PROJECT MANUAL FOR City of Aurora Project #: 21-30

ROOF REPLACEMENT AT THE VENUE, CITY HALL & WATER STREET PLAYHOUSE FOR THE CITY OF AURORA AURORA, ILLINOIS 60507

OWNER



CITY OF LIGHTS

44 E. DOWNER PLACE AURORA, ILLINOIS 60507

ARCHITECT

KLUBER ARCHITECTS + ENGINEERS 10 S. SHUMWAY AVE. BATAVIA, ILLINOIS 60510

BIDS DUE WEDNESDAY, MAY 19, 2021 AT 2:00 P.M. CITY OF AURORA CITY CLERK'S OFFICE 44 E. DOWNER PLACE AURORA, ILLINOIS 60507

DATE: APRIL 30, 2021 PROJECT NO. 21-130-1349

SECTION 00 01 01 PROJECT TITLE PAGE

PROJECT MANUAL

FOR

CITY OF AURORA - ROOF REPLACEMENT AT THE VENUE, CITY HALL & WATER STREET PLAYHOUSE 44 E. DOWNER PLACE AURORA, ILLINOIS 60507

OWNER

CITY OF AURORA 44 E. DOWNER PLACE AURORA, ILLINOIS 60507

ARCHITECT/ENGINEER

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END OF DOCUMENT

SECTION 00 11 13 ADVERTISEMENT FOR BIDS

City of Aurora Invitation to Bid attached (Two Pages). END OF DOCUMENT



INVITATION TO BID 21-30 ROOF REPLACEMENT AT THE VENUE, CITY HALL & WATER STREET PLAYHOUSE FOR THE CITY OF AURORA

Sealed bids will be received at the office of the City Clerk, 44 East Downer Place, Aurora, Illinois 60507, until 2:00 p.m., Wednesday, May 19, 2021 for the Roof Replacement at the Venue (19-21 S. Broadway), City Hall (44 E. Downer) & Water Street Playground (11-13 Water Street) located in Aurora, Illinois 60507.

City Hall is open to the public on Wednesdays and Fridays, however deliveries of sealed bid proposals are accepted Monday through Friday 8:00 am -5:00 pm. The City shall not be responsible for late delivery of your Bid Proposal by a third party courier. The Bidder assumes responsibility for late delivery of the mail. It is the sole responsibility of the Bidder to see that their Bid Proposal is received in the proper time.

A non-mandatory teleconferenced live streamed bid opening will be held regarding this Invitation to Bid. Information regarding this opening, including the dial-in number and meeting link, will be posted to the city's website at <u>https://www.aurora-il.org/bids.aspx</u> 24 to 48 hours in advance of the bid opening.

The proposed work consists of demolition of the existing roof system, copings, gutters and abandoned roof items and replace with new fully adhered EPDM roofing systems on each of the roof areas identified above. The area of the total roof replacement is approximately 10,500 square feet.

Drawings and Specifications and other pertinent documents may be obtained online at <u>https://www.aurora-il.org/bids.aspx</u> by calling the Purchasing Office during normal business hours 630-256-3550.

The Bidding Documents may also be examined at the Architect's office, Kluber, Inc., 10 S. Shumway Avenue, Batavia, IL 60510.

A mandatory pre-bid meeting will be held Friday, May 7, 2021 from 10:00 a.m. to 11:00 a.m. All bidders should meet at 44 East Downer Place, Second Floor, City Council Chambers, Aurora, Illinois 60507. Bidders must be present at the start of the meeting to qualify to bid on the project.

Questions regarding the bids are to be sent to the Director of Purchasing at PurchasingDL@aurora.il.us. All questions must be submitted in writing via e-mail by 8:00 a.m., Tuesday, May 11, 2021. Questions will be answered via bid addendum to be sent to those in attendance at the pre-bid meeting by 12:00 p.m., Thursday, May 13, 2021. Except at the pre-bid meeting, NO questions will be accepted or answered verbally. No questions will be accepted or answered after Tuesday, May 11, 2021 at 8:00 a.m. cut-off date/time.

It is the responsibility of the interested bidder to ensure they have received addendum, if any issued, and acknowledge such receipt where indicated.

A bid bond or a certified check payable to the City of Aurora in the amount of 10% of the bid price is required with the bid presented. A 100% performance and payment bond will be required from the successful Bidder.

The City of Aurora encourages minority business firms to submit bids and encourages the successful firm to utilize minority businesses as applicable.

Any Bidder who owes the City money may be disqualified at the City's discretion.

The City of Aurora has a local preference ordinance that would apply to this contract.

Sufficient proof of liability and workmen's compensation insurance must be furnished to satisfy requirements of the City of Aurora.

When required by State Law, please be advised that all Bids must comply with the Illinois Prevailing Wage Act and the Prevailing Rate of Hourly Wages in the City of Aurora where the Work is to be performed is to be paid to all persons on the project.

The successful respondent shall comply with all codes, ordinances, rules, statutes, laws and regulations of the City of Aurora, State of Illinois as they apply to all Public Works construction projects.

The City of Aurora reserves the right at any time and for any reason to cancel this Invitation to Bid, to accept or reject any or all Bids or portion thereof, or accept an alternate bid. The City reserves the right to waive any immaterial defect in any bid, or technicality, informality or irregularity in the bids received, and to disregard all nonconforming or conditional bids or counterproposals. Unless otherwise specified by the bidder or the City, the City reserves the right to hold the best bids for ninety (90) days from the opening date set forth above. The City may seek clarification from any bidder at any time and failure to respond promptly is cause for rejection. The City further reserves the right to award the bid to the lowest responsible Bidder whose offer best responds in quality, fitness and capacity to the requirements of the proposed work or usage and therefore is in the best interest of the City.

CITY OF AURORA

SECTION 00 21 13 INSTRUCTIONS TO BIDDERS

1.01 FORM OF INSTRUCTIONS TO BIDDERS

- A. AIA Document A701 (1997 Edition) Instructions To Bidders is hereby made part of the Bidding Requirements to the same extent as if written out in full.
- B. The above document may be examined at the Architect/Engineer's office or purchased at the American Institute of Architects, http://www.aia.org.
- C. City of Aurora Instructions to Bidders attached (14 pages). END OF DOCUMENT

CITY OF AURORA, ILLINOIS INSTRUCTIONS TO BIDDERS

01. **REQUIREMENTS OF BIDDER**

The successful Bidder may be required to (a) enter into a fully signed contract in writing with the City of Aurora covering matters and things as are set forth in the Bid Package; (b) execute a bond necessary for surety acceptable to the City of Aurora in the amount of one hundred percent (100%) of the full contract price and to be conditioned for the faithful fulfillment of the contract for the payment of all labor and materials used in the Work and to include the protection of the City from all liens and damages arising out of the Work; (c) carry insurance acceptable to the City covering public liability, property damage and workers compensation; and (d) pay workers in accordance with the schedule of prevailing wages for Kane County attached hereto.

02. ACCEPTANCE OF BIDS

- a. Bidder must submit an original bid response, marked as "original" and three (3) complete paper copies and one (1) PDF copy on a CD, and shall have provided all requested information, and submitted all appropriate forms, certificates, affidavits and addendum acknowledgements <u>in each copy</u> in order to be considered responsive.
- b. Bids must be submitted on the forms provided and all information and certifications called for must be furnished. Bids submitted in any other manner, or which fail to furnish all information or certificates required, may be summarily rejected. Bids may be modified or withdrawn prior to the time specified for the opening of bids. Bids shall be filled out legibly in ink or type-written with all erasures, strike overs and corrections initialed in ink by the person signing the bid. The bid shall include the legal name of the bidder, the complete mailing address, and be signed in ink by a person or persons legally authorized to bind the bidder to a contract. Name of person signing should be typed or printed below the signature.

Envelopes containing bids must be sealed and addressed to the City of Aurora City Clerk. The name and address of the bidder and the Invitation Number must be shown in the upper left corner of the envelope.

c. The City of Aurora reserves the right at any time and for any reason to accept or reject any or all Bids or portion thereof, or accept an alternate bid. The City reserves the right to waive any immaterial defect in any bid, or technicality, informality or irregularity in the bids received, and to disregard all nonconforming or conditional bids or counter-proposals. Unless otherwise specified by the bidder or the City, the City reserves the right to hold the best bids for ninety (90) days from the opening date. Bidder agrees to accept a notice of award, if selected, based on the terms of this Bid Proposal in the event that a notification of award is received on or before expiration of the 90-day time period. The City reserves the

right to cancel the Bid Proposal at any time, without liability for any loss, damage, cost or expense incurred or suffered by any Bidder as a result of that cancellation. Each Bidder is solely responsible for the risk and cost of preparing and submitting a Bid Proposal.

d. Although price is a consideration, qualifications and experience, capacity to handle the work, and response to the bid, will also be considered. No Bid Proposal will be considered unless the Bidder shall furnish evidence satisfactory to the City that he has the necessary facilities, abilities, experience, equipment, and financial and physical resources available to fulfill the conditions of the contract and execute the Work should the contract be awarded to them. Bid Proposal documents which are not responsive to the requirements herein may not be considered by the City for an award of the contract.

The contract will be awarded to the lowest responsive responsible Bidder. In determining the responsibility of any Bidder, the City may take into account other factors such as past records of its or other entities transactions with the Bidder, experience, ability to work cooperatively with the City and its staff, adequacy of equipment, ability to complete performance within necessary time limits, and other pertinent considerations such as, but not limited to, reliability, reputation, competency, skill, efficiency, facilities and resources.

The Bidder will be awarded in the City's best interests based on these and other legally-allowable considerations. The City and its representatives and agents may make any investigations deemed necessary to determine the ability of the Bidder to perform the Work. The Bidder shall furnish any information and data requested by the City for this purpose.

03. RECEIPT OF BIDS

- a. It is suggested that respondents allow a minimum of four (4) days for delivery through U.S. mail, or Bids may be delivered to the Office of the City Clerk in person. Overnight courier is acceptable provided timely receipt of Bids. The Bidder assumes responsibility for late delivery of the mail. It is the sole responsibility of the Bidder to see that his Bid is received in the proper time.
- b. Any Bid received by the Office of the City Clerk after 2:00 p.m. on Wednesday, May 19, 2021 shall be rejected.
- c. City Hall is open to the public on Wednesdays and Fridays, however deliveries are accepted daily Monday through Friday 8:00 am 5:00 pm.

04. WITHDRAWAL OF BIDS

Bidders are cautioned to verify their bids before submission. Negligence on the part of the bidder in preparing the bid confers no right for withdrawal or modification of the bid after it has been opened. Bidders may not withdraw their bid after the opening without the approval of the Director of Purchasing. Requests to withdraw a bid must be in writing and properly signed. Bidders may, however, without prejudice, modify or withdraw its bid by written request, provided that the request is received by the City Clerk prior to the scheduled opening and at the address to which bid proposals were to be submitted. Following withdrawal or modification of its Bid Proposal, Bidder may submit a new Bid Proposal, provided it is received by the City Clerk prior to the bid proposal due date. No bid proposal will be opened which is received after the time and date scheduled for the Bid Proposals to be received.

05. BID DEPOSIT

Each Bidder shall deposit with his Bid a Bid guarantee consisting of a bank draft, Bid bond, cashier's check, or certified check drawn on a good and solvent National or State Bank and payable to the order of the City, in an amount not less than ten percent (10%) of the total amount of the Bid submitted, as a guaranty that in case the Bidder's Bid is accepted, the Bidder shall within one day after the date of such acceptance and notification thereof, deliver to the City a contract signed and executed by the Bidder, proper insurance certificates and a Performance and Payment Bond in one hundred percent of the contract sum furnished by a responsible bonding company acceptable to and written upon forms prepared or approved by the City as security for payment of labor and materials and for the faithful performance of the contract and compliance with the provisions of law relating to the payment of prevailing rate of wages. All Bid deposits will be retained by the City until a Bid award is made, at which time the Bid deposit will be promptly returned to the unsuccessful Bidders. The Bid deposit of the successful Bidder will be retained until the equipment, goods or services have been received or completed and found to be in compliance with the specifications. Performance by the Bidder shall not be considered complete, until final inspection and acceptance by the City of the Bidder's Work. Final inspection shall occur within 30 days after the actual completion of the Work. Execution of the contract is contingent upon receipt of an acceptable Performance and Payment Bond and any required certificates of insurance. Upon failure to meet the requirements of this paragraph, the Bidder shall forfeit the amount deposited as liquidated damages and no mistakes or errors on the part of the Bidder shall excuse the Bidder or entitle him to a return of the aforementioned amount.

06. BOND AND INSURANCE

The Bidder will be required to furnish a Performance and Payment Bond in the amount of one hundred percent (100%) of the full contract price, Public Liability Insurance, and Workers Compensation Insurance; all of which shall be acceptable to the City of Aurora.

The Bidder awarded the project will need to provide performance and payment bonds for one year with a letter attached from the bond company certifying that the bond may be automatically renewed for the second year.

The term Payment Bond shall be understood to mean the bond executed by the Bidder and his surety guaranteeing the payment of all sums of money due for any labor, materials, apparatus, fixtures, or machinery furnished to such principal for the purpose of performing the contract work.

The term Performance Bond shall be understood to mean the bond, executed by the contractor and his surety, guaranteeing complete execution of the contract.

Proof of liability insurance coverage through a reputable, recognized carrier shall be provided at the time of acceptance and signing of the contract and shall remain current for the duration of the contract.

The City of Aurora, by showing and substantiating sufficient proof of incompetence, negligence, poor or substandard workmanship which would cause unwarranted damage or deterioration of either premises, contents or appendages, reserves the right to terminate said Contractor without recourse from the City by successful Contractor.

07. CITY'S AGENT

The Director of Purchasing, or his delegate, shall represent and act for the City in all matters pertaining to the Bid proposal and contract in conjunction thereto.

08. INVESTIGATION

It shall be the responsibility of the Bidders to make any and all investigations necessary to become thoroughly informed of what is required and specified in the Bid. No plea of ignorance by the Bidders of conditions that exist or may hereafter exist as a result of failure or omission on the part of the Bidder to make the necessary examinations and investigations will be accepted as a basis for varying the requirements of the City of the compensation to the Bidder.

Each Bidder submitting a Bid is responsible for examining the complete Bid Package and all Addenda, and is also responsible for informing itself of all conditions that might in any way affect the cost or the performance of any Work. Failure to do so will be at the sole risk of the Bidder, and no relief will be given for errors or omissions by the Bidder. If awarded the contract, the Bidder will not be allowed any extra compensation by reason of any matter or thing concerning which such Bidder should have fully informed himself, because of his failure to have so informed himself prior to the bidding. The submission of a Bid shall be construed as conclusive evidence that the Bidder has made such examination as is required in this section and that the Bidder is conversant with local facilities and difficulties, the requirements of the Bid Package documents, and of pertinent, local, state and federal laws and codes, prevailing local labor and material markets, and has made due allowance in its Bid for all contingencies. Before any award is made of the contract to the Bidder, the Bidder may be required to, upon request of the City, furnish information concerning his performance record in his capacity to complete the Work in an efficient and timely manner.

09. BIDDER CAPABILITY

The City reserves the right to require of the Bidder proof of his/her capability to perform as required by the specifications. However, prequalification of the Bidder shall not be required. The City may, at its option, disqualify a Bidder and reject his proposal for cause. Reasons deemed sufficient for this action shall include, but not be limited to, the following:

- Evidence of collusion among bidders.
- Receipt of more than one bid proposal on any project from an individual, or from a corporation. This restriction does not apply to subcontractors.

- Default on any previous contract.
- Unreasonable failure to complete a previous contract within the specified time or for being in arrears on an existing contract without reasonable cause for being in arrears.
- Inability to perform as revealed by an investigation of the Proposer's financial statement, experience and/or plant and equipment.
- Any proposer who owes the city money may be disqualified at the City's discretion.

10. AWARD OF BID

It is the intent of the City to award a contract to the lowest responsive responsible bidder meeting specifications. The City reserves the right to determine the lowest responsive responsible bidder on the basis of an individual item, groups of items, or in any way determined to be in the best interests of the City. Award will be based on the following factors, but not limited to (where applicable): (a) adherence to all conditions and requirements of the bid specifications; (b) price; (c) qualifications of the bidder, including past performance, financial responsibility, general reputation, experience, service capabilities, and facilities; (d) delivery or completion date; (e) product appearance, workmanship, finish, taste, feel, overall quality, and results of product testing; (f) maintenance costs and warranty provisions; and (g) repurchase or residual value.

However, if the Bidder modifies limits, restricts or subjects his bid proposal to conditions that would change the requirements of the bid, this would be considered a conditional or qualified Bid Proposal and will not be accepted. The City reserves the right to delete any item listed in the bid.

11. PRICES

The price quoted for each item is the full purchase price, including delivery to destination and includes all transportation and handling charges, premiums on bonds, material or service costs and all other overhead charges of every kind and nature. Unless otherwise specified, prices shall remain firm for the contract period.

Unit prices shall not include any local, state or federal taxes. In case of mistake in extension of price, unit price shall govern. All prices must be typewritten or written in black ink. (The party signing the Bid Proposal or his/her authorized representative must initial any alteration in ink.)

12. DISCOUNTS

Prices quoted must be net after deducting all trade and quantity discounts. Where cash discounts for prompt payment are offered, the discount period shall begin with the date of receipt of a correct invoice or receipt or final acceptance of goods, whichever is later.

13. PAYMENT

Payment shall be made for services rendered. The City, after inspection and acceptance, and in consideration of the faithful performance by the Bidder, agrees to pay for the completion of the work embraced in this Contract, payment shall be made in accordance with the Illinois Local Government Prompt Payment Act (50 ILCS 505/1, *et. seq.*) upon receipt of the invoice.

Time, in connection with any discount offered, will be computed from the date of delivery to the City or from the date a correct invoice is received by the City of Aurora Purchasing Division, if the latter date is later than the date of delivery.

Prices will be considered NET, if no payment discount is shown.

The successful Bidder shall submit invoices via e-mail to:

PurchasingDL@aurora-il.org

or Fax to **630-256-3559**

or Mail to the following address:

City of Aurora Attn: Purchasing Division 44 E. Downer Place Aurora, IL 60507

The City of Aurora offers electronic funds transfer (EFT) payment to our vendors. EFT is fast, simple, safe and secure and is *our preferred method of payment!* An authorization agreement form is included in this bid proposal package for your use and convenience.

14. TAXES

The City of Aurora is exempt, by law, from paying State and City Retailer's Occupation Tax, State Service Occupation Tax, State Use Tax and Federal Excise Tax upon City works and purchases. The City of Aurora's Sales Tax Exemption Number is E9996-0842-07.

15. DEFAULT

Time is of the essence of this contract and if delivery of acceptable items or rendering of services is not completed by the time promised, the City reserves the right, without liability, in addition to its other rights and remedies, to terminate the contract by notice effective when received by Bidder, as to stated items not yet shipped or services not yet rendered The City will procure articles or service from other sources and hold the Bidder responsible for any excess cost incurred as provided for in Article 2 of the Uniform Commercial Code.

16. INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

Bidders shall promptly notify the City of any ambiguity, inconsistency of error which they may discover upon examination of the bidding documents. Interpretations, corrections and changes will be made by addendum. Each bidder shall ascertain prior to submitting a bid that all addenda have been received and acknowledged in the bid.

17. INSPECTION

Materials or equipment purchased are subject to inspection and approval at the City's destination. The City reserves the right to reject and refuse acceptance of items which are not in accordance with the instructions, specifications, drawings or data of Bidder's warranty (express or implied). Rejected materials or equipment shall be removed by, or at the expense of, the Bidder promptly after rejection.

18. WARRANTY

Bidder warrants that all goods and services furnished hereunder will conform in all respects to the terms of the solicitation, including any drawings, specifications or standards incorporated herein, and that they will be free from latent and patent defects in materials, workmanship and title, and will be free from such defects in design. In addition, Bidder warrants that said goods and services are suitable for, and will perform in accordance with, the purposes for which they are purchased, fabricated, manufactured and designed or for such other purposes as are expressly specified in this solicitation. The City may return any nonconforming or defective items to the Bidder or require correction or replacement of the item at the time the defect is discovered, all at the Bidder's risk and expense. Acceptance shall not relieve the Bidder of its responsibility.

Contractor and/or Bidder (as case may be) expressly warrants that all goods and services (real property and all structures thereon) will conform to the drawings, materials, performance and any other specifications, samples or other description furnished by the City, and will be fit and sufficient for the purpose intended, merchantable, of good material and workmanship. Contractor and/or Bidder (as case may be) agrees that these warranties shall run to the City of Aurora, its successor, assigns, customers and users of the products or services and that these warranties shall survive acceptance of the goods or performance of the services.

19. CANCELLATION

The City reserves the right to cancel the whole or any part of the contract if the Bidder fails to perform any of the provisions in the contract or fails to make delivery within the time stated. The Bidder will not be liable to perform if situations arise by reason of strikes, acts of God or public enemy, acts of the City, fires or floods.

20. SIGNATURES

Bid proposals must be signed by the Bidder with his/her usual signature. Bids by partnerships must be signed with the partnership name by all members of the partnership,

or an authorized representative, followed by the signature and title of the person signing. Bids by corporations must be signed with the name of the corporation, followed by the signature and title of the person authorized to bind it in the matter. All signatures must be in ink.

When a corporation submits a Bid, its agent must present legal evidence that he has lawful authority to sign said Bid and that the corporation has a legal existence. In the event that any corporation organized and doing business under the laws of any foreign state is the successful Bidder, such corporation must present evidence before any contract is executed that it is authorized to do business in the State of Illinois. Bids by corporations must be executed in the corporate name by the President or a Vice President (or other corporate officer accompanied by evidence of authority to sign), and the signature must be attested by the Secretary or an Assistant Secretary, and the corporate seal must be affixed. The corporate address and state of incorporation must be shown below the signature. Bids by partnerships must be executed in the partnership name and signed by a partner whose title must appear under the signature, and the official address of the partnership must be shown below the signature. Any corrections to entries made on the Bid forms shall be initialed by the person signing the Bid. When requested by the City, satisfactory evidence of the authority of any signature on behalf of the Bidder shall be furnished.

21. SPECIAL CONDITIONS

Wherever special conditions are written into the Special Conditions and Specifications which are in conflict with conditions stated in these Instructions to Bidders, the conditions stated in Special Conditions and Specifications shall take precedence.

22. PERMITS AND LICENSES

The successful Bidder shall obtain, at its own expense, all permits and licenses which may be required to complete the contract.

23. **REGULATORY COMPLIANCE**

Bidder represents and warrants that the goods or services furnished hereunder (including all labels, packages and container for said good) comply with all applicable standards, rules and regulations in effect under the requirements of all Federal, State and local laws, rules and regulations as applicable, including the Occupational Safety and Health Act as amended, with respect to design, construction, manufacture or use for their intended purpose of said goods or services. Bidder shall furnish "Material Safety Data Sheet" in compliance with the Illinois Toxic Substances Disclosure to Employees Act.

24. ROYALTIES AND PATENTS

Bidder shall pay all royalties and license fees. Bidder shall defend all suits or claims for infringement of any patent or trademark rights and shall hold the City harmless from loss on account thereof.

25. REFERENCES

Sufficient references of all like public and/or private agencies must be presented on a separate sheet and attached to this Bid. Listing must include company name, contact person, telephone number and date purchased. All Bidders, as a condition of and prior to entry into a contract, agree that a complete background investigation of the principals of the Bidder and all employees who will work on the project may be made. Bidders agree to cooperate with the appropriate City of Aurora personnel to supply all information necessary to complete these investigations. The City of Aurora in its complete discretion may disqualify any Bidder, including low Bidder, and may void any contract previously entered into based on its background investigation.

26. ELIGIBILITY

By signing this bid, the bidder hereby certifies that they are not barred from bidding on this contract as a result of a violation of Article 33E, Public Contracts of the Illinois Criminal Code of 1961, as amended (Illinois Compiled Statutes, 720 ILCS 5/33E-1).

27. COMPLIANCE WITH LAWS AND REGULATIONS

The Bidder shall at all times observe and comply with all Federal, State, Municipal and other local laws, ordinances, regulations, and requirements which in any manner affect the conduct of the Work, and with all Federal, State and local laws and policies of nondiscrimination, sexual harassment, prevailing wages and others applicable thereto; and all such orders or decrees as exist at the present and which may be enacted later, of bodies or tribunals having jurisdiction or authority over the Work, and no plea of misunderstanding or ignorance thereof will be considered. He shall indemnify and save harmless the City and all its officers, agents, employees and servants against any requirement, claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees.

28. PATENTED DEVICES, MATERIALS, AND PROCESSES

It is mutually understood and agreed that without exception contract prices are to include all royalties and costs arising in the Work. It is the intent that whenever the Bidder is required or desires to use any design, device, material, or process covered by letters or patent or copyright, the right of such use shall be provided for by suitable legal agreement with the patent owner. The Bidder in all cases shall indemnify and save harmless the City from any and all claims for infringement by reason of the use of any such patent design, device, materials, or process, to be performed or used under the contract, and shall indemnify and save harmless the said City for any costs, expenses, attorney's fees, and damages which it may be obligated to pay, by reason of any such infringement at any time during the prosecution or after the completion of the Work.

29. PROTECTION AND RESTORATION OF PROPERTY

It is understood that in the execution of the Work herein provided for there may be interference with and/or damage to trees, shrubbery, crops, fences, railroad tracks, overhead structures such as poles, wires, cables, underground structures such as sewers, gas mains, telephone conduits and cables, water mains, drains, service connections, wires, pipes, conduits, located along, adjacent to, and/or crossing the locations of the Work, and that it may be necessary to relocate or reconstruct certain of such structures, improvements, and installations and/or to make repairs to the same by reasons of doing the Work herein provided for, and it is therefore particularly and specifically agreed that the Bidder except as otherwise herein provided, shall do the Work necessary for such relocation, reconstruction, and repair and shall bear and pay all of the cost and expense of such relocation, reconstruction, and/or repair of, and all damage done to any and all such pipe line and other structures, improvements, and installations, including service connections, if any, to adjacent property, existing at the date of the execution of the contract and/or existing, during the period of the Work to be done under the contract, which may be interfered with, damaged, and/or necessarily relocated, reconstructed, or repaired in the performance of the Work herein provided for, including the restoration and resurfacing of unpaved portions of public streets and alleys, rights-of-way, easements, and private property damaged or disturbed by the Work, the same to be restored to as good condition as the same existed at the time of the commencement of any such Work or relocation.

It is further agreed that the owners of any structures, improvements, installations, referred to in the preceding paragraph shall have the right to do the Work or any part thereof necessary for the relocation, reconstruction, replacement, repair, and other Work required by reason of any interference with and/or damage to such structures, improvements, installations, due to the prosecution of the Work and upon completion of such Work by them done, said owners may render bills to the Bidder for the cost and expenses thereof which bills shall be paid by the Bidder without extra compensation therefore from the City, upon demand by said owners, or upon demand made by the City upon the Bidder for the payment thereof.

30. INSURANCE AND HOLD HARMLESS PROVISION

At the Bidder's expense, the Bidder shall secure and maintain in effect throughout the duration of this contract, insurance of the following kinds and limits to cover all locations of the Bidder's operations. The Bidder shall furnish Certificates of Insurance to the City before starting or within ten (10) days after the execution of the contract, whichever date is reached first. All insurance policies shall be written with insurance companies approved by the City of Aurora and licensed to do business in the State of Illinois and having a rating of not less than A IX, according to the latest edition of the A.M. Best Company; and shall include a provision preventing cancellation of the insurance policy unless thirty (30) days prior written notice is given to the City. This provision shall also be stated on each Certificate of Insurance as: "Should any of the above described policies be canceled before the expiration date thereof, the issuing company will endeavor to mail 10 days written notice to the certificate holder named to the left".

If requested, the awardee of this proposal will give the City a copy of the insurance policies. The policies must be delivered to the City within two weeks of the request.

The limits of liability for the insurance required shall provide coverage for not less than the following amount, or greater where required by law:

- (1) Worker's Compensation Insurance Statutory amount.
- (2) General Liability Insurance:
 - (a) \$1,000,000 per occurrence and \$2,000,000 general aggregate

- (b) \$500,000 per occurrence for Property Damage
- (c) \$1,000,000 per occurrence for Personal Injury
- (3) Auto Liability Insurance:
 - (a) Bodily injury with limits not less than \$1,000,000
 - (b) Property damage with limits not less than \$500,000
- (4) Umbrella excess liability of \$1,000,000 per occurrence, \$2,000,000 aggregate

The Bidder shall include the City as a primary, non-contributory additional named insured on both General and Auto Liability Insurance policies and indicate said status on any Certificates of Insurance provided to the City pursuant to this project. All insurance premiums shall be paid without cost to the City.

The Bidder agrees to indemnify and save harmless the City of Aurora, their agents and employees from and against all loss and expenses (including costs and attorneys' fees) by reason of liability imposed by law or claims made upon the City of Aurora for damages because of bodily injury, including death at any time resulting therefrom sustained by any person or persons or on account of damage to property, including loss of use thereof, arising out of or in consequence of the performance of this project work, whether such claims or injuries to persons or damage to property be due to the negligence of the Bidder or his Subcontractors. The Bidder shall assume total risk and shall be responsible for any and all damages or losses caused by or in any way resulting from the work and provide all insurance necessary to protect and save harmless the City of Aurora and its employees.

31. LOCAL BIDDER PREFERENCE

O20-029 approved April 28, 2020 defines "Local business" to mean a vendor or contractor who has a valid, verifiable physical business address located within the corporate boundaries of the City of Aurora at least twelve months prior to a bid or proposal opening date, from which the vendor, contractor or consultant operates or performs business on a daily basis, including manufacturing production or distribution. The business must disclose the percentage of workforce in the City of Aurora; be registered with the City of Aurora, if applicable; be subject to City of Aurora taxes (inclusive of sales taxes); be current with property tax payments and sales tax payments; not have any outside cited code violations; not have any outstanding debts to the City of Aurora; have adequately qualified and trained staff to service the bid of interest.

32. MINORITY PARTICIPATION

The City of Aurora encourages minority business firms to submit proposers and encourages the successful contract bidder to utilized minority businesses as subcontractors for supplies, equipment, services and construction.

33. WORKERS COMPENSATION ACT

The Bidder further agrees to insure his employees and their beneficiaries and to the employees and the beneficiaries of any subcontractor employed from time to time by him

on said Work, the necessary first-aid, medical, surgical, and hospital services and any compensation provided for in the Workers Compensation Act of the State of Illinois that is or may be in force in the State.

Such insurance shall be placed by said Bidder in a company or association (to be approved by the City and to be accepted by the Council thereof) authorized under the laws of the State of Illinois to insure the liability above specified.

Said Bidder hereby further agrees to indemnify, keep and save harmless said City from all action, proceedings, claims, judgments, awards, and costs, loss, damages, expenses, and attorney's fees which may in any way come against said City by reason of any accidental injuries or death suffered by any of his employees or the employees of any subcontractor employed by him in and about the performance of the Work provided for in the contract, and any and all liability resulting thereupon; and said Bidder, in case of any suit, action, or proceeding on account of any or all of the foregoing shall defend the same for and on behalf of said City and indemnify the City therefore, and pay the amount of any and all awards and final judgments and orders rendered and entered therein, together with all loss, costs, damages, attorney's fees, and expenses incurred therein. Said Bidder shall be the sole employer of its employees and workers, and in no way so shall the City be considered a joint employer of same under any circumstance.

34. RESPONSIBLE BIDDER

Section 2-331(5) of the Aurora City Code requires that bidders for city contracts in excess of \$25,000 must participate in active apprenticeship and training programs approved and registered with the United States Department of Labor's Bureau of Apprenticeship and Training to be considered a responsible bidder. A bidder must affirm such participation in the Bidder's Certification submitted with any bid. Furthermore, the bidder must submit a copy of each applicable program registration certificate with his/her bid.

35. SUBLETTING OR ASSIGNMENT OF WORK

If the Bidder sublets the whole or any part of the Work to be done under the contract, with or without the written consent of the City, he shall not, under any circumstances, be relieved of his liabilities and obligations. All transactions of the City shall be with the Bidder; subcontractors shall be recognized only in the capacity of employees or workmen and shall be subject to the same requirements as to character and competence. In case any party or parties, to whom any work under the contract shall have been sublet, shall disregard the directions of the City or his duly authorized representatives, or shall furnish any unsatisfactory Work or shall fail or refuse in any way to conform to any of the City, the Bidder shall require said party or parties in default to discontinue Work under the contract. Said Work shall be corrected or made good and shall be continued and completed by the said Bidder or by such other party or parties as are approved by the City, in the manner and subject to all of the requirements specified in the contract.

36. PROSECUTION OF WORK

The Bidder shall begin the Work to be performed under the contract no later than ten (10) days after the execution and acceptance of the contract, unless otherwise provided. The Work shall be conducted in such a manner and with sufficient materials, equipment and labor as is considered necessary to insure its completion within the time specified in the contract. The Bidder shall solely be fully responsible for complying with State and local prevailing wage requirements in accordance with the Bidders Certification, and for all wage rate and hour regulations and applications.

37. GUARANTEE AND MAINTENANCE OF WORK

The Bidder shall guarantee the Work to be free from defects of any nature for a period of one year from and after the final acceptance and payment for the Work by the City, and the Bidder shall maintain said Work and shall make all needed repairs and/or replacements during this one year period which in the judgment of the Council, may be necessary to insure the delivery of the Work to the City in first-class condition and in full conformity with the plans and specifications therefore, at the expiration of the guarantee period.

38. CONTRACT

The successful Bidder will be required to execute a contract in the form attached hereto (as may be modified and amended by the City) within five (5) days after notice of award and receipt of the contract from the City and sign and deliver to the City all required copies of the contract. Failure on the part of the Bidder to execute the contract within five (5) days and provide the required evidence of insurance at, or before the execution of the contract, will be considered just cause for the annulment of the award of the Bid.

39. INSURANCE CERTIFICATES

At, or prior to, delivery of the signed contract, the successful Bidder shall deliver to the City the policies of insurance or insurance certificates as required by the contract Documents. All policies or certificates of insurance shall be approved by the City before the successful Bidder may proceed with the Work. Execution of the contract by the City is contingent upon receipt of the insurance policies or certificates. Failure to provide the evidence of insurance in the time provided for will result in disqualification and the Bid will be awarded to the next lowest Bidder or in the creation of a new Bid.

40. PERSONNEL AND EQUIPMENT

The Bidder shall provide an adequate number of competently trained personnel with sufficient supervision to provide the services required, and the Bidder shall provide identification of its personnel if requested by the City.

Any Bidder's employee whose employment is reasonably detrimental or objectionable to the City shall be immediately transferred from the premises upon the City's request. The exercise of the option shall not be construed as placing the City in charge of the Work or making the City responsible for safety.

All on the road vehicles or equipment shall be identified by the Bidder's name for

purpose of identification.

All tools or equipment required to carry out the operations within the scope of the contract shall be provided by the Bidder, and shall meet the standards of the Federal Occupational Safety and Health Act and State of Illinois safety codes as may be required by law. The City reserves the right to inspect the equipment that will be used prior to award of Bid.

41. TIME

Bidder shall schedule its Work and that of its subcontractors to meet the requirement of the City. Bidder shall perform the Work expeditiously in cooperation with the City's agents, employees, contractors and subcontractors. Bidder shall make no claim against City and no claim shall be allowed for any damages which may arise out of any delay caused by City, its agents, employees, contractor or subcontractors. Bidder's sole remedy for delay shall be an extension in the contract time.

42. **QUESTIONS**

Inquiries and/or questions pertaining to the provisions and specifications of this bid package shall be directed to the Director of Purchasing in writing at PurchasingDL@aurora.il.us. Questions will be accepted until 8:00 am, Tuesday May 11, 2021. Questions will be answered via addendum and posted to the City's website at <u>https://www.aurora-il.org/bids.aspx</u> by 12:00 pm, Thursday, May 13, 2021. NO questions will be accepted or answered verbally. No questions will be accepted or answered after **Tuesday, May 11, 2021 8:00 am cut-off date/time.**

It is the responsibility of the interested bidder to assure they have received addendum, if any issued, and acknowledge such receipt where indicated.

SECTION 00 31 00 AVAILABLE PROJECT INFORMATION

PART 1 GENERAL

1.01 EXISTING CONDITIONS

- A. Hazardous Material Survey: Entitled ASBESTOS SAMPLING REPORTS, dated April 21, 2021.
 - 1. City Hall North Roof, MEC Project #: 21-02-111-INSP (10 Pages)
 - 2. The Venue, MEC Project # 21-02-110-INSP (10 Pages)
 - 3. Water Street Playhouse, MEC Project #: 21-02-112-INSP (10 Pages)

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION



Consultants – Engineers – Scientists

ASBESTOS SAMPLING REPORT

Performed For:

CITY OF AURORA

44 E. Downer Place, P.O. Box 2067 Aurora, IL 60507-2067

Project Location:



CITY HALL - NORTH ROOF 44 E. Downer Place Aurora, IL 60505

Inspection Date: March 18, 2021

MEC Project #: 21-02-111-INSP

Yorkville Location 2551 N. Bridge St. Yorkville, IL 60560 P: (630) 553-3989 F: (630) 553-3990

Peoria Location

3100 N. Knoxville Ave. Suite 204

Peoria, IL 61603 P: (309) 621-4680 F: (309) 621-4690

CITY OF AURORA CITY HALL - NORTH ROOF 44 E. Downer Place Aurora, IL 60505

Table of Contents MEC Project #: 21-02-111-INSP

Sampling Report	Section 1
Photographs of Homogeneous Areas	Section 2
Final Analytical Report	Section 3
Licensing / Certifications	Section 4

Midwest Environmental Consulting Services, Inc. 2551 N. Bridge Street Yorkville, IL 60560 Phone: (630) 553-3989 Fax: (630) 553-3990 Midwest Environmental Consulting Services, Inc.

Consultants – Engineers – Scientists

April 21, 2021

CITY OF AURORA 44 E. Downer Place, P.O. Box 2067 Aurora, IL 60507-2067

Attention: Jim Birchall, Superintendent of Fleet & Facility Maintenance

Subject: ACM Roof Bulk Sampling Results CITY HALL - NORTH ROOF, 44 E. Downer Place , Aurora, IL 60505 MEC Project #: 21-02-111-INSP

Dear Mr. Birchall:

On March 18, 2021, Stephen Merwin (IDPH-Licensed Asbestos Inspector #100-02871) from Midwest Environmental Consulting Services, Inc. (MEC) collected a total of six (6) suspect asbestos-containing roofing samples from the City of Aurora - City Hall located at 44 E. Downer Place, Aurora, Illinois.

The purpose of the sampling was to determine the potential existence of asbestos-containing materials (ACM) in selected roofing sections where roof renovations are scheduled.

The table below displays a summary of the sampled material per your direction and the analytical

H S A	Material Description	Sample Location	ACM (Y/N)
MRA	Built-Up Roofing	3rd Floor - North - West Section	No
MRB	Built-Up Roofing	3rd Floor Roof - North - East Section	No

EMSL Analytical, Inc. located at 4140 Litt Drive, Hillside, Illinois, 60162, analyzed the samples and reported the results to Midwest Environmental Consulting Services, Inc. Please keep the analytical laboratory results attached to this letter for future reference. A photograph of each homogeneous sampling area has also been attached for your reference.

If you have any questions or concerns regarding, please feel free to contact me at (630) 553-3989.

Thank you for providing us with an opportunity to service your environmental needs.

Yorkville Location 2551 N. Bridge St. Yorkville, IL 60560 P: (630) 553-3989

F: (630) 553-3990

Peoria Location 3100 N. Knoxville Ave. Suite 204

Peoria, IL 61603 P: (309) 621-4680

F: (309) 621-4690

Merui

Respectfully Submitted,

Stephen Merwin

www.mec-us.com
Providing Quality Service Since 1994

CITY OF AURORA CITY HALL - NORTH ROOF

44 E. Downer Place Aurora, IL 60505



Homogeneous Area:	MRA
Material Description:	Built-Up Roofing
Material Location:	3rd Floor - North - West Section
ACM Y/N:	No
Comments: N/A	



Homogeneous Area:	MRB
Material Description:	Built-Up Roofing
Material Location:	3rd Floor Roof - North - East Section
ACM Y/N:	No

Comments: N/A

MSL	EMSL Analytical, Inc. 4140 Litt Drive Hillside, IL 60162 Tel/Fax: (773) 313-0099 / (773) 313-0139 http://www.EMSL.com / chicagolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	
Attention:	Stephen Merwin	Phone:	(630) 514-3758
	Midwest Environmental Consulting Svs.	Fax:	(630) 553-3990
	2551 N. Bridge Street	Received Date:	03/22/2021 8:00 AM
	Yorkville, IL 60560	Analysis Date:	03/29/2021
		Collected Date:	
Project:	21-02-111-INSP CITY OF AURORA, CITY HALL 44 E DOWNER PLACE AURORA, IL		

		Non-Asbestos			<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
MRA-1	BUILT-UP ROOFING -> NORTH END	Black Non-Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
262102235-0001		Homogeneous			
MRA-2	BUILT-UP ROOFING -> WEST SECTION	Black Non-Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
262102235-0002		Homogeneous			
MRA-3	BUILT-UP ROOFING - EAST SECTION	Black Non-Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
262102235-0003		Homogeneous			
MRB-1	BUILT-UP ROOFING -> NORTH END	Black Non-Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
262102235-0004		Homogeneous			
MRB-2	BUILT-UP ROOFING -> WEST SECTION	Black Non-Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
262102235-0005		Homogeneous			
MRB-3	BUILT-UP ROOFING - EAST SECTION	Black Non-Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
262102235-0006		Homogeneous			

Light Microscopy

Analyst(s)

Kristen Berglund (6)

fam P. Hh

James Hahn, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP. NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis . Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Hillside, IL NVLAP Lab Code 200399-0

Initial report from: 03/29/2021 11:23:23

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Company Name: M. dwest	ENVisionmenta	EMSL Cysto	/ • • /		
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Zip/Postal Code: 60560	J Country:	Telephone #	670 537398	Fax #: 630	1553-3980
Report To (Name): TEPHEN	MERWIN	Please Prov	ide Results: 🔲 Fa	x 🗌 Email	
Email Address: SMC(W) C	MEC-US, lom_	Purchase O	rder:		
Project Name/Number: 2/-03	2-111-IFNSP		ct ID (Internal Use Or		
U.S. State Samples Taken:	Bill to: Same Different -		: Commercial/Tax t note instructions in Comm		ential/Tax Exempt
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*For TEM Air 3 hr through 6 hr, please call a	head to schedule. There is a premiur	n charge for 3 Ho	ur TEM AHERA or EPA L	evel II TAT. You w	ill be asked to sign an
authorization form for this service	Analysis completed in accordance			l in the An <u>a</u> lytical P	rice Guide.
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w/OSHA 8hr. TWA			Wipe - ASTM D		
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PLM EPA NOB (<1%) Point Count	TEM - Buík □ TEM EPA NOB		PLM EPA 600/R		
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Point Count w/Gravimetric	Chatfield SOP	,	TEM Qualitative		
400 (<0.25%) 🗌 1000 (<0.1%)	TEM Mass Analysis-EPA	600 sec. 2.5	TEM Qualitative		
NYS 198.1 (friable in NY)	TEM – Water: EPA 100.2		Cincinnati Metho (BC only)	00 EPA 000/R-04	4/004 - muivi/ i civi
NYS 198.6 NOB (non-friable-NY)	Fibers >10µm 🗌 Waste	Drinking	Other:		
□ NYS 198.8 SOF-V □ NIOSH 9002 (<1%)	All Fiber Sizes 🔲 Waste	Drinking			
Check For Positive Stop – Clear	y Identify Homogenous Grou	p Filter	Pore Size (Air Samp	oles): 0.8µr	🖌 🗌 0.45µm
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	Page 1 of	pages			

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Controlled Document - Asbestos COC - R10 - 05/09/2016

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PROFESSIONAL LICENSE

ISSUED 1/17/2020

ID NUMBER

100 - 02871

EXPIRES 05/15/2021

25 W 101 MARBLEHEAD COUR NAPERVILLE, IL 60540 STEPHEN D MERWIN

Environmental Health



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OCCUPATIONAL TRAINING & SUPPLY, INC. 7233 S. Adams Street | Willowbrook, IL 60527 | (630) 655-3900 | www.otssafety.com

Asbestos Building Inspector Refresher

Occupational Training & Supply, Inc. certifies that **Stephen Merwin**

70%. The course is accredited by the Illinois Department of Public Health and Indiana Department of Environmental Management for purposes has successfully completed the Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency response Act (AHERA) and TSCA Title II

Course Date: 7/31/2020

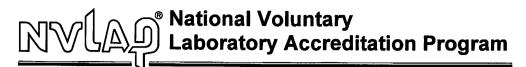
Exam Date: 7/31/2020

Expiration Date: 7/31/2021

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Kath/ DeSalvo, Director

Certificate Number: BIR2007311726





SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EMSL Analytical Inc.

4140 Litt Drive Hillside, IL 60162 Mr. James Hahn Phone: 773-313-0099 Fax: 773-313-0139 Email: jhahn@emsl.com http://www.emsl.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200399-0

Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code **Description**

18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200399-0

EMSL Analytical Inc.

Hillside, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2021-04-01 through 2022-03-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



Consultants – Engineers – Scientists

ASBESTOS SAMPLING REPORT

Performed For:

CITY OF AURORA

44 E. Downer Place, P.O. Box 2067 Aurora, IL 60507-2067

Project Location:



THE VENUE 19-21 S. Broadway Aurora, IL 60505

Inspection Date: March 18, 2021

MEC Project #: 21-02-110-INSP

Yorkville Location 2551 N. Bridge St. Yorkville, IL 60560 P: (630) 553-3989 F: (630) 553-3990

Peoria Location

3100 N. Knoxville Ave. Suite 204

Peoria, IL 61603 P: (309) 621-4680 F: (309) 621-4690

CITY OF AURORA THE VENUE 19-21 S. Broadway Aurora, IL 60505

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Midwest Environmental Consulting Services, Inc. 2551 N. Bridge St. Yorkville, IL 60560 Phone: (630) 553-3989 Fax: (630) 553-3990 Midwest Environmental Consulting Services, Inc.

Consultants – Engineers – Scientists

April 21, 2021

CITY OF AURORA 44 E. Downer Place, P.O. Box 2067 Aurora, IL 60507-2067

Attention: Jim Birchall, Superintendentof Fleet & Facility Maintenance

Subject: ACM Roof Bulk Sampling Results THE VENUE, 19-21 S. Broadway, Aurora, IL 60505 MEC Project #:21-02-110-INSP

Dear Mr. Birchall:

On March 18, 2021, Stephen Merwin (IDPH-Licensed Asbestos Inspector #100-02871) from Midwest Environmental Consulting Services, Inc. (MEC) collected a total of nine (9) suspect asbestos-containing roofing samples from the Water Street Playhouse located at 11-13 Water Street, Aurora, Illinois.

The purpose of the sampling was to determine the potential existence of asbestos-containing materials (ACM) in selected roofing sections where roof renovations are scheduled.

The table below displays a summary of the sampled material per your direction and the analytical results:

H S A	Material Description	Sample Location	ACM (Y/N)
MRA	Asphalt Roofing w/Insulation	Roof	No
MRB	Roof Tar Sealant - Black	Roof Edges - 350 S.F.	Yes

EMSL Analytical, Inc. located at 4140 Litt Drive, Hillside, Illinois, 60162, analyzed the samples and reported the results to Midwest Environmental Consulting Services, Inc. Please keep the analytical laboratory results attached to this letter for future reference. A photograph of each homogeneous sampling area has also been attached for your reference.

If you have any questions or concerns, please feel free to contact me at (630) 553-3989. Thank you for providing us with an opportunity to service your environmental needs.

Respectfully Submitted,

Merui

Stephen Merwin

www.mec-us.com Providing Quality Service Since 1994

Yorkville Location 2551 N. Bridge St. Yorkville, IL 60560 P: (630) 553-3989 F: (630) 553-3990

Peoria Location 3100 N. Knoxville Ave. Suite 204

Peoria, IL 61603 P: (309) 621-4680 F: (309) 621-4690

CITY OF AURORA

THE VENUE 19-21 S. Broadway Aurora, IL 60505



Homogeneous Area:	MRA
Material Description:	Asphalt Roofing w/Insulation
Material Location:	Roof
ACM Y/N:	No

Comments: N/A



Homogeneous Area:	MRB
Material Description:	Roof Tar Sealant - Black
Material Location:	Roof Edges - 350 S.F.
ACM Y/N:	Yes

Comments: N/A

MSL (EMSL Analytical, Inc. 1140 Litt Drive Hillside, IL 60162 Tel/Fax: (773) 313-0099 / (773) 313-0139 http://www.EMSL.com / chicagolab@emsl.com	Customer ID: Customer PO: Project ID:	
Attention:	Stephen Merwin	Phone:	(630) 514-3758
	Midwest Environmental Consulting Svs.	Fax:	(630) 553-3990
	2551 N. Bridge Street	Received Date:	03/22/2021 8:00 AM
	Yorkville, IL 60560	Analysis Date:	03/29/2021
		Collected Date:	
Project:	21-02-110-INSP		
	CITY OF AURORA-THE VENUE		
	19-21 S. BROADWAY		
	AURORA, IL		

			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
MRA-1-Roofing 262102237-0001	ASPHALT ROOFING/INSULATI ON	Black Non-Fibrous Homogeneous	10% Synthetic 15% Glass	75% Non-fibrous (Other)	None Detected
MRA-1-Insulation	ASPHALT ROOFING/INSULATI ON	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
MRA-2-Roofing 262102237-0002	ASPHALT ROOFING/INSULATI ON	Black Non-Fibrous Homogeneous	10% Synthetic 15% Glass	75% Non-fibrous (Other)	None Detected
MRA-2-Insulation	ASPHALT ROOFING/INSULATI ON	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
MRA-3-Roofing 262102237-0003	ASPHALT ROOFING/INSULATI ON	Black Non-Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
MRA-3-Insulation 262102237-0003A	ASPHALT ROOFING/INSULATI ON	Brown Fibrous Homogeneous	85% Cellulose	10% Perlite 5% Non-fibrous (Other)	None Detected
MRB-1 262102237-0004	ROOF TAR SEALANT	Black Non-Fibrous Homogeneous	10% Cellulose	80% Non-fibrous (Other)	10% Chrysotile
MRB-2	ROOF TAR SEALANT				Positive Stop (Not Analyzed)
262102237-0005					
MRB-3	ROOF TAR SEALANT				Positive Stop (Not Analyzed)
262102237-0006					

Analyst(s)

James Hahn (7)

for P. Hh

EMSI Order: 262102237

James Hahn, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Hillside, IL NVLAP Lab Code 200399-0

Initial report from: 03/29/2021 09:53:44

Ord	erID: 262102237	Aurorq - Th Asbestos Cha EMSL Order Num	ho 1/2	0110-	-19-21 5	5. Broadure
	Muty or	Achastas Cha	in of Cus	nuc_	A MOL RMSL	
		EMSL Order Nun		slouy	AUTO MADE	4140 LITT DRIVE
•						ILLSIDE, IL 60162
	EMSL ANALTICAL, INC.	262102237		/		(773) 313-0099
·		/_/	CONS. H	Wz SU	5 TRC FAX.	(773) 313-0139
	Company Name : Midwert	ENVIONMENTAL	EMSL Custo	mer ID:		
· · /	Street: 2551, N. BA	dal Tr	City: YJ	Hull	O State/Provin	nce: Ft-
	Zip/Postal Code: 60,560	Country:	Telephone #	630-55	737 Fax #: 63	2-553-3980
	Report To (Name): STEPHEN	MERNIN	Please Prov	ide Results:	🗌 Fax 🗌 Email	
	Email Address: SMCNUIN)	Omec-US, COM	Purchase O	rder:		•
k	Project Name/Number 2/02	=110-JNSP	EMSL Proje			
Ľ	U.S. State Samples Taken: EMSL-E	Bill to: Same Different -				idential/Tax Exempt
	· · · · · · · · · · · · · · · · · · ·	Third Party Billing requires writ	ten authorizatior	n from third pai	rty	
-	3 Hour 6 Hour	Turnaround Time (TAT)	Options* Pl	10 m m	6 Hour X 1 Week	2 Week
	*For TEM Air 3 hr through 6 hr, please call a authorization form for this service		n charge for 3 Ho	ur TEM AHERA	or EPA Level II TAT. You	will be asked to sign an
	PCM - Air Check if samples are from NY	<u>TEM – Air</u> 🗌 4-4.5hr TAT (AHERA only}	TEM- Dust	i .	
	NIOSH 7400	AHERA 40 CFR, Part 76	3	🗌 🗌 Microva	c - ASTM D 5755	· · · · ·
	🔲 w/ OSHA 8hr. TWA	NIOSH 7402		🗌 🗌 Wipe - A	ASTM D6480	ļ
	PLM - Bulk (reporting limit)	EPA Level II			Sonication (EPA 600/J-	93/167)
	PLM EPA 600/R-93/116 (<1%)	ISO 10312		Soil/Rock/Vermiculite		
	PIM EPA NOB (<1%)	TEM - Bulk			A 600/R-93/116 with m	•••••
•]	☐ 400 (<0.25%) ☐ 1000 (<0.1%)				PA 600/R-93/116 with milling prep (<0.25%) PA 600/R-93/116 with milling prep (<0.1%)	
	Point Count w/Gravimetric	Chatfield SOP	TEM Qualitative via Filtration Prep			
	□ 400 (<0.25%) □ 1000 (<0.1%)	TEM Mass Analysis-EPA	600 sec. 2.5		alitative via Drop Mour ati Method EPA 600/R-	
1	- NYS 198.1 (friable in NY)	<u>TEM – Water:</u> EPA 100.2		(BC only)		
	NYS 198.6 NOB (non-friable-NY)	Fibers >10µm 🗍 Waste [] Drinking	Other:	,	
	□ NYS 198.8 SOF-V / / □ NIOSH 9002 (<1%)	All Fiber Sizes D Waste	Drinking			
	Check For Positive Stop – Clearly	Identify Homogenous Group	5 Filter	Pore Size (A	Air Samples): 🔲 0.8	um 🗌 0.45µm
	Candi) NOGO (1)		·,	OILA	r
	Samplers Name: JEPHEN	MERUIN	Samplers	Signature:	Volume/Area (Air)	Date/Time
	Sample #	Sample Description	on -	1	HA # (Bulk)	Sampled
	MRN A-1	IT Rufuld	FNSI	1 Tim		3/10/21
		LI TONTNAL	<u>- 710 70</u>	<u>action</u>	<u> </u>	10/2
	MKB-1-3 Kuo	TUV See and	<u>// `</u>			
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		<u> </u>				
Ī	Client Sample # (s):	A			Total # of Samples:	
	Relinquished (Client)	Date:	3/19/	z/		TOOP
	Received (Lab):	Date:	332	21	Time	8.00 m
	Comments/Special Instructions:			,		D.3
•	L		<u> </u>			
-		//> Page 1 of	1	4		
		Page 1 of	pages			
• •	Controlled Document - Asbestos CCC - R10 - 05/09/2016	•	•			
	. /					
			,			-

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7-



PROFESSIONAL LICENSE

ISSUED 1/17/2020

ID NUMBER

100 - 02871

EXPIRES 05/15/2021

25 W 101 MARBLEHEAD COUR NAPERVILLE, IL 60540 STEPHEN D MERWIN

Environmental Health



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OCCUPATIONAL TRAINING & SUPPLY, INC. 7233 S. Adams Street | Willowbrook, IL 60527 | (630) 655-3900 | www.otssafety.com

Asbestos Building Inspector Refresher

Occupational Training & Supply, Inc. certifies that **Stephen Merwin**

70%. The course is accredited by the Illinois Department of Public Health and Indiana Department of Environmental Management for purposes has successfully completed the Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency response Act (AHERA) and TSCA Title II

Course Date: 7/31/2020

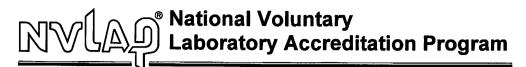
Exam Date: 7/31/2020

Expiration Date: 7/31/2021

lith, De Selv-

Kath/ DeSalvo, Director

Certificate Number: BIR2007311726





SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EMSL Analytical Inc.

4140 Litt Drive Hillside, IL 60162 Mr. James Hahn Phone: 773-313-0099 Fax: 773-313-0139 Email: jhahn@emsl.com http://www.emsl.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200399-0

Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code **Description**

18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200399-0

EMSL Analytical Inc.

Hillside, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2021-04-01 through 2022-03-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



Consultants – Engineers – Scientists

ASBESTOS SAMPLING REPORT

Performed For:

CITY OF AURORA

44 E. Downer Place, P.O. Box 2067 Aurora, IL 60507-2067

Project Location:



WATER STREET PLAYHOUSE - ROOF 11-13 Water Street Aurora, IL 60505

Inspection Date: March 18, 2021

MEC Project #: 21-02-112-INSP

Yorkville Location 2551 N. Bridge St. Yorkville, IL 60560 P: (630) 553-3989 F: (630) 553-3990

Peoria Location

3100 N. Knoxville Ave. Suite 204

Peoria, IL 61603 P: (309) 621-4680 F: (309) 621-4690

CITY OF AURORA WATER STREET PLAYHOUSE - ROOF 11-13 Water Street Aurora, IL 60505

Table of Contents MEC Project #: 21-02-112-INSP

Sampling Report	Section 1
Photographs of Homogeneous Areas	Section 2
Final Analytical Report	Section 3
Licensing / Certifications	Section 4

Midwest Environmental Consulting Services, Inc. 2551 N. Bridge Street Yorkville, IL 60560 Phone: (630) 553-3989 Fax: (630) 553-3990 Midwest Environmental Consulting Services, Inc.

Consultants – Engineers – Scientists

April 21, 2021

CITY OF AURORA 44 E. Downer Place, P.O. Box 2067 Aurora, IL 60507-2067

Attention: Jim Birchall, Superintendentof Fleet & Facility Maintenance

Subject: ACM Roof Bulk Sampling Results WATER STREET PLAYHOUSE - ROOF, 11-13 Water Street, Aurora, IL 60505 MEC Project #: 21-02-112-INSP

Dear Mr. Birchall:

On March 18, 2021, Stephen Merwin (IDPH-Licensed Asbestos Inspector #100-02871) from Midwest Environmental Consulting Services, Inc. (MEC) collected a total of six (6) suspect asbestos-containing roofing samples from the Water Street Playhouse located at 11-13 Water Street, Aurora, Illinois.

The purpose of the sampling was to determine the potential existence of asbestos-containing materials (ACM) in selected roofing sections where roof renovations are scheduled.

The table below displays a summary of the sampled material per your direction and the analytical

EMSL Analytical, Inc. located at 4140 Litt Drive, Hillside, Illinois, 60162, analyzed the samples and reported the results to Midwest Environmental Consulting Services, Inc. Please keep the analytical

laboratory results attached to this letter for future reference. A photograph of each homogeneous

If you have any questions or concerns, please feel free to contact me at (630) 553-3989. Thank you for

H S A	Material Description	Sample Location	ACM (Y/N)
MRA	Asphalt Roofing	Roof	No
MRB	Roof Sealant - Gray	Roof Edges	No

Yorkville Location 2551 N. Bridge St. Yorkville, IL 60560 P: (630) 553-3989 F: (630) 553-3990

Peoria Location 3100 N. Knoxville Ave.

Suite 204

Peoria, IL 61603 P: (309) 621-4680 F: (309) 621-4690 Stypher Merin

Respectfully Submitted,

sampling area has also been attached for your reference.

providing us with an opportunity to service your environmental needs.

Stephen Merwin

www.mec-us.com Providing Quality Service Since 1994

CITY OF AURORA WATER STREET PLAYHOUSE - ROOF 11-13 Water Street Aurora, IL 60505



Homogeneous Area:	MRA
Material Description:	Asphalt Roofing
Material Location:	Roof
ACM Y/N:	No

Comments: N/A



Homogeneous Area:	MRB
Material Description:	Roof Sealant - Gray
Material Location:	Roof Edges
ACM Y/N:	No

Comments: N/A

EMSL	EMSL Analytical, Inc. 4140 Litt Drive Hillside, IL 60162 Tel/Fax: (773) 313-0099 / (773) 313-0139 http://www.EMSL.com / chicagolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	
Attention:	Stephen Merwin	Phone:	(630) 514-3758
	Midwest Environmental Consulting Svs.	Fax:	(630) 553-3990
	2551 N. Bridge Street	Received Date:	03/22/2021 8:00 AM
	Yorkville, IL 60560	Analysis Date:	03/29/2021
		Collected Date:	
Project:	21-02-112-INSP		
-	CITY OF AURORA-WATER STREET PLAYHOUSE		
	11-13 WATER ST. AURORA, IL		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-A	sbestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
MRA-1	ASPHALT ROOFING	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
262102234-0001		Homogeneous			
MRA-2	ASPHALT ROOFING	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
262102234-0002		Homogeneous			
MRA-3	ASPHALT ROOFING	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
262102234-0003		Homogeneous			
MRB-1	ROOF SEALANT-GRAY	Gray/Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
262102234-0004		Homogeneous			
MRB-2	ROOF SEALANT-GRAY	Gray/Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
262102234-0005		Homogeneous			
MRB-3	ROOF SEALANT-GRAY	Gray/Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
262102234-0006		Homogeneous			

Analyst(s)

Kristen Berglund (6)

for P. Hh

James Hahn, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis . Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Hillside, IL NVLAP Lab Code 200399-0

Initial report from: 03/29/2021 11:28:34

OrderID: 262102234	Aurora - D Asbestos Cha	Vater	Street	Playho	ouse
	Asbestos Cha EMSL Order Nur	i <mark>in of Cus</mark> nber (Lab Us	stody 11-13		A2507FICAL, INC 4140 LITT DRIVE IILLSIDE, IL 60162
	262102234				: (773) 313-0099
EMSL ANALYTICAL, INC.		USI Hiver	SULS FN	<u>С.</u> ^{Fax}	: (773) 313-0139
Company Name MidiNest	ENVIRONMENTE	EMSL Custo	omer ID: 1/		
	ge IT	City: Por	Kvi Ile	State/Provi	
Zip/Postal Code: 60560	MERWIN	Telephone #		87 Fax #: <u>636</u> ax □ Email	<u>5557 777C</u>
Email Address: ASINEWIN		Purchase O	•		
Project Name/Number: $21-0$ U.S. State Samples Taken:	2-112-INSP	EMSL Proje	ct ID (Internal Use (:] Commercial/T		idential/Tax Exempt
	Sill to: Same Different -	If Bill to is Differen	t note instructions in Com		Identiau lax Exempt
	Third Party Billing requires with Turnaround Time (TAT)	Options* Pl	ease Check		··
For TEM Air 3 hr through 6 hr, please call al	24 Hour 48 Hour 48 Hour 48 Hour 48 Hour 48 Hour	n charge for 3 Ho	ur TEM AHERA or EPA	Levell TAT. You	will be asked to sign an
PCM - Air Check if samples are	Analysis completed in accordance		ns and Conditions locate	ed in the Analytical	Price Guid <u>e.</u>
from NY	AHERA 40 CFR, Part 76		Microvac - AS	FM D 5755	
w/ OSHA 8hr. TWA	NIOSH 7402		Wipe - ASTM [06480	
PLM - Bulk (reporting limit) PLM EPA 600/R-93/116 (<1%)	EPA Level II		Carpet Sonicat	_ i	-93/167)
□ PLM EPA NOB (<1%)	<u>TEM - Bulk</u>	_	PLM EPA 600/		nilling prep (<1%)
Point Count ☐ 400 (<0.25%)	TEM EPA NOB				nilling prep (<0.25%) nilling prep (<0.1%)
Point Count w/Gravimetric	Chatfield SOP	·	🔲 TEM Qualitativ	e via Filtration F	rep
☐ 400 (<0.25%)	TEM Mass Analysis-EPA	600 sec 2.5			nt Prep 04/004 – PLM/TEM
NYS 198.6 NOB (non-friable-NY)	Fibers >10µm 🗋 Waste 🗋 Drinking		(BC only) Other:		
□ NYS 198.8 SOF-V □ NIOSH 9002 (<1%)	All Fiber Sizes	Drinking			
Check For Positive Stop – Clearly	Identify Homogenous Grou	p Filter	Pore Size (Air Sam	nples): 📋 0.8	um _ 🗌 0.45µm
Samplers Name: STEPHE	N MERUSA	Samplers	Signature:	the M	in the second se
Sample #	Sample Descript	ion .		me/Area (Air) A # (Bulk)	Date/Time Sampled
MRA-13 A	oph. IT Kuć				3/18/21
MRB-1-3 K	out Sealan	T-lh	LAV.		
	UON Maan				
Client Sample # (s):	1			of Samples:	
Relinguished (Client):	Date	3/19/	7.1	Time	TOP
Received (Lab):	D. J. Date		22.21	Time	
Comments/Special Instructions:		- J - C			\$.3

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Page 1 of ____ pages

Controlled Document - Asbestos COC - Rt0 - 05/09/2016



PROFESSIONAL LICENSE

ISSUED 1/17/2020

ID NUMBER

100 - 02871

EXPIRES 05/15/2021

25 W 101 MARBLEHEAD COUR NAPERVILLE, IL 60540 STEPHEN D MERWIN

Environmental Health



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(N

OCCUPATIONAL TRAINING & SUPPLY, INC. 7233 S. Adams Street | Willowbrook, IL 60527 | (630) 655-3900 | www.otssafety.com

Asbestos Building Inspector Refresher

Occupational Training & Supply, Inc. certifies that **Stephen Merwin**

70%. The course is accredited by the Illinois Department of Public Health and Indiana Department of Environmental Management for purposes has successfully completed the Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of of accreditation in accordance with EPA 40 CFR 763, Asbestos Hazard Emergency response Act (AHERA) and TSCA Title II

Course Date: 7/31/2020

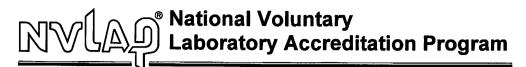
Exam Date: 7/31/2020

Expiration Date: 7/31/2021

lith, De Selv-

Kath/ DeSalvo, Director

Certificate Number: BIR2007311726





SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EMSL Analytical Inc.

4140 Litt Drive Hillside, IL 60162 Mr. James Hahn Phone: 773-313-0099 Fax: 773-313-0139 Email: jhahn@emsl.com http://www.emsl.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200399-0

Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code **Description**

18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200399-0

EMSL Analytical Inc.

Hillside, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2021-04-01 through 2022-03-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program

SECTION 00 31 13 PRELIMINARY SCHEDULE

1.01 GENERAL

A. The following represents the preliminary construction schedule for the Work. This schedule is the current estimate of the Owner to be used for purposes of bidding. All bidders shall include the costs of all overtime, double-shift, or so-called "premium" time that may be necessary to meet this milestone.

1.02 PRELIMINARY SCHEDULE

- A. Award of Project: Anticipated May 23, 2021
- B. Commencement of Construction: July 1, 2021
- C. Substantial Completion: October 1, 2021 END OF SECTION

SECTION 00 41 13 BID FORM - STIPULATED SUM

SINGLE CONTRACT

- PROJECT: CITY OF AURORA ROOF REPLACEMENT AT THE VENUE, CITY HALL & WATER STREET PLAYHOUSE 44 E. DOWNER PLACE AURORA, ILLINOIS 60507
- BID TO: CITY OF AURORA 44 E. DOWNER PLACE AURORA, ILLINOIS 60507

BID FROM:	Corporate Name:	
	Address:	
	City, State, Zip:	
	Telephone No.:	
	Fax No.:	
	Email Address:	
	Contact Person:	

1.01 ACCEPTANCE

The undersigned Bidder agrees, if this Bid is accepted, to enter into an agreement with the Owner, in the form included in the Bidding Documents, to perform and furnish the Work as indicated in the Bidding Documents for the Bid Price and within the Bid times indicated in this Bid and in accordance with the terms and conditions of the Contract Documents.

1.02 ACKNOWLEDGMENTS

In submitting this Bid, the Bidder represents that:

- A. This Bid will remain open for acceptance for a period of 90 days from the Bid opening date;
- B. The Owner has the right to reject this Bid;
- C. The Bidder accepts the provisions of the Instructions and Supplementary Instructions to Bidders regarding the disposition of the Bid;
- D. The Bidder agrees to sign and submit the Agreement and other documents required by the Bidding Requirements within 15 days after the Owner's Notice of Award;
- E. The Bidder has examined the complete set of Bidding Documents;
- F. The Bidder has visited the site and become familiar with the general, local, and site conditions;
- G. The Bidder is familiar with Federal, State and Local Laws and Regulations;

- H. The Bidder has correlated the information known to the Bidder; information and observations obtained from visits to the site, reports and drawings identified in the Bidding Documents and additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;
- I. This Bid is genuine and not made in the interest of or on behalf of an undisclosed person, firm, or corporation and is not submitted in conformity with an Agreement or rules or group, association, organization, or corporation;
- J. The Bidder has not directly or indirectly induced or solicited another Bidder to submit a false or sham Bid; sought by collusion to obtain for itself an advantage over another Bidder or over the Owner;
- K. The Bidder has received the following Addenda, receipt of which is hereby acknowledged:
 - 1. Addendum No. _____Date _____
 - 2. Addendum No. _____ Date _____
 - 3. Addendum No. _____Date _____

The Bidder understands that, in submitting this Bid, he waives all right to plead any misunderstandings regarding the foregoing.

1.03 SINGLE CONTRACT - BASE BID PRICE:

- A. Refer to Section 01 10 00 Summary.
- B. The Bidder will complete the Work of the Project in accordance with the Contract Documents for the following price:
 - 1. Stipulated Sum Bid Price:

(Use Numerals)

(Use Words)

1.04 BID BOND

A. The Bidder has attached the required bid security in the form described by Document 00 43 13-Bid Security Form with this Bid.

1.05 ALLOWANCES

A. The Bidder has included in the Bid the appropriate allowances as specified in Section 01 21 00 - Allowances.

1.06 ALTERNATES

A. The Bidder has attached Document 00 43 23 - Bid Form Supplement - Alternates with this Bid. Refer to Section 01 23 00 - Alternates for description of alternates.

1.07 CONTRACT TIME

A. The Bidder agrees to begin and complete Work as indicated in Document 00 31 13 - Preliminary Schedule.

1.08 OTHER BID FORM SUPPLEMENTS

- A. The following additional Documents are attached to and made a condition of this Bid:
 - 1. Document 00 43 14 Bid Form Supplement Bidder's Certification.
 - 2. Document 00 43 15 Bid Form Supplement Bidder's Tax Certification.
 - 3. Document 00 43 16 Bid Form Supplement Apprenticeship or Training Program Certification and Current Signatory Letters.
 - 4. Document 00 43 17 Bid Form Supplement City of Aurora Local Vendor Preference Application.

1.09 SIGNATURES

- A. Respectfully submitted this _____ day of _____, 2021.
- B. Type of Firm: (check one)
 - _____ Individual
 - _____ Partnership
 - _____ Corporation
 - _____ Joint Venture
- C. Corporate Seal:(SEAL)
- D. Full name of firm: _____
- E. Authorized Signing Officer:

Title: _____

F. Authorized Signing Officer: _____

Title: _____ END OF DOCUMENT

SECTION 00 43 13 BID SECURITY FORM

1.01 FORM OF BID BOND

- A. AIA Document A310 (2010 Edition) Bid Bond Form.
- B. The above document may be examined at the Architect/Engineer's office or purchased at the American Institute of Architects, http://www.aia.org/docs.
 END OF DOCUMENT

SECTION 00 43 14 BID FORM SUPPLEMENT - BIDDER'S CERTIFICATION

1.01 City of Aurora Bidder's Certification attached (1 page). END OF DOCUMENT

BIDDER'S CERTIFICATION

I/We hereby certify that:

- A. A complete set of bid papers, as intended, has been received, and that I/We will abide by the contents and/or information received and/or contained herein.
- B. I/We have not entered into any collusion or other unethical practices with any person, firm, or employee of the City which would in any way be construed as unethical business practice.
- C. I/We have adopted a written sexual harassment policy which is in accordance with the requirements of Federal, State and local laws, regulations and policies and further certify that I/We are also in compliance with all other equal employment requirements contained in Public Act 87-1257 (effective July 1, 1993) 775 ILCS 5/2-105 (A).
- D. I/We are in compliance with the most current "Prevailing Rate" of wages for laborers, mechanics and other workers as required by the State of Illinois Department of Labor.
- E I/We operate a drug free environment and drugs are not allowed in the workplace or satellite locations as well as City of Aurora sites in accordance with the Drug Free Workplace Act of January, 1992.
- F. The Bidder is not barred from bidding on the Project, or entering into this contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code, or any similar offense of "bid rigging" or "bid rotating" of any state or the United States.
- G. I/We will submit, for all contracts in excess of \$25,000.00, a certificate indicating participation in apprenticeship and training programs approved and registered with the United Sates Department of Labor. Contractor shall check the box indicating that a copy of applicable program certification is attached.
- H. I/We will abide by all other Federal, State and local codes, rules, regulations, ordinances and statutes.

COMPANY NAME	
ADDRESS	
CITY/STATE/ZIP CODE	
NAME OF CORPORATE/COMPANY OFFICIAL	PLEASE TYPE OR PRINT CLEARLY
TITLE	
AUTHORIZED OFFICIAL SIGNATURE	
DATE	Subscribed and Sworn to
TELEPHONE ()	Before me this day
	of, 2021
	Notary Public

SECTION 00 43 15 BID FORM SUPPLEMENT - BIDDER'S TAX CERTIFICATION

1.01 City of Aurora Bidder's Tax Certification attached (1 page). END OF SECTION

STATE OF ILLINOIS

County of Kane

SS.

))

)

BIDDER'S TAX CERTIFICATION

(BIDDER'S EXECUTING OFFICER), being first duly sworn on oath, deposes and states that all statements made herein are made on behalf of the Bidder, that this despondent is authorized to make them and that the statements contained herein are true and correct.

Bidder deposes, states and certifies that Bidder is not barred from contracting with any unit of local government in the State of Illinois as result of a delinquency in payment of any tax administered by the Illinois Department of Revenue unless Bidder is contesting, in accordance with the procedures established by the appropriate statute, its liability for the tax or the amount of the tax, all as provided for in accordance with 65 ILCS 5/11-42.1-1.

DATED this ______ day of ______, 2021.

By ______ (Signature of Bidder's Executing Officer)

(Print name of Bidder's Executing Officer)

(Title)

ATTEST/WITNESS:

By _____

Title

Subscribed and sworn to before me this _____ day of _____, 2021.

Notary Public

(SEAL)

SECTION 00 43 16 BID FORM SUPPLEMENT - APPRENTICESHIP OR TRAINING PROGRAM CERTIFICATION AND CURRENT SIGNATORY LETTERS

1.01 City of Aurora Apprenticeship or Training Program Certification attached (2 pages). END OF SECTION

Apprenticeship or Training Program Certification

Return with Bid

All contractors are required to complete the following certification:

 \Box For this contract proposal or for all groups in this deliver and install proposal.

□ For the following deliver and install groups in this material proposal:

The City of Aurora policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidders' subcontractors to disclose participation in apprenticeship or training programs that are approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

- I. Except as provided in paragraph IV below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
- II. The undersigned bidder further certifies for work to be performed by subcontract that each of its subcontractors submitted for approval is, at the time of such bid, participating in an approved, applicable apprenticeship or training program applicable to the work of the subcontract.
- III. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.

IV. Except for any work identified above, any bidder or subcontractor that shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforce and positions of ownership. □

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. <u>The City of Aurora requires a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors be included with the bid in order to qualify to bid on the project.</u>

The Bidder must also submit a signed and current dated letter(s) from the <u>certificate holder(s)</u> indicating that the Bidder may use the certificate to meet the above listed requirements for this specific project.

Bidder:	By:	
		(Signature)
Address:	Title	

SECTION 00 43 17 BID FORM SUPPLEMENT - CITY OF AURORA LOCAL VENDOR PREFERENCE APPLICATION

1.01 City of Aurora, IL. - Local Vendor Application attached (1 page). END OF SECTION



The business identified below is requesting to be placed on the City of Aurora, Illinois Local Vendor Preference list, in accordance with ordinance O20-029 approved April 28, 2020.

1)	Date Submitted:
2)	Name of Business:
3)	Address of Local Office:
	City, State, Zip:
	Company's Web Address:
6)	Phone: Fax:
7)	County your Local Business is Located In:
	Submitted By (Signature):
	Print Name and Title:
	Email Address:

Sec. 2-410.-Prequalification; local bidder.

- (a) If an interested business would like to prequalify as a "local business", such a business shall complete and submit the prequalification application along with supporting documentation, as listed below, and the applicable fee as set by the City Council, to the Finance Department:
 - a. Evidence that the business has established and maintained a physical presence in the City of Aurora, by virtue of the ownership or lease of all or a portion of a building for a period of not less than twelve (12) consecutive months prior to the submission of the prequalification application; and
 - b. Evidence demonstrating that the business is legally authorized to conduct business within the State of Illinois and the City of Aurora, and has a business registered to operate in the City if required; and
 - c. Evidence that the business is not a debtor to the City of Aurora. For purposes of this subparagraph, a debtor is defined as having outstanding fees, water bills, sales tax or_restaurant/bar tax payments that are thirty (30) days or more past due, or has outstanding weed or nuisance abatements or liens, has failure to comply tickets or parking tickets that are not in dispute as to their validity and are not being challenged in court or other administrative processes.

Back up documentation for (a) a. and (a) b. must accompany this submittal or application will be rejected. Please note for (a) c. above the City of Aurora will verify internally that your company does not have any outstanding fees. Your company should make sure that to the best of its knowledge all bills are current.

Return completed application, with all required backup documentation to: City of Aurora, Attn: Purchasing Division, 44 E. Downer Place, Aurora, IL 60507 Or email to: <u>PurchasingDL@aurora.il.us</u>

Do not write below this line: For City of Aurora use ONLY

(;	1)	a.
1	~	

(a) b.

(a) c.

Date: ____

Approved: _	
Letter Sent:	

Denied:	
Initials: _	

SECTION 00 43 23 ALTERNATES FORM

PARTICULARS

1.01 THE FOLLOWING IS THE LIST OF ALTERNATES REFERENCED IN THE BID SUBMITTED BY:

A. (Bidder) _____

B. TO (Owner): City of Aurora

ALTERNATES LIST

2.01 THE FOLLOWING AMOUNTS SHALL BE ADDED TO THE BID AMOUNT. REFER TO SECTION 01 23 00 - Alternates.

ALTERNATE # 1: ADD \$ _____

END OF SECTION

SECTION 00 52 00 AGREEMENT FORM

1.01 FORM OF AGREEMENT

- A. AIA Document A101, Owner-Contractor Agreement Form Stipulated Sum (2017 Edition), forms the basis of Contract between the Owner and Contractor.
- B. The above document may be examined at the Architect's office or purchased at the American Institute of Architects, http://www.aia.org/contractdocs/index.htm.

1.02 RELATED REQUIREMENTS

- A. Document 00 72 00 General Conditions.
- B. Document 00 73 00 Supplementary Conditions.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF DOCUMENT

AIA Document A101° – 2017

Standard Form of Agreement Between Owner and Contractor where the basis of

payment is a Stipulated Sum

AGREEMENT made as of the 23rd day of May in the year 2021 (In words, indicate day, month and year.)

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

City of Aurora 44 East Downer Place Aurora, Illinois 60506

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

TBD

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

1349 - City of Aurora - Roof Replacement at the Venue, City Hall & Water Street Playhouse 44 East Downer Place Aurora, Illinois 60506

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

Kluber, Inc. 10 S. Shumway Avenue Batavia, Illinois 60510

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:

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

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

The parties should complete A101®-2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

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TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION 3
- 4 CONTRACT SUM
- 5 PAYMENTS
- **DISPUTE RESOLUTION** 6
- 7 **TERMINATION OR SUSPENSION**
- 8 **MISCELLANEOUS PROVISIONS**
- 9 ENUMERATION OF CONTRACT DOCUMENTS

EXHIBIT A INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

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

ARTICLE 2 THE WORK OF THIS CONTRACT

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

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be: (Check one of the following boxes.)

- [] The date of this Agreement.
- [] A date set forth in a notice to proceed issued by the Owner.
- [X] Established as follows:

(Insert a date or a means to determine the date of commencement of the Work.)

July 1, 2021

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

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

§ 3.3 Substantial Completion

Init.

1

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work: (Check one of the following boxes and complete the necessary information.)

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[] Not later than () calendar days from the date of commencement of the Work.

By the following date: October 1, 2021 [X]

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work

Substantial Completion Date

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

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

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item TBD

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. (Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Price

Item

NA

Price

Conditions for Acceptance

§ 4.3 Allowances, if any, included in the Contract Sum: (Identify each allowance.)

> Item Section 01 21 00 - Contingency Allowance

Price \$10,000.00

§ 4.4 Unit prices, if any:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item		Units and Limitations	Price per Unit (\$	0.00)
NA				
	and showing the			

§ 4.5 Liquidated damages, if any: (Insert terms and conditions for liquidated damages, if any.)

None

§ 4.6 Other:

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

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ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

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

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

See attached 2021 Payment Deadline Schedule – Exhibit E

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than two weeks prior to payment deadline, the Owner shall make payment of the amount certified to the Contractor not later than on the attached schedule. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than the next day listed on the attached schedule. The provisions of the Illinois Local Government Prompt Payment Act, 50ILCS 505/1 shall apply to this contract. Contractor shall submit certified payroll and partial/final waivers of lien with every payment request. *(Federal, state or local laws may require payment within a certain period of time.)*

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

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with AIA Document A201TM–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

Init.

1

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

Ten Percent (10.0)%

§ 5.1.7.1.1 The following items are not subject to retainage: (Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:

(Insert any other conditions for release of retainage upon Substantial Completion.)

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.

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

§ 5.2 Final Payment

Init.

1

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

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.

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

(Paragraphs deleted) ARTICLE 6 DISPUTE RESOLUTION § 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker. (If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows: *(Check the appropriate box.)*

- Arbitration pursuant to Section 15.4 of AIA Document A201-2017 []
- [X] Litigation in a court of competent jurisdiction
- [] Other (Specify)

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201-2017.

§ 7.1.1 If the Contract is terminated for the Owner's convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows: (Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner's convenience.)

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

MISCELLANEOUS PROVISIONS ARTICLE 8

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

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

Jim Birchall City of Aurora 44 East Downer Place Aurora, Illinois 60506

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

TBD

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

Init. 1

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§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101TM-2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101[™]–2017 Exhibit A, and elsewhere in the Contract Documents.

(Paragraphs deleted) § 8.7 Other provisions:

ENUMERATION OF CONTRACT DOCUMENTS **ARTICLE 9**

§ 9.1 This Agreement is comprised of the following documents:

- AIA Document A101[™]–2017, Standard Form of Agreement Between Owner and Contractor .1
- .2 Exhibit A – Insurance and Bonds
- .3 AIA Document A201TM-2017, General Conditions of the Contract for Construction
- AIA Document E203TM–2013, Building Information Modeling and Digital Data Exhibit, dated as .4 indicated below:

(Insert the date of the E203-2013 incorporated into this Agreement.)

NA

.5 Drawings

	Number 00 01 15	Title Drawing Index Exhibit D	Date February 14, 2020	
;	Specifications			
	Section	Title	Date	Pages
	01 01 10	Table of Contents	February 14, 2020	- <u>14</u>) (150)
		Exhibit C		

Addenda, if any:

Number	Date	Pages
TBD	TBD	TBD

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

.8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

AIA Document E204TM_2017, Sustainable Projects Exhibit, dated as indicated below: [] (Insert the date of the E204-2017 incorporated into this Agreement.)

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[] The Sustainability Plan:

	Title		Date	Pages	
[]	Supplementary and other Condit	ions of the Contract:		
	Docu	ment	Title	Date	Pages

.9 Other documents, if any, listed below:

> (List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201[™]–2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

00 11 13	Advertisement for Bids	
00 21 13	Instructions to Bidders	
00 31 13	Preliminary Schedule	
00 41 13 Bid Form – Stipulated Sum submitted by TBD, Exhibit B		
00 43 13 Bid Security Form, Exhibit B		
00 43 14 Bid Form – Bidder's Certification submitted by TBD, Exhibit B		
00 43 15 Bid Form – Bidder's Tax Certification submitted by TBD, Exhibit B		
00 43 16 Bid Form – Apprenticeship or Training Program Cert. and Curr		
	Letters submitted by TBD, Exhibit B	
	Bid Bond submitted by TBD, Exhibit B	

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

OWNER (Signature)

Jolene Coulter, Director of Purchasing (Printed name and title)

CONTRACTOR (Signature)

(Printed name and title)

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SECTION 00 60 00 PROJECT FORMS

1.01 FORMS OF BONDS AND CERTIFICATES

- A. Performance and Payment Bonds: AIA Document A312 Performance Bond and Payment Bond.
- B. Consents of Surety:
 - 1. AIA Document G707A Consent of Surety to Final Reduction in or Partial Release of Retainage.
 - 2. AIA Document G707 Consent of Surety to Final Payment.
- C. The above documents may be examined at the Architect's office or purchased at the American Institute of Architects, http://www.aia.org/docs_purchase&defPr=1.

END OF DOCUMENT

SECTION 00 72 00 GENERAL CONDITIONS

1.01 FORM OF GENERAL CONDITIONS

- A. The General Conditions applicable to this contract is attached following this page.
- B. AIA Document A201 2017 "General Conditions of the Contract for Construction" is the General Conditions between the Owner and Contractor.
- C. The above document may be examined at the Architect's office or purchased at the American Institute of Architects, http://www.aia.org/contractdocs/index.htm.

1.02 RELATED REQUIREMENTS

A. SECTION 00 73 00 - Supplementary Conditions.

1.03 SUPPLEMENTARY CONDITIONS

A. Refer to Document 00 73 00 for amendments to these General Conditions. END OF DOCUMENT

SECTION 00 73 00 SUPPLEMENTARY CONDITIONS

1.01 GENERAL

A. The Supplementary Conditions contain modifications and additions to AIA Document A201 - 2017 "General Conditions of the Contract for Construction". Where a portion of the General Conditions is modified, deleted or voided by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

1.02 ARTICLE 1 GENERAL PROVISIONS

- A. § 1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS
 - 1. Add new Section 1.2.2.1 as follows:

"§ 1.2.2.1 Sections of Division 1 - General Requirements govern the execution of the Work of all Sections of the specifications."

- B. § 1.5 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE
 - 1. After the first sentence of Section 1.5.1, insert the following:

"These Instruments of Service are the tangible rendering of professional opinions and service for the Owner and are not, therefore, a commodity, product or good. No warranties, express or implied, are made by the Architect to the Contractor concerning those Instruments of Service."

1.03 ARTICLE 2 OWNER

- A. § 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER
 - 1. Delete the third sentence of Section 2.2.1.
 - 2. Delete Section 2.2.5 in its entirety and replace with the following:

"§ 2.2.5 The contractor will be furnished, free of charge, all returned bidding copies of the drawings and project manuals. The Contractor will be furnished as many additional copies as the Contractor may require, at the cost of reproduction."

B. Add new Section 2.5 as follows:

"§ 2.5 OWNER'S REMEDIES NOT EXCLUSIVE

§ 2.5.1 The rights and remedies of Owner stated in this Article 2 shall be in addition to and not in limitation of any other rights of the Owner granted in the Contract Documents or at law or in equity."

1.04 ARTICLE 3 CONTRACTOR

- A. § 3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTACTOR
 - 1. Delete Section 3.2.1 in its entirety and replace with the following:

"§ 3.2.1 Execution of the Contract by the Contractor is a representation by the Contractor that, prior to the submission of its bid, the Contractor (a) has visited and examined the Project site and is familiar with all of the conditions thereon; (b) has examined the nature, location and character of the general area in which the Project is located, including, without limitation, its climactic conditions, available labor supply, labor costs and available

equipment supply and costs; and (c) has examined the quality and quantity of materials, supplies, tools, equipment, labor and professional services necessary to complete the Work in the manner and within the cost and time frame required by the Contract Documents."

2. Add new Section 3.2.5 as follows:

"§ 3.2.5 Prior to any excavation, the Contractor shall determine the locations of all existing water, gas, sewer, electric, telephone, telegraph, television, irrigation, petroleum pipelines, and other underground utilities and structures. Where the locations of existing underground and surface utilities and structures are indicated, these locations are generally approximate, and all items that may be encountered during the work are not necessarily indicated. The Contractor shall determine the exact locations of all items indicated, and the existence and locations of all items not indicated. Contractor shall be solely responsible for any damage to said facilities and structures and indemnify Architect and Owner."

B. § 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

1. Add new Sections 3.3.4 through 3.3.7 as follows:

"§ 3.3.4 The Contractor has the responsibility to ensure that all material suppliers and Subcontractors, their agents, and employees adhere to the Contract Documents, and that they order materials on time, taking into account the current market and delivery conditions and that they provide materials on time. The Contractor shall coordinate its Work, including without limitation, deliveries, storage, installations, and construction utilities with that of all others on the Project. The Contractor shall be responsible for the space requirements, locations, and routing of its equipment. In areas and locations where the proper and most effective space requirements, locations and routing cannot be made as indicated, the Contractor shall meet with all others involved, before installation, to plan the most effective method of overall installation.

§ 3.3.5 All manufactured articles, material and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer, unless herein specified to the contrary.

§ 3.3.6 After commencing the work, the Contractor shall use every precaution to avoid interferences with existing underground and surface utilities and structures, and protect them from damage. The Contractor shall repair or pay for all damage caused by his operations to all existing utility lines, public property, and private property, whether it is below ground or above ground, and he shall settle in total cost of all damage suits which may arise as a result of his operations at no additional costs to the Owner. To avoid unnecessary interferences or delays, the Contractor shall coordinate all utility removals, replacements and construction with the appropriate utility company. The cost of temporarily relocating utilities for convenience of the Contractor, shall be paid by Contractor. § 3.3.7 The Contractor shall establish and maintain benchmarks and all other grades, lines, and levels necessary for the Work, report errors or inconsistencies to the Owner and Architect before commencing Work, and review the placement of the building and permanent facilities on the site with the Owner and Architect after all lines are staked out and before foundation Work is started."

C. § 3.4 LABOR AND MATERIALS

1. Delete Section 3.4.2 in its entirety and replace with the following:

"§ 3.4.2 After the Contract has been executed, the Owner and the Architect will consider a formal request for the substitution of products in place of those specified only under the conditions set forth in the General Requirements (Section 01 60 00)."

2. Add new Section 3.4.4 as follows:

"§ 3.4.4 The Contractor and each Subcontractor shall pay not less than the general prevailing rate of hourly wages for work of a similar character in the locality in which the work is performed and not less than general prevailing rate of hourly wages for legal holidays and overtime work in the performance of work under this Contract, as established by the Illinois Department of Labor, pursuant to an act of the General Assembly of the State of Illinois. In accordance with applicable law, Contractor and each Subcontractor shall keep an accurate record showing the names and occupation of all laborers, workers and mechanics employed by them, and also showing the actual hourly wages paid to each such individual, which record shall be open at all reasonable hours to inspection by the Owner, its officers and agents, and to agents of the Illinois Department of Labor. The Contractor and each Subcontractor hereby agree, jointly and severally, to defend, indemnify and hold harmless the Owner from any and all claims, demands, liens or suits of any kind or nature whatsoever (including suits for injunctive relief) by the Illinois Department of Labor under the Illinois Prevailing Wage Act, or by any laborer, worker or mechanic employed by the Contractor or the Subcontractor who alleges that he has been paid for his services in a sum less than prevailing wage rates required by Illinois law. The Owner agrees to notify the Contractor or Subcontractor of the pendency of any such claim, demand, lien or suit. Contractor must pay prevailing wages in effect at time labor is performed."

- D. § 3.6 TAXES
 - 1. Delete Section 3.6 in its entirety and replace with the following:
 - "§ 3.6 TAXES

The Owner is exempt from the Illinois Use Tax Act and the Retailer's Occupation Tax. Any taxes for which the Owner is not exempt shall be paid by the Contractor."

- E. § 3.7 PERMITS, FEES, NOTICES AND COMPLIANCE WITH LAWS
 - 1. Delete Section 3.7.4 in its entirety.

F. § 3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

1. Delete Section 3.10.1 in its entirety and replace with the following:

"§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall indicate the proposed completion dates for the various subdivisions of the Work, as well as the totality of the Work. The schedule shall be updated every thirty (30) days and submitted to Architect with Contractor's Applications for Payment. Each schedule shall contain a comparison of actual progress with the estimated progress for such point in time stated in the original schedule. If any schedule submitted sets forth a date for Completion for the Work or any phase of the Work beyond the date(s) of Completion established in the Contract (as the same may extended as provided in the Contract Documents), then Contractor shall submit to Architect and Owner for their review and approval a narrative description of the Work to ensure timely completion of the various phases of the Work as well as the totality of the Work. To ensure such timely completion,

Contractor shall take all necessary action including, without limitation, increasing the number of personnel and labor on the Project and implementing overtime and double shifts. In that event, Contractor shall not be entitled to an adjustment in the Contract Sum of the schedule. The Owner may, in its discretion, choose to withhold any payment due the Contractor until an updated schedule is submitted. The Owner's or Architect's failure to object to a submitted schedule that exceeds time limits current under the Contract Documents shall not relieve the Contractor of its obligations to meet the time limits in the Contractor's damages incurred as a result of increased construction time or not meeting the time limits in the Contractor's schedule showing completion in advance of the time limits in the Contract Documents shall not create or infer any rights in favor of the Contractor for acceleration of the Work."

G. § 3.18 INDEMNIFICATION

- 1. Delete Section 3.18.1 and replace with the following:
 - a. "§ 3.18.1 To the fullest extent permitted by law, the Contractor shall waive any right of contribution against the Owner and shall indemnify and hold harmless the Owner and the Architect and their officers, officials, employees, volunteers and agents from and against all claims, damages losses and expenses, including, but not limited to, legal fees (attorney's and paralegal's fees, expert fees and court costs), arising out of or resulting from the performance of the Contractor's work provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or injury to or destruction of property, other than the work itself, including the loss of use resulting therefrom to the extent it is caused in whole or in part by any wrongful or negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. Such obligation shall not be construed to negate, abridge or otherwise reduce any other right to indemnity which the Owner would otherwise have. The Contractor shall similarly, protect, indemnify and hold and save harmless, the Owner, its officers, officials, employee, volunteers and agents against and from any and all claims, costs, causes, actions and expenses, including, but not limited to, legal fees, incurred by reason of Contractor's breach of any of its obligations under, or Contractor's default of any provisions of the Contract."
- 2. Add new Section 3.18.1.1 as follows:

"§ 3.18.1.1 The Contractor and every subcontractor expressly waive all so-called Kotecki rights under the Illinois workers' compensation statutes even though Owner has retained all such rights."

1.05 ARTICLE 7 CHANGES IN THE WORK

A. § 7.1 GENERAL

1. Add new Section 7.1.4 as follows:

"§ 7.1.4 For adjustments to the Contract Sum based on other than the unit price method, overhead, profit and general conditions combined. The parties shall negotiate reasonable adjustment.

.1 All proposals, except those less than \$200.00, shall be accompanied by a complete itemization of costs including labor, materials and subcontracts. Labor and

materials shall be itemized in the manner prescribed above. Where major cost items are subcontracts, they shall be itemized also. In no case will a change involving over \$200.00 be approved without such itemization."

- B. § 7.3 CONSTRUCTION CHANGE DIRECTIVES
 - 1. In the first sentence of Section 7.3.7, delete the words: "as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount." and replace with the words: "in accordance with Section 7.1.4".
- C. 7.4 MINOR CHANGES IN THE WORK
 - 1. At the end of the paragraph, add the following sentence: "Copies of any such changes will be forwarded in a timely manner to the Owner."

1.06 ARTICLE 9 PAYMENTS AND COMPLETION

- A. § 9.3 APPLICATIONS FOR PAYMENT
 - 1. Add new Section 9.3.1.3 as follows:

"§ 9.3.1.3 Until substantial completion, the Owner shall pay 90 percent of the amount due the Contractor on account of progress payments."

2. Add new Section 9.3.2.1 as follows:

"§ 9.3.2.1 In accordance with Section 9.3.2, the Contractor shall be permitted to make written petition to the Owner requesting payment for 75% of the cost of materials and equipment suitably stored off the site at a location agreed upon in writing between the Owner and the Contractor. In order to receive such payment, title to the materials and/or equipment must pass to the Owner; the materials and/or equipment must be stored in a protected, insured facility agreed to by the Owner, with the Owner named as an additional insured; and all storage costs and costs associated with handling and transporting the materials and/or equipment to the Project site must be paid for by the Contractor. Owner in its sole discretion may grant said petition."

- B. § 9.8 SUBSTANTIAL COMPLETION
 - 1. Delete the last sentence of Section 9.8.5 and replace with the following: "The payment shall be sufficient to increase the total payments to 95 percent of the Contract sum, less such amounts as the Architect shall determine for incomplete Work and unsettled claims."
- C. § 9.10 FINAL COMPLETION AND FINAL PAYMENT
 - 1. Delete Section 9.10.4 in its entirety.

1.07 ARTICLE 11 INSURANCE AND BONDS

- A. § 11.1 CONTRACTOR'S LIABILITY INSURANCE
 - Delete the semicolon at the end of Clause 11.1.1.1 and append the following: ", including private entities performing work at the site and exempt from the coverage on account of number of employees or occupation, which entities shall maintain voluntary compensation coverage at the same limits specified for mandatory coverage for the duration of the project;"
 - Delete the semicolon at the end of Clause 11.1.1.2 and append the following: ", or persons or entities excluded by statute from the requirements of Clause 11.1.1.1 but required by the contract documents to provide the insurance required by that clause;"

- 3. Delete the semicolon at the end of Clause 11.1.1.6 and append the following: ", and coverage should be written on a comprehensive automobile policy which will include coverage for owned, non-owned and hired motor vehicles."
- 4. Add new Section 11.1.2.1 as follows:
 - "§ 11.1.2.1 The insurance required by Section 11.1.1 shall be written for not less than the following limits, or greater if required by law:
 - 1) Workers' Compensation:
 - a) State: Statutory
 - b) Applicable Federal (e.g., Longshoremen's): Statutory
 - c) Employer's Liability
 - (1) \$500,000.00 Per Accident
 - (2) \$500,000.00 Disease, Policy Limit
 - (3) \$500,000.00 Disease, Each Employee
 - 2) If written under Comprehensive General Liability Policy Form (including sub-lines specified in Clause 11.1.1.8):
 - a) Bodily Injury:
 - (1) \$1,000,000.00 Per Occurrence
 - (2) \$3,000,000.00 Aggregate Per Project
 - b) Property Damage:
 - (1) \$1,000,000.00 Per Occurrence
 - (2) \$3,000,000.00 Aggregate Per Project
 - c) Bodily Injury and Property Damage combined:
 - (1) \$1,000,000.00 Per Occurrence
 - (2) \$3,000,000.00 Aggregate Per Project
 - d) Personal Injury:
 - (1) \$3,000,000.00 Aggregate Per Project
 - 3) If written under Commercial General Liability Policy Form:
 - a) \$3,000,000.00 General Aggregate Per Project
 - b) \$1,000,000.00 Products Completed Operations Aggregate
 - c) \$1,000,000.00 Personal and Advertising Injury
 - d) \$1,000,000.00 Per Occurrence
 - e) \$ 50,000.00 Fire Damage (any one fire)
 - f) \$ 5,000.00 Medical Expense (any one person)
 - 4) Business Automobile Liability (including owned, non-owned and hired vehicles):
 - a) Bodily Injury:
 - (1) \$1,000,000.00 Per Person
 - (2) \$3,000,000.00 Per Accident
 - b) Property Damage:
 - (1) \$1,000,000.00 Per Occurrence
 - c) Bodily Injury and Property Damage Combined:
 - (1) \$1,000,000.00 Per Occurrence
 - 5) Umbrella Excess Liability:
 - a) \$2,000,000.00 over Primary Insurance
 - b) \$2,000,000.00 Retention for Self-Insured Hazards Each Occurrence"
- 5. Add new Sections 11.1.2.2 through 11.1.2.6 as follows:

"§ 11.1.2.2 Liability insurance should be written on the comprehensive general liability basis, and shall include, but not be limited to the following sub-lines:

- 1) Premises and Operations including x, c, u coverages (explosion, collapse, underground).
- 2) Products and Completed Operations.
- 3) Independent Contractor's Protective.
- 4) Broad Form Comprehensive General Liability Endorsement:
 - a) Contractual Liability, including contractors obligation under Section 3.18.
 - b) Personal Injury & Advertising Injury Liability
 - c) Premises Medical Payments
 - d) Host Liquor Law Liability
 - e) Fire Legal Liability Real Property
 - f) Broad Form Property Damage Liability (including completed Operations)
 - g) Incidental Medical Malpractice Liability
 - h) Non-owned Watercraft Liability
 - i) Limited Worldwide Liability
 - j) Additional Persons Insured, including employees for personal and advertising injury.
 - k) Extended Bodily Injury Liability
 - I) Automatic Coverage Newly acquired Organizations (90 days)

§ 11.1.2.3 If liability insurance is written under the new simplified form Commercial General Liability, the above listed coverages should be included.

§ 11.1.2.4 If the General Liability coverages are provided by a Commercial General Liability Policy on a claims-made basis, the policy date or retroactive date shall predate the contract; the termination date of the policy shall be no earlier than the termination date of coverages required to be maintained after final payment, certified in accordance with Section 9.10.2, and extended period endorsement "Supplemental Tail", must be purchased."

§ 11.1.2.5 All policies of insurance purchased or maintained in fulfillment of Section 11.1.1 shall name the Owner and Architect as additional insureds on a primary and noncontributory basis thereunder.

§ 11.1.2.6 The Contractor shall provide the Owner with the Original policy and shall furnish the Architect with a memorandum copy of said policy. The additional insureds on the Contractor's Liability policy shall be:

City of Aurora 44 E. Downer Place Aurora, Illinois 60507

KLUBER, INC. 10 S. Shumway Ave. Batavia, Illinois 60510

- 6. In Section 11.1.3:
 - a. In the second sentence, delete the words "Section 11.1" and replace with the words "Article 11".
 - b. Append the following sentence to the end of the Section:

"On the Certificate of Insurance, delete in the cancellation provision the following words, "Endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives"."

7. Add new Section 11.1.3.1 as follows:

"§ 11.1.3.1 Failure of the Owner to demand any certificate, policy, endorsement or other evidence of full compliance with the insurance requirements of Article 11 or failure of the Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of the Contractor's obligation to maintain such insurance. The Contractor agrees that the obligation to provide the insurance required by these documents is solely its responsibility and that this is a requirement which cannot be waived by any conduct, action, inaction or omission by the Owner."

8. Add new Section 11.1.5 as follows:

"§ 11.1.5 Nothing contained in the insurance requirements of the Contract Documents is to be construed as limiting the liability of the Contractor, the liability of any Subcontractor or any tier or either of their respective insurance carriers. The Owner, does not in any way, represent that the coverages or limits of insurance specified is sufficient or adequate to protect the Owner, Contractor, Architect, or any Subcontractor's interests or liabilities but are merely at minimums. The obligation of the Contractor, the Architect, and any Subcontractor of any tier to purchase insurance, shall not, in any way, limit their obligations to the Owner in the event the Owner should suffer an injury or loss in excess of the amount recoverable through insurance, or any loss or portion of the loss which is not covered by either the Contractor's or any Subcontractor's insurance."

- B. § 11.3 PROPERTY INSURANCE
 - 1. In the last sentence of Section 11.3.1, after "Owner, " insert "the Architect,".
 - 2. Delete Section 11.3.1.2. in its entirety.
 - 3. Delete Section 11.3.1.3. in its entirety.
 - 4. Delete Section 11.3.3 in its entirety.
 - 5. Delete Section 11.3.5 in its entirety.
 - 6. Delete Section 11.3.6 in its entirety.
 - 7. Delete Section 11.3.7 in its entirety.
 - 8. In the third sentence of Section 11.3.9 delete the phrase ", or as determined in accordance with the method of binding dispute resolution selected in the Agreement between the Owner and Contractor.".

C. § 11.4 PERFORMANCE AND PAYMENT BOND

- 1. Delete Section 11.4.1 in its entirety and replace with the following:
 - "§ 11.4.1 The Contractor, before commencing the Work, shall furnish a Performance Bond and a Labor and Material Bond. The Performance Bond shall be in an amount equal to 100% of the full amount of the Contract Sum as security for the faithful performance of the obligation of the Contract Documents, and the Labor and Material Payment Bond shall be in an amount equal to 100% of the full amount of the Contract Sum as security for the payment of all persons performing labor and furnishing materials in connections with the Contract Documents. Such bonds shall be on standard AIA Documents, issued by the American Institute of Architects, shall be issued by a surety satisfactory to the Owner, and shall name the Owner as primary co-obligee.

§ 11.4.1.1 The Contractor shall deliver the required bonds to the Owner not later than three days following the date the Agreement is entered into, or if the Work is to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to the commencement of the Work, submit evidence satisfactory to the Owner that such bonds shall be furnished.

§ 11.4.1.2 The Contractor shall require the attorney-in-fact who executed the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney."

2. Add new Section 11.4.3 as follows:

"§ 11.4.3 Whenever the Contractor shall be and is declared by Owner to be in default under the Contract, the Surety and the Contractor are each responsible to make full payment to the Owner or any and all extra Work incurred by the Architect as a result of the Contractor's default, and to pay to Owner all attorney's fees and court costs incurred by Owner as a result of the Contractor's default, and in protecting Owner's rights under the Agreement to remedy Contractor's default."

3. Add new Section 11.4.4 as follows:

"§ 11.4.4 The Contractor shall (i) furnish all Surety Company's bonds through Surety Company's local agents approved by and/or as directed by Owner; (ii) fully covered and guarantee with said bond the faithful performance and completion of the entire Contract, including without limitation, the faithful performance of prevailing wage requirements; and (iii) guarantee with said bond payment in all cases by the Contractor or by the Surety Company for all labor performed, material and supplies furnished with the entire Work in the Contract. Said Bond shall remain in full force and effect during the entire period of all general guarantees given by the Contractor with the Contract as called for in the Specifications and Contract, except in cases where other bonds are specifically called for in the specifications and Contract in connection with special guarantees."

D. Add new Section 11.5 as follows:

"
§ 11.5 OWNERS AND CONTRACTORS PROTECTIVE LIABILITY INSURANCE § 11.5.1 The Contractor shall purchase and maintain Owners and Contractors Protective (OCP) liability insurance covering the Owner's contingent liability for claims which may arise from operations under the Contract and that will protect the Owner and the Architect and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the work specifically pertaining to the Illinois Structural Works Act, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury or to destruction of tangible property (other than the work itself) including the loss of use resulting therefrom and (2) is cause in whole or in part by any negligent act of omission of the Contractor, and Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, including by assignment, regardless of whether or not it is caused in part by a party to whom insurance is afforded pursuant to this paragraph. The minimum Per Occurrence and Aggregate limits of liability purchased for such coverage shall be equal, respectively, to the Per Occurrence and Aggregate limits required for the Contractor's Liability insurance, as listed in Section 11.1.2.1, above.

§ 11.5.2 In any and all claims against the Owner or the Architect or any of their agents or employees by any employee of the Contractor, any other contractor assigned to the Contractor,

Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the insurance obligation under this Section shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under Workmen's Compensation Acts, disability benefit acts or other employee benefit acts.

§ 11.5.3 The insurance obligations of the Contractor under this Section shall not extend to the liability of the Architect, his agents or employees arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications or (2) the giving of or failure to give directions or instruction by the Architect, his agents or employees provided that such giving or failure to give is the primary cause of the injury damage.
§ 11.5.4 The Contractor shall provide the Owner with the Original policy and shall furnish the Architect with a memorandum copy of said policy. The named insured on the Owners and Contractors Protective (OCP) liability policy shall be:

City of Aurora 44 E. Downer Place Aurora, Illinois 60507

KLUBER, INC. 10 S. Shumway Ave. Batavia, Illinois 60510

1.08 ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

- A. § 12.2.2 AFTER SUBSTANTIAL COMPLETION
 - 1. Delete Sections 12.2.2.1, 12.2.2.2 and 12.2.2.3 in their entireties and replace with the following:

"§ 12.2.2.1 In addition ot the Contractor's obligations under Section 3.5, if, within two years 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 an 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 written 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 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 within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4.

§ 12.2.2.2 The two-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 two-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2."

- 2. Delete Section 12.2.2.5 in its entirety and replace with the following:
 - a. "§ 12.2.2.5 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 two-year period for correction of Work as described in Section 12.2 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 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."

1.09 ARTICLE 13 MISCELLANEOUS PROVISIONS

- A. § 13.6 INTEREST
 - 1. Delete Section 13.6 in its entirety. All references to interest payments throughout the Contract Documents are hereby voided.
- B. Add Section 13.8 as follows:

"§ 13.8 REGULATIONS

§ 13.8.1 The Contractor or Subcontractor warrants that he is familiar with and he shall comply with Federal, State and local laws, statutes, ordinances, rules and regulations and the orders and decrees of any courts or administrative bodies or tribunals in any manner affecting the performance of the Contract including without limitation Workmen's Compensation Laws, minimum salary and wage statutes and regulations, laws with respect to permits and licenses and fees in connection therewith, laws regarding maximum working hours. No plea of misunderstanding or ignorance thereof will be considered.

§ 13.8.2 Whenever required, the Contractor or Subcontractor shall furnish the Architect and Owner with satisfactory proof of compliance with said Federal, State and local laws, statutes, ordinances, rules, regulations, orders, and decrees.

§ 13.8.3 Each bidder shall carefully examine the Occupational Safety and health Act as issued by the Federal Register (OSHA), and the specific regulations governing procedures, techniques, safety precautions, equipment design, and the configuration of the same as required under this Act and each bidder agrees as evidenced by his submission of a bid to comply with all terms of the Act and to perform and complete in a workmanlike manner all work required in full compliance with said Act.

§ 13.8.4 Each bidder agrees as evidenced by his submission of a bid to comply with all terms of the Equal Employment Opportunity Clause of the Illinois Fair Employment Practices Commission.

§ 13.8.5 At all times Contractor shall remain in compliance with the Illinois Public Works Employment Discrimination Act (775 ILCS 10/1, et seq.,) and the Illinois Human Rights Act (775 ILCS 5/2-101, et seq.,) and in addition shall at all times comply with Section 2-105 of the Illinois Human Rights Act.

§ 13.8.6 By execution of this Contract, the Contractor understands, represents and warrants to the Owner that the Contractor and its Subcontractors (for which the Subcontractor takes responsibility to insure that they comply with the above-mentioned Acts) are in compliance with all requirements provided by the Acts set forth in Article 13 and that they will remain in

compliance for the entirety of the Work. A violation of any of the Acts set forth in this Article is cause for the immediate cancellation of the Contract. However, any forbearance or delay by the Owner in canceling this Contract shall not be considered as, and does not constitute, Owner's consent to such violation and a waiver of any rights the Owner may have, including without limitation, cancellation of this Contract."

C. Add Section 13.9 as follows:

"§ 13.9 PREVAILING WAGES

§ 13.9.1 The Contractor and all Subcontractors shall pay prevailing wages as established by the Illinois Department of Labor for each craft or type of work needed to execute the contract in accordance with the Prevailing Wage Act (820 ILCS 130/0.01 et seq.). The Contractor shall prominently post the current schedule of prevailing wages at the Contract site and shall notify immediately in writing all of its Subcontractors, of all changes in the schedule of prevailing wages. Any increases in costs to the Contractor due to changes in the prevailing rate of wage during the terms of any contract shall be at the expense of the Contractor and not at the expense of the Owner. The change order shall be computed using the prevailing wage rates applicable at the time the change order work is scheduled to be performed. The Contractor shall be solely responsible for maintain accurate records as required by the prevailing wages and any wages actually received by laborers, workmen and/or mechanics engaged in the Work. § 13.9.2 The Contractor shall provide certified payroll records in accordance with the requirements established by the Prevailing Wage Act(820 ILCS 130/5) as amended 8/10/2005 by Illinois Public Act 94-0515."

1.10 ARTICLE 15 CLAIMS AND DISPUTES

A. § 15.1.6 CLAIMS FOR CONSEQUENTIAL DAMAGES

- 1. Delete Section 15.1.6 in its entirety.
- B. § 15.2 INITIAL DECISION
 - 1. Delete Section 15.2.1 in its entirety and replace with the following:

"§ 15.2.1 Claims, excluding those arising under Sections 10.3, 10.4, 11.3.9 and 11.3.10, may be referred to the Initial Decision Maker for action. A decision by the Initial Decision Maker shall not be binding and shall not be required as a condition precedent to litigation." **END OF SECTION**

SECTION 00 73 40 LABOR AND WAGE REQUIREMENTS

1.01 LABOR AND WAGE REQUIREMENTS

- A. In the employment and use of labor, the Contractor and his subcontractors shall conform to the Illinois Statutory requirements regarding labor and wages.
- B. Wage Guidelines:
 - Prevailing Rate of Wages: All Contracts for the work herein are subject to the provisions of the Illinois Prevailing Wages Act (820 ILCS 130/et seq.) providing for the payment of prevailing rate of wages to all Laborers, Workmen, and Mechanics engaged on the work, which such provisions shall be applicable to all subcontractors and material men as well as the Contractor. The Owner may at any time inquire of the Contractor as to rates of wages being paid employees of the Contractor, any subontractor or material men, whereupon such information shall be promptly provided to the Owner.
 - a. The terms "generally prevailing rate of hourly wages," "generally prevailing rate of wages," or "prevailing rate of wages," mean the hourly cash wage plus fringe benefits for health and welfare, insurance, vacations, and pensions paid generally, in the locality in which the work is being performed, to employees engaged in work of a similar character on public works.
 - The Contractor shall not pay less than the rates of wages prevailing the District as determined by the Illinois Department of Labor to all Laborers, Mechanics and Workers performing any work under this Contract.
 - a. Only such laborers, workers and mechanics as are directly employed by the Contractor or Subcontractors in actual construction work on the site of the Project, and laborers, workers and mechanics engaged in the transportation of materials and equipment to or from the site, but not in cluding the transportation by sellers and suppliers or the manufacture or processing of materials or equipment, in the execution of the Work shall be deemed to be employed on the Project for purposes of compliance with the Illinois Statutory requirements.
 - 3. The Contractor shall require all of its Subcontractors to comply with the requirements of the preceding paragraphs, which shall be incorporated in each and every subcontract for all or any portion of the Work.
 - 4. The Contractor will cooperate and coordinate his work with any subcontractors that the Owner has working on the Project at the same time.
 - 5. Future increases to wage rates and material cost over the course of the contract time will not be born by the Owner. Contractor to include in his Base Bid.
- C. Certified Payroll Requirements: For all of the Contractor's, its Subcontractors and Sub-subcontractors' laborers, mechanics and other workers employed on the Project, the Contractor shall submit monthly, and with each Application For Payment, certified payroll records in accordance with State of Illinois, Department of Labor, 8/10/2005 Prevailing Wage Act Changes; "Certified Payroll Requirements" (Public Act 94-0515).

1.02 WAGE DETERMINATION SCHEDULE

A. Contact the Illinois Department of Labor for the most recent revisions to the Prevailing Rate of Wages.

END OF DOCUMENT

SECTION 01 10 00 SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: CITY OF AURORA ROOF REPLACEMENT AT THE VENUE, CITY HALL & WATER STREET PLAYHOUSE.
- B. Owner's Name: City of Aurora.
- C. Architect/Engineer's Name: Kluber Architects + Engineers.
- D. The Project consists of the demolition and roof replacement of the North Roof of City Hall, The Venue and Water Street Playhouse.

1.02 CONTRACT DESCRIPTION

A. Contract Type: A single prime contract based on a Stipulated Price as described in Document 00 52 00 - Agreement Form.

1.03 DESCRIPTION OF ALTERATIONS WORK

- A. Scope of demolition and removal work is shown on drawings and specified in Section 02 41 00.
- B. Scope of alterations work is shown on drawings.

1.04 OWNER OCCUPANCY

- A. Owner intends to continue to occupy portions of the existing building during the entire construction period.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.05 CONTRACTOR USE OF SITE AND PREMISES

- A. Arrange use of site and premises to allow:
 - 1. Owner occupancy.
 - 2. Work by Others.
 - 3. Work by Owner.
 - 4. Use of site and premises by the public.
- B. Provide access to and from site as required by law and by Owner:
 - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.
- C. Time Restrictions:
 - 1. Limit conduct of especially noisy work to the hours of 6:00 am to 8:00 am.
- D. Utility Outages and Shutdown:
 - 1. Limit disruption of utility services to hours the building is unoccupied.

- 2. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days notice to Owner and authorities having jurisdiction.
- 3. Prevent accidental disruption of utility services to other facilities.

1.06 WORK SEQUENCE

A. Coordinate construction schedule and operations with Owner.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 20 00 PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Correlation of Contractor submittals based on changes.
- E. Procedures for preparation and submittal of application for final payment.

1.02 RELATED REQUIREMENTS

- A. Section 00 52 00 Agreement Form: Contract Sum, retainages, payment period, monetary values of unit prices.
- B. Section 00 72 00 General Conditions: Additional requirements for progress payments, final payment, changes in the Work.
- C. Section 00 73 00 Supplementary Conditions: Percentage allowances for Contractor's overhead and profit.

1.03 SCHEDULE OF VALUES

- A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect/Engineer for approval.
- C. Forms filled out by hand will not be accepted.
- D. Submit Schedule of Values to the Architect/Engineer at earliest possible date, but no later than 14 days prior to first Pay Request Meeting.
 1. After review by the Architect/Engineer, revise and resubmit Schedule as directed.
- E. Format: Utilize the Table of Contents of this Project Manual as a format for the listing of the Work.
- F. Identify as separate line items on the Schedule the costs for the following items: Bonds, Insurance, Site Mobilization, each Allowance scheduled in Section 01 21 00, Construction Submittals, General Conditions, Overhead And Profit, Demonstration And Training, and Closeout Submittals.
- G. Submit Schedule of Values in sufficient detail for the Architect/Engineer to use in evaluation of Applications for Payment.
 - 1. Itemize the cost of the work of:
 - a. Contractor's own labor forces.
 - b. Subcontractors.
 - c. Suppliers of products and equipment.
- H. Revise Schedule of Values to list approved Change Orders, with each Application For Payment.

1.04 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect/Engineer for approval.
- D. Forms filled out by hand will not be accepted.
- E. For each item, provide a column for listing each of the following:
 - 1. Item Number.
 - 2. Description of work.
 - 3. Scheduled Values.
 - 4. Previous Applications.
 - 5. Work in Place and Stored Materials under this Application.
 - 6. Authorized Change Orders.
 - 7. Total Completed and Stored to Date of Application.
 - 8. Percentage of Completion.
 - 9. Balance to Finish.
 - 10.Retainage.
- F. Execute certification by signature of authorized officer.
- G. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- H. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.
- I. Submit one pencil/draft copy of each Application for Payment to the Architect/Engineer at least 7 days prior to the due date for the submission of the Application.
- J. Contractor or Architect/Engineer may schedule a Pay Request Meeting to review the pencil/draft copy of the Application for agreement with the progress of the Work.
- K. After receipt of Architect/Engineer's review comments, submit three final copies, signed and notarized, of each Application for Payment.
- L. Include the following with the application:
 - 1. Transmittal letter as specified for submittals in Section 01 30 00.
 - 2. Construction progress schedule, revised and current as specified in Section 01 30 00.
 - 3. Contractor's partial waiver of lien in the amount of the Application for Payment as well as trailing partial waivers of lien for subcontractors and suppliers who were included in the previous Application for Payment, to the extent of that payment.
 - a. When an Application shows completion of a subcontractor or supplier item, submit a final or full waiver for that item.
 - b. Waivers of lien shall be submitted on forms and executed in a manner acceptable to the Owner.

- 4. Certified payroll records for the Contractor and for all Subcontractors and Sub-subcontractors employed on the Project who performed work on the Project during the Payment Period.
 - a. Contractor shall assemble his and all subcontractor and sub-subcontractor records prior to submitting each Application for Payment.
 - b. Applications for Payment submitted without certified payroll records or with incomplete certified payroll records will result in payment being delayed until the Contractor complies fully with the requirements set forth in the preceding paragraphs.
- 5. Affidavits attesting to products or equipment suitablly stored off-site in a bonded warehouse. Payments for materials stored off-site shall be conditioned upon submission of bills of sale, applicable insurance, and any other documentation or procedures satisfactory to the Owner to establish the Owner's title to such materials, or otherwise protect the Owner's interest.
- M. When Architect/Engineer requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

1.05 MODIFICATION PROCEDURES

- A. Submit name of the individual authorized to receive change documents and who will be responsible for informing others in Contractor's employ or subcontractors of changes to Contract Documents.
- B. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect/Engineer will issue instructions directly to Contractor.
- C. For other required changes, Architect/Engineer will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
 - 1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
 - 2. Promptly execute the change.
- D. For changes for which advance pricing is desired, Architect/Engineer will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within ten (10) days.
- E. Contractor may propose a change by submitting a request for change to Architect/Engineer, describing the proposed change and its full effect on the work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on work by separate or other contractors. Document any requested substitutions in accordance with Section 01 60 00.
- F. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
 - 1. For change requested by Architect/Engineer for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
 - 2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Architect/Engineer.

- 3. For pre-determined unit prices and quantities, the amount will based on the fixed unit prices.
- 4. For change ordered by Architect/Engineer without a quotation from Contractor, the amount will be determined by Architect/Engineer based on the Contractor's substantiation of costs as specified for Time and Material work.
- G. Substantiation of Costs: Provide full information required for evaluation.
 - 1. On request, provide the following data:
 - a. Quantities of products, labor, and equipment.
 - b. Taxes, insurance, and bonds.
 - c. Overhead and profit.
 - d. Justification for any change in Contract Time.
 - e. Credit for deletions from Contract, similarly documented.
 - 2. Support each claim for additional costs with additional information:
 - a. Origin and date of claim.
 - b. Dates and times work was performed, and by whom.
 - c. Time records and wage rates paid.
 - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
 - 3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
- H. Execution of Change Orders: Architect/Engineer will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- I. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- J. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- K. Promptly enter changes in Project Record Documents.

1.06 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
 - 1. All closeout procedures specified in Section 01 70 00.
 - 2. Procedures outlined in Article 9 of the General Conditions as amended.
 - 3. Additional closeout procedures specified in Section 01 77 00.
- C. The submittal of Final Waiver of Lien and the acceptance of the final payment by the Contractor shall be held to be a waiver of any and all claims against the Owner arising from, out of, or in any connection with the Contract.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 21 00 ALLOWANCES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Contingency allowance.

1.02 RELATED REQUIREMENTS

A. Section 01 20 00 - Price and Payment Procedures: Additional payment and modification procedures.

1.03 CONTINGENCY ALLOWANCE

- A. Contractor's costs for products, delivery, installation, labor, payroll, taxes and equipment rental will be included in Change Orders authorizing expenditure of funds from this Contingency Allowance.
- B. Funds will be drawn from the Contingency Allowance only by Change Order.
- C. Bond, insurance, overhead and profit fees on Change Orders paid out of Contingency Allowances will not be permitted. The Contractor must carry in its Base Bid OH&P costs on Contingency Allowance funds expenditures.
- D. At closeout of Contract, funds remaining in Contingency Allowance will be credited to Owner by Change Order.

1.04 ALLOWANCES SCHEDULE

A. Contingency Allowance: Include in the Base Bid the stipulated sum of \$15,000.00 for use upon Owner's instructions.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 23 00 ALTERNATES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Description of Alternates.

1.02 RELATED REQUIREMENTS

A. Document 00 52 00 - Agreement Form: Incorporating monetary value of accepted Alternates.

1.03 ACCEPTANCE OF Alternates

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.04 SCHEDULE OF Alternates

- A. Alternate No. 1 City Hall West Roof Area:
 - 1. Provide an Alternate ADD to re-roof the West Roof Area of City Hall as indicated on the drawings. This alternate includes the full removal of the existing roofing down to the existing roof decking and replacement of all counterflashing and coping systems as noted on the drawings.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 30 00 ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General administrative requirements.
- B. Preconstruction meeting.
- C. Site mobilization meeting.
- D. Progress meetings.
- E. Construction progress schedule.
- F. Submittals for review, information, and project closeout.
- G. Architect/Engineer-provided CAD files.
- H. Number of copies of submittals.
- I. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Section 00 72 00 General Conditions: Dates for applications for payment.
- B. Section 01 70 00 Execution and Closeout Requirements: Additional coordination requirements.
- C. Section 01 78 00 Closeout Submittals: Project record documents; operation and maintenance data; warranties and bonds.

1.03 GENERAL ADMINISTRATIVE REQUIREMENTS

A. Comply with requirements of Section 01 70 00 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRECONSTRUCTION MEETING

- A. Architect/Engineer will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Owner.
 - 2. Architect/Engineer.
 - 3. Contractor.

C. Agenda:

- 1. Execution of Owner-Contractor Agreement.
- 2. Submission of executed bonds and insurance certificates.
- 3. Distribution of Contract Documents.

- 4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
- 5. Designation of personnel representing the parties to Contract and Architect/Engineer.
- 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
- 7. Scheduling.
- 8. Scheduling activities of a Geotechnical Engineer.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect/Engineer, Owner, participants, and those affected by decisions made.

3.02 PROGRESS MEETINGS

- A. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- B. General Contractor will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required:
 - 1. Contractor.
 - 2. Owner.
 - 3. Architect/Engineer.
 - 4. Contractor's superintendent.
 - 5. Major subcontractors.

D. Agenda:

- 1. Review minutes of previous meetings.
- 2. Review of Work progress.
- 3. Field observations, problems, and decisions.
- 4. Identification of problems that impede, or will impede, planned progress.
- 5. Review of submittals schedule and status of submittals.
- 6. Maintenance of progress schedule.
- 7. Corrective measures to regain projected schedules.
- 8. Planned progress during succeeding work period.
- 9. Maintenance of quality and work standards.
- 10. Effect of proposed changes on progress schedule and coordination.
- 11. Other business relating to Work.
- E. Record minutes and distribute copies within two days after meeting to participants, with copies to Architect/Engineer, Owner, participants, and those affected by decisions made.

3.03 CONSTRUCTION PROGRESS SCHEDULE

- A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.
- B. If preliminary schedule requires revision after review, submit revised schedule within 7 days.
- C. Submit updated schedule with each Application for Payment.

3.04 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
 - 1. Product data.
 - 2. Shop drawings.
 - 3. Samples for selection.
 - 4. Samples for verification.
- B. Submit to Architect/Engineer for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.
- C. Samples will be reviewed for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 78 00 Closeout Submittals.

3.05 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 - 1. Design data.
 - 2. Certificates.
 - 3. Test reports.
 - 4. Inspection reports.
 - 5. Manufacturer's instructions.
 - 6. Manufacturer's field reports.
 - 7. Other types indicated.
- B. Submit for Architect/Engineer's knowledge as contract administrator or for Owner.

3.06 SUBMITTALS FOR PROJECT CLOSEOUT

- A. Submit Correction Punch List for Substantial Completion.
- B. Submit Final Correction Punch List for Substantial Completion.
- C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 01 78 00 Closeout Submittals:
 - 1. Project record documents.
 - 2. Operation and maintenance data.
 - 3. Warranties.
 - 4. Bonds.
 - 5. Other types as indicated.
- D. Submit for Owner's benefit during and after project completion.

3.07 ARCHITECT/ENGINEER-PROVIDED CAD FILES

A. After the execution of the Contract, Architect/Engineer will provide, free of charge, upon receipt of a properly completed and signed request utilizing "Electronic Data Transfer Consent Form" at the end of this Specification Section, CAD files depicting graphic information for the project as follows:

- 1. Architectural Floor Plans: Column grid, walls, floors, stairs, doors, windows, room numbers, ceiling grid, mechanical diffusers, plumbing fixtures, sprinkler heads (if depicted in Bid Documents) and lights.
- B. Contractor acknowledges and accepts that the Architectural Floor Plans do not contain structural, mechanical, electrical, plumbing, fire protection and other building systems information depicted in the Bidding Documents. Examples of information not contained in these files include, but are not limited to, title blocks, keynotes, schedules, mechanical ductwork and equipment, electrical device symbols, circuit numbers and home runs, plumbing equipment, piping runs and riser diagrams, and architectural/engineering text or details. No other CAD files, data or information will be provided.
- C. Only requests from Prime Contractors will be honored. Subcontractors must obtain the files from their respective Prime Contractors.
- D. In submitting a request, Contractor acknowledges that:
 - 1. Architect/Engineer bears no responsibility for the data or its transmission,
 - 2. Use of the data by the Contractor or his subcontractors in no way relieves the Contractor of his obligations under the Contract,
 - 3. Contractor is solely liable for any and all claims arising from any and all products generated by the Contractor or its Subcontractors employing the data,
 - 4. Contractor and its Subcontractors have a limited, non-exclusive license to use the data solely in connection with the Work of the Project, and that
 - 5. Architect/Engineer retains all rights, including copyright, to the data.

3.08 NUMBER OF COPIES OF SUBMITTALS

- A. Documents for Review:
 - 1. Small Size Sheets: Not Larger Than 11 x 17 inches. Submit two (2) paper copies, one of which will be retained by Architect/Engineer. Contractor shall make his own copies from the original returned by the Architect.
 - a. Contractor's Option: In lieu of paper copies indicated above, submit in Adobe PDF electronic file format via email. Architect will return a reviewed copy in Adobe PDF electronic file format via email. Create PDFs at native size and right-side up; illegible files will be rejected.
 - Large Size Sheets: Larger Than 11 x17 inches; 36 x 48 inches maximum. Submit two (2) paper copies, one of which will be retained by Architect/Engineer. Electronic file format (PDF or other) is NOT acceptable. Contractor shall make his own copies from the original returned by the Architect.
- B. Documents for Information: Submit one copy.
- C. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect/Engineer.
 - 1. After review, produce duplicates.
 - 2. Retained samples will not be returned to Contractor unless specifically so stated.

3.09 SUBMITTAL PROCEDURES

A. Shop Drawing Procedures:

- 1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting the Contract Documents and coordinating related Work.
- 2. Generic, non-project specific information submitted as shop drawings do not meet the requirements for shop drawings.
- B. Transmit each submittal with a copy of approved submittal form.
- C. Transmit each submittal with AIA Form G810.
- D. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- E. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- F. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- G. Deliver submittals to Architect/Engineer at business address.
- H. Schedule submittals to expedite the Project, and coordinate submission of related items.
- I. For each submittal for review, allow 20 days excluding delivery time to and from the Contractor.
- J. Clearly identify variations from the Contract Documents. Regardless of the type of variation, Contractor is solely responsible for errors in the field that arise from submittal variations from the requirements of the Contract Documents if those variations were not expressly noted to specifically identify for and describe to the reviewer the nature of the variation from the Contract Documents.
- K. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- L. Correlate submitted items with specified products; clearly indicate the specified product that corresponds to each submitted item.
- M. When options or optional features available for a Product are indicated in a submittal, and selections for those options/features are indicated in the Contract Documents, identify on the submittal the selection indicated in the Contract Documents.
- N. Provide space for Contractor and Architect/Engineer review stamps.
- O. When revised for resubmission, using clouds, highlights or other means acceptable to the Architect, identify all changes made since previous submission. Resubmittals that do not clearly identify all changes may be delayed and/or returned to the Contractor unreviewed.
- P. The Contractor is entitled to one (1) resubmittal of any Shop Drawing, Product Data, or Closeout Submittal item rejected by the Architect or returned by the Architect for further action. Thereafter, the Contractor shall pay the cost of all further Architect's reviews of Shop Drawing, Product Data or Closeout Submittal, at a rate of \$200.00/hour. Cost of such further reviews will be deducted from the Contract Sum by Change Order.

- Q. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- R. Submittals not requested will not be recognized or processed.
- S. Submittal reviews may be delayed and/or submittals may be returned unreviewed for any of the following reasons:
 - 1. Submittals submitted outside the scheduled dates of the Submittal Schedule.
 - 2. Submittals are incomplete or are missing information.
 - 3. Submittals are not submitted in accordance with procedures outlined in this Section (i.e. spec Section number not indicated, missing Contractor's review stamp, submitted items not correlated with specified products).



ELECTRONIC DATA TRANSFER CONSENT FORM

Project Name: CITY OF AURORA - ROOF REPLACEMENT AT THE VENUE, CITY HALL & WATER STREET PLAYHOUSE 44 E. DOWNER PLACE AURORA, ILLINOIS 60507

Project No.: 21-130-1349

CITY OF AURORA Owner:

Your Work:

KLUBER, INC. (hereinafter referred to as "Kluber") an Illinois corporation, is providing electronic data to you solely at your request and for your convenience. By accepting and opening any of the electronic data files, you agree that Kluber bears no liability for the data or its transmission to you and that you are solely liable for any and all claims referring or relating to any and all products you, or your Subcontractors, may generate with the data.

You acknowledge that you have a limited non-exclusive license to use the information solely in connection with your work on the project captioned above, and that Kluber retains all rights, including copyright, to the data.

Acknowledged by: ____ (Printed Name) (Signature) Company: Date: Email:

Architectural Floor Plans are transmitted for the contractors' use as backgrounds for shop drawings and as-built drawings, and, as such, contain graphic information for column grid, walls, floors, stairs, doors, windows, room numbers, ceiling grid, lights, diffusers and sprinkler heads where indicated on Bid Documents. Plans do not contain title blocks, keynotes, schedules, mechanical ductwork and equipment, electrical device symbols, circuit numbers and home runs, plumbing equipment, piping runs and riser diagrams, and architectural/engineering text and details. Plans depict entire floors and are not formatted, partial plans as depicted in the Bidding Documents. Files are provided in R2013 .DWG format.)

> Bloomington Office 2401 East Washington Street Bloomington, Illinois 61704 309.430.6460

Chicago Office 222 South Riverside Street Plaza 10 South Shumway Avenue Chicago, Illinois 60606 312.667.5670

Aurora Office Batavia, Illinois 60510 630.406.1213

SECTION 01 41 00 REGULATORY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General.
- B. Definitions.
- C. Quality Assurance.
- D. Regulatory Requirements.

1.02 RELATED SECTIONS

- A. Section 01 10 00 Summary.
- B. Section 01 42 00 References.

1.03 GENERAL

- A. Comply with all applicable laws, rules, regulations, codes and ordinances.
- B. If the Contractor observes that the Contract Documents may be at variance with specified codes, notify the Architect/Engineer immediately. Architect/Engineer shall issue all changes in accordance with the General Conditions.
- C. It shall not be the Contractor's primary responsibility to make certain that the Contract Documents are in accordance with all applicable laws, rules and regulations, however, when the Contractor performs work knowing or having reason to know that the work in question is contrary to applicable laws, rules, and regulations, and fails to notify the Architect/Engineer, the Contractor shall pay all costs arising therefrom.

1.04 DEFINITIONS

- A. Definitions:
 - 1. Codes: Codes are statutory requirements, rules or regulations of governmental entities.
 - 2. Standards: Standards are requirements that have been established as accepted criteria, set general consent.

1.05 QUALITY ASSURANCE

- A. The Architect/Engineer has designed the project to applicable code requirements and has copies of said codes available for the Contractor's inspection.
- B. The Contractor shall:
 - 1. Ensure that copies of codes and standards referenced herein or specified in individual specifications sections are available to Contractor's personnel, agents, and Sub-Contractors.
 - 2. Ensure that Contractor's personnel, agents, and Sub-Contractors are familiar with the workmanship and requirements of applicable codes and standards.

1.06 REGULATORY REQUIREMENTS

- A. Source and Requirements: Verify amendments with local code officials.
 - 1. Local code requirements:
 - a. ICC International Building Code, 2015 Edition.
 - b. ICC International Mechanical Code, 2015 Edition.
 - c. ICC International Fire Code, 2015 Edition.
 - d. ICC International Fuel and Gas Code, 2015 Edition.
 - e. ICC International Existing Building Code, 2015 Edition.
 - f. National Electrical Code, 2014 Edition.
 - 2. State code requirements:
 - a. Capital Development Board (CDB):
 - 1) 2009 ICC ANSI A117.1 and its references to the 2010 Americans with Disabilities Act.
 - 2) 2018 Illinois Accessibility Code.
 - 3) Illinois Energy Conservation Code (ICC International Energy Conservation Code, 2018 Edition, with State of Illinois modifications.
 - b. Illinois Department of Labor (IDOL): Safety Glazing Materials Act Illinois Revised Statutes, chap. 111 1/2, paragraph 3101, et seq.
 - c. Illinois Department of Public Health (IDPH):
 - 1) 2014 Illinois Plumbing Code (Illinois Administrative Code, Title 77, Chapter I, Subchapter r, Part 890).
 - d. Illinois Environmental Protection Agency (IEPA):
 - 1) Air-Pollution Standards.
 - 2) Noise Pollution Standards.
 - 3) Water Pollution Standards.
 - 4) Public Water Supplies
 - 5) Solid Waste Standards.
 - 6) Illinois Recommended Standards for Sewage Works (Illinois Administrative Code, Title 35, Subtitle C, Chapter II, Part 370).
 - e. Illinois State Fire Marshal (OSFM):
 - 1) Boiler & Pressure Vessel Safety Code (Illinois Administrative Code, Title 44, Chapter I, Part 120).
 - 2) Illinois Rules & Regulations for Fire Prevention & Safety (as amended).
 - 3) Gasoline and Volatile Oils (Illinois Revised Statutes, chap. 17 1/2, paragraph 31, et seq.).
 - 3. Information and Requirements for Utility Services: Local utility companies.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 42 00 REFERENCES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Drawing symbols, abbreviations and acronyms.
- B. Definitions of terms used throughout the Contract Documents.
- C. Explanation of specification format and content.
- D. Requirements relating to referenced standards.
- E. Applicability of referenced standards.
- F. List of industry organizations and certain of their respective documents.

1.02 DRAWING SYMBOLS AND CONVENTIONS

- A. Abbreviations and graphic symbols are defined on the General Notes, Symbols & Abbreviations sheet of the drawings.
- B. Generally, symbols used on the mechanical and electrical drawings conform to those recommended by ASHRAE, though, where appropriate, these symbols are supplemented by more specific symbols as recommended by ASME, ASPE, or the IEEE.

1.03 DEFINITIONS

- A. Where the terms "indicated", "noted", "scheduled", "shown", or "specified" are used it is to help locate the reference; no limitation on location is intended except as specifically noted.
- B. Where the terms "directed", "requested", "authorized", "approved", are used as in "directed by the Architect/Engineer", no implied meaning shall be construed to extend the Architect/Engineer's responsibilities into the Contractor's purview of construction supervision.
- C. Where the term "approved" is used in conjunction with the Architect/Engineer's action on submittals, requests or applications it is limited to the duties of the Architect/Engineer as described in the Agreement, and the General and Supplemental Conditions of the Contract. Such use of the term "approval" shall not limit or release the Contractor from his responsibility to fulfill Contract requirements.
- D. Where the term "regulations" is used it means all applicable statutes, laws, ordinances, and orders issued by authorities having jurisdiction, as well as construction industry standards, rules, or conventions that address performance of the Work.
- E. Where the term "furnish" is used it means supply, deliver, and unload to the construction site ready for assembly and incorporation into the Work.
- F. Where the term "install" is used it is meant to describe operations at the job site to include unloading, assembling, placing, anchoring, finishing, protecting, cleaning and all other similar operations required to fully incorporate an item into the Work.
- G. Where the term "provide" is used it means "furnish and install" as defined above.

H. The "Project Site" is the space available to the Contractor for performance of construction activities. The Project Site may be for the exclusive use of the Contractor and his activities or may be used in conjunction with others with others performing other construction or related activities on the Project. The Extent of the Project Site is indicated on the drawings.

1.04 SPECIFICATION FORMAT AND CONTENT

- A. These Specifications are based on the Construction Specification Institute's 49 Division format and numbering system.
- B. Language used in the Specifications and other Contract Documents is an abbreviated type. Implied words and meanings will appropriately interpreted.
- C. Requirements expressed in imperative and streamlined language are to be performed by the Contractor. At certain locations in the text, subjective language may be used to describe responsibilities that must be fulfilled indirectly by the Contractor or others.
 - 1. Whenever a colon (:) is used within a sentence or phrase, it shall be construed to mean the words "shall be".
- D. Use of certain terms such as "carpentry" is not intended to imply that certain activities must be performed by accredited or unionized individuals of a corresponding generic name. The Specifications do, however, require that certain construction activities shall be performed by specialists who are recognized experts in the operations to be performed. Specialists shall be used for said activities, however the final responsibility for fulfilling the requirements of the Contract remains the Contractor's.

1.05 QUALITY ASSURANCE

- A. For products or workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue specified in this section, except where a specific date is established by applicable code.
- C. Obtain copies of standards when required by the Contract Documents.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from the Architect/Engineer before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the Architect/Engineer shall be altered by the Contract Documents by mention or inference otherwise in any reference document.

1.06 APPLICABILITY OF INDUSTRY STANDARDS

A. Construction industry standards shall have the same force and effect as if bound or copied directly in the Contract Documents, except where more stringent requirements are specified. All such applicable standards are made a part of the Contract Documents by reference.

- 1. Where compliance with two or more standards are referenced and conflicting requirements for quality or quantities occur, comply with the more stringent requirements. Refer questions regarding apparently conflicting standards to the Architect for a decision before proceeding.
- 2. The standard of quality or quantity levels specified, shown, or referenced shall be the minimum to be provided or performed. Refer questions regarding standards of minimum quality or quantity to the Architect before proceeding.

1.07 CONSTRUCTION INDUSTRY ORGANIZATIONS AND DOCUMENTS

- A. AABC -- ASSOCIATED AIR BALANCE COUNCIL
- B. AAMA -- AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION
- C. ACI -- AMERICAN CONCRETE INSTITUTE INTERNATIONAL
- D. ADC -- AIR DIFFUSION COUNCIL
- E. AGA -- AMERICAN GAS ASSOCIATION
- F. ANSI -- AMERICAN NATIONAL STANDARDS INSTITUTE
- G. APA -- APA THE ENGINEERED WOOD ASSOCIATION
- H. ASCA -- ARCHITECTURAL SPRAY COATERS ASSOCIATION
- I. ASHRAE -- AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.
- J. ASME -- THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS 1. ASME A17.1 - Safety Code for Elevators and Escalators; 2004.
- K. ASTM -- AMERICAN SOCIETY FOR TESTING AND MATERIALS
- L. AWI -- ARCHITECTURAL WOODWORK INSTITUTE
- M. AWPA -- AMERICAN WOOD-PRESERVERS' ASSOCIATION
- N. BHMA -- BUILDERS HARDWARE MANUFACTURERS ASSOCIATION
- O. CISCA -- CEILINGS & INTERIOR SYSTEMS CONSTRUCTION ASSOCIATION
- P. CPSC -- CONSUMER PRODUCTS SAFETY COMMISSION
- Q. CRI -- CARPET AND RUG INSTITUTE
- R. CTI -- COOLING TECHNOLOGY INSTITUTE
- S. DHI -- DOOR AND HARDWARE INSTITUTE
- T. ESD -- ELECTROSTATIC DISCHARGE ASSOCIATION
- U. FM -- FACTORY MUTUAL RESEARCH CORPORATION
- V. GA -- GYPSUM ASSOCIATION
- W. GANA -- GLASS ASSOCIATION OF NORTH AMERICA
- X. GREENSEAL -- GREEN SEAL

- Y. ICC -- INTERNATIONAL CODE COUNCIL, INC.
- Z. IEEE -- INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
- AA. ISO -- INTERNATIONAL STANDARDS ORGANIZATION
- AB. MPI -- MASTER PAINTERS INSTITUTE (MASTER PAINTERS AND DECORATORS ASSOCIATION)
- AC. NAAMM -- THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS
- AD. NCMA -- NATIONAL CONCRETE MASONRY ASSOCIATION
- AE. NEBB -- NATIONAL ENVIRONMENTAL BALANCING BUREAU
- AF. NECA -- NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION
- AG. NELMA -- NORTHEASTERN LUMBER MANUFACTURERS ASSOCIATION, INC.
- AH. NEMA -- NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
- AI. NFPA -- NATIONAL FIRE PROTECTION ASSOCIATION
- AJ.NGA -- NATIONAL GAS ASSOCIATION
- AK. NPCA -- NATIONAL PAINT AND COATINGS ASSOCIATION
- AL. NRCA -- NATIONAL ROOFING CONTRACTORS ASSOCIATION
- AM. PCA -- PORTLAND CEMENT ASSOCIATION
- AN. PIMA -- POLYISOCYANURATE INSULATION MANUFACTURERS ASSOCIATION
- AO. SDI -- STEEL DOOR INSTITUTE
- AP. SGCC -- SAFETY GLAZING CERTIFICATION COUNCIL
- AQ. SIGMA SEALED INSULATING GLASS MANUFACTURERS ASSOCIATION (See IGMA)
- AR. SMACNA -- SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION, INC.
- AS. SSPC -- THE SOCIETY FOR PROTECTIVE COATINGS
- AT. SWRI -- SEALANT, WATERPROOFING AND RESTORATION INSTITUTE
- AU. UL -- UNDERWRITERS LABORATORIES INC.
- AV. USG -- UNITED STATES GYPSUM
 - 1. USG (HB) Gypsum Construction Handbook; Seventh Edition.
- AW. USGBC -- U. S. GREEN BUILDING COUNCIL
- AX. WWPA -- WESTERN WOOD PRODUCTS ASSOCIATION

1.08 UNITED STATES GOVERNMENT AND RELATED AGENCIES/DOCUMENTS

A. CFR -- CODE OF FEDERAL REGULATIONS

- B. CPSC -- CONSUMER PRODUCTS SAFETY COMMISSION
- C. EPA -- ENVIRONMENTAL PROTECTION AGENCY
- D. FS -- FEDERAL SPECIFICATIONS AND STANDARDS (General Services Administration)
- E. GSA -- U.S. GENERAL SERVICES ADMINISTRATION
- F. USGS -- UNITED STATES GEOLOGICAL SURVEY

1.09 STATE GOVERNMENT AND RELATED AGENCIES/DOCUMENTS

- A. CDB -- ILLINOIS CAPITAL DEVELOPMENT BOARD
- B. IDOL -- ILLINOIS DEPARTMENT OF LABOR
- C. IDPH -- ILLINOIS DEPARTMENT OF PUBLIC HEALTH
- D. IEPA -- ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
- E. OSFM -- OFFICE OF THE ILLINOIS STATE FIRE MARSHAL.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 50 00 TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary utilities.
- B. Temporary telecommunications services.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Security requirements.
- F. Vehicular access and parking.
- G. Waste removal facilities and services.

1.02 TEMPORARY UTILITIES

- A. Owner will provide the following:
 - 1. Electrical power, consisting of connection to existing facilities.
 - 2. Water supply, consisting of connection to existing facilities.
- B. Existing facilities may not be used.
- C. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.03 TELECOMMUNICATIONS SERVICES

- A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.
- B. Telecommunications services shall include:
 - 1. One (1) mobile cellular telephone for each of Contractor's and any Subcontractor's field personnel.

1.04 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Maintain daily in clean and sanitary condition.

1.05 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way .
- C. Provide protection for plants designated to remain. Replace damaged plants.

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

1.06 FENCING

A. Construction: Contractor's option.

1.07 EXTERIOR ENCLOSURES

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

1.08 SECURITY

A. Coordinate with Owner's security program.

1.09 VEHICULAR ACCESS AND PARKING

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and Owner.
- C. Provide and maintain access to fire hydrants, free of obstructions.

1.10 WASTE REMOVAL

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site periodically.
- C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 60 00 PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General product requirements.
- B. Transportation, handling, storage and protection.
- C. Product option requirements.
- D. Substitution limitations.
- E. Procedures for Owner-supplied products.
- F. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

PART 2 PRODUCTS

2.01 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by Contract Documents.
- B. Designed, manufactured, and tested in accordance with industry standards.

2.02 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, or equal to or superior product as approved by Architect in accordance with Section L of the Instruction to Bidders.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for equal to or superior to substitution for any manufacturer not named.

2.03 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site and place in location directed by Owner's representative; obtain Owner's signature on receipt for delivery prior to final payment. Submit signed receipts with Closeout Submittals.

PART 3 EXECUTION

3.01 SUBSTITUTION LIMITATIONS

- A. Substitutions Prior To Bid Opening: Architect/Engineer will consider a written request for substitution provided that such request is received at least seven (7) days prior to the Bid opening date. Requests received after that time will not be considered.
 - 1. If a request is approved, the Architect/Engineer will issue and appropriate addendum not less than three (3) days prior to the Bid opening date.
- B. Substitutions After Notice of Award: Architect/Engineer and Owner will consider a request for substitution only under one or more of the following conditions:
 - 1. Substitution is required for compliance with final interpretation of code requirements or insurance regulations.
 - 2. Specified product is not available through no fault of the Contractor.
 - 3. Specified product is not compatible with other specified materials/equipment.
 - 4. Manufacturer will not certify or warranty specified product as required.
 - 5. Owner shall have final approval of any substitutions requested after notice of award in accordance with Section 3.01B.
- C. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Agrees to provide the same warranty for the substitution as for the specified product.
 - 3. Agrees to coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 - 5. Agrees to reimburse Owner and Architect/Engineer for review or redesign services associated with re-approval by authorities having jurisdiction ove the Project.
- D. Substitutions of products or product characteristics/components/accessories will not be considered when they are indicated or implied on Contractor's submittals, without separate written request, or when acceptance will require revision to the Contract Documents, whether rejection of said subsititutions is expressly identified by Architect/Engineer on Contractor's submittals or not.

3.02 OWNER-SUPPLIED PRODUCTS

- A. See Section 01 10 00 Summary for identification of Owner-supplied products.
- B. Owner's Responsibilities:

- 1. Arrange for and deliver Owner reviewed shop drawings, product data, and samples, to Contractor.
- 2. Arrange and pay for product delivery to site.
- 3. On delivery, inspect products jointly with Contractor.
- 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
- 5. Arrange for manufacturers' warranties, inspections, and service.
- C. Contractor's Responsibilities:
 - 1. Review Owner reviewed shop drawings, product data, and samples.
 - 2. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
 - 3. Handle, store, install and finish products.
 - 4. Repair or replace items damaged after receipt.
 - 5. Make final connections to Owner-provided equipment, and test equipment.

3.03 TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.04 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.

- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.



SUBSTITUTION REQUEST FORM

 Project Name:
 ROOF REPLACEMENT AT THE VENUE, CITY HALL & WATER STREET

 PLAYHOUSE FOR THE CITY OF AURORA
 Project No.:

 21-130-1349
 21-130-1349

Owner: CITY OF AURORA SPECIFIED ITEM: _____

Specification Section Page Paragraph

Description

The undersigned requests consideration of the following:

PROPOSED SUBSTITUTION: _____

Attached data includes project description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents which the proposed substitution will require for its proper installation.

The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

- 1. The proposed substitution does not affect dimensions shown on drawings.
- 2. The undersigned will pay for changes to the building design, including engineering design, detailing, and construction costs caused by the requested substitution.
- 3. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.
- 4. Maintenance and service parts will be locally available for the proposed substitution.

The undersigned further states that the function, appearance, and quality of the proposed substitution are equivalent or superior to the specified item.

		For Use By The Architect/Engineer:	
Printed Name		Accepted	Accepted As Noted
Signature	Date	Not Accepted	
Firm		By:	
Telephone		Date:	
Email Attachments (list):		Remarks:	
	Bloomington Office 2401 East Washington Street	Chicago Office 222 South Riverside Street Plaza	Aurora Office 10 South Shumway Avenue

2401 East Washington Street Bloomington, Illinois 61704 309.430.6460

Chicago Office 222 South Riverside Street Pla: Chicago, Illinois 60606 312.667.5670 Aurora Office 10 South Shumway Avenue Batavia, Illinois 60510 630.406.1213

SECTION 01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition.
- C. Pre-installation meetings.
- D. Cutting and patching.
- E. Cleaning and protection.
- F. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.

1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- B. Section 01 30 00 Administrative Requirements: Submittals procedures, Electronic document submittal service.
- C. Section 01 50 00 Temporary Facilities and Controls: Temporary exterior enclosures.
- D. Section 01 77 00 Closeout Procedures: Additional requirements for Project Closeout.
- E. Section 01 78 00 Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.
- F. Section 07 84 00 Firestopping.

1.03 REFERENCE STANDARDS

A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.

1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate Contractor.
 - 6. Include in request:
 - a. Identification of Project.
 - b. Location and description of affected work.
 - c. Necessity for cutting or alteration.
 - d. Description of proposed work and products to be used.

- e. Alternatives to cutting and patching.
- f. Effect on work of Owner or separate Contractor.
- g. Written permission of affected separate Contractor.
- h. Date and time work will be executed.
- C. Project Record Documents: Accurately record actual locations of capped and active utilities.

1.05 PROJECT CONDITIONS

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
 - 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors.
 - 2. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Owner.
- C. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
 - 1. Minimize amount of bare soil exposed at one time.
 - 2. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
 - 3. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
 - 4. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- D. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
 - 1. At All Times: Excessively noisy tools and operations will not be tolerated inside the building at any time of day; excessively noisy includes jackhammers.
 - 2. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.
 - 3. Indoors: Limit conduct of especially noisy interior work to the hours of 6 pm to 7 am.
- E. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- F. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.
- G. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.06 COORDINATION

- A. See Section 01 10 00 for occupancy-related requirements.
- B. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

- C. Notify affected utility companies and comply with their requirements.
- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- G. Coordinate completion and clean-up of work of separate sections.
- H. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 60 00 Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect/Engineer four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect/Engineer, Owner, participants, and those affected by decisions made.

3.04 GENERAL INSTALLATION REQUIREMENTS

- A. In addition to compliance with regulatory requirements, conduct construction operations in compliance with NFPA 241, including applicable recommendations in Appendix A.
- B. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- C. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- D. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- E. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- F. Make neat transitions between different surfaces, maintaining texture and appearance.

3.05 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/Engineer before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 01 50 00 in locations indicated on drawings.

- 2. 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.
 - 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
 - 2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- D. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
 - 2. Remove items indicated on drawings.
 - 3. Relocate items indicated on drawings.
 - 4. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
 - 5. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- E. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove, relocate, and extend existing systems to accommodate new construction.
 - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
 - 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
 - Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
 - b. See Section 01 10 00 for other limitations on outages and required notifications.
 - c. Provide temporary connections as required to maintain existing systems in service.
 - 4. Verify that abandoned services serve only abandoned facilities.
 - 5. Remove abandoned pipe, ducts, conduits, and equipment; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- F. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.

- 1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Architect/Engineer.
- 2. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
- 3. Where a change of plane of 1/4 inch or more occurs in existing work, submit recommendation for providing a smooth transition for Architect/Engineer review and request instructions.
- 4. Trim existing wood doors as necessary to clear new floor finish. Refinish trim as required.
- H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- I. Refinish existing surfaces as indicated:
 - 1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
 - 2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
- J. Clean existing systems and equipment.
- K. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- L. Do not begin new construction in alterations areas before demolition is complete.
- M. Comply with all other applicable requirements of this section.

3.06 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Fit products together to integrate with other work.
 - 3. Provide openings for penetration of mechanical, electrical, and other services.
 - 4. Match work that has been cut to adjacent work.
 - 5. Repair areas adjacent to cuts to required condition.
 - 6. Repair new work damaged by subsequent work.
 - 7. Remove samples of installed work for testing when requested.
 - 8. Remove and replace defective and non-conforming work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.

- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 84 00, to full thickness of the penetrated element.
- J. Patching:
 - 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 - 2. Match color, texture, and appearance.
 - 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.07 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.08 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Protect work from spilled liquids. If work is exposed to spilled liquids, immediately remove protective coverings, dry out work, and replace protective coverings.
- G. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- H. Prohibit traffic from landscaped areas.

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

3.09 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.1. Clean areas to be occupied by Owner prior to final completion before Owner occupancy.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- F. Clean filters of operating equipment.
- G. Clean debris from roofs, gutters, downspouts, scuppers, overflow drains, area drains, and drainage systems.
- H. Clean site; sweep paved areas, rake clean landscaped surfaces.
- I. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.10 CLOSEOUT PROCEDURES

- A. See Section 01 77 00 for additional requirements.
- B. Make submittals that are required by governing or other authorities.1. Provide copies to Architect/Engineer and Owner.
- C. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
- D. Notify Architect/Engineer when work is considered ready for Architect/Engineer's Substantial Completion inspection.
- E. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect/Engineer's Substantial Completion inspection.
- F. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect/Engineer's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect/Engineer.
- G. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- H. Accompany Project Coordinator on Contractor's preliminary final inspection.

- I. Notify Architect/Engineer when work is considered finally complete and ready for Architect/Engineer's Substantial Completion final inspection.
- J. Complete items of work determined by Architect/Engineer listed in executed Certificate of Substantial Completion.

SECTION 01 77 00 CLOSEOUT PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES:

- A. Substantial Completion Procedures.
- B. Final Completion Procedures.

1.02 RELATED REQUIREMENTS:

- A. Section 01 10 00 Summary.
- B. Section 01 7800 Closeout Submittals.

1.03 SUBSTANTIAL COMPLETION PROCEDURES

- A. Pre-Substantial Completion Conference:
 - 1. General Contractor to schedule a Pre-substantial Completion Conference 15 days prior to the date of Substantial Completion, prepare an agenda with copies for the participants and preside over the meeting.
 - 2. Attendance Required: Contractor, Architect/Engineer and Owner.
 - 3. Minimum Agenda:
 - a. Schedule dates of Substantial Completion and Owner occupancy.
 - b. Schedule dates for Initial Punch Lists of respective Subcontractors to be produced.
 - c. Schedule date for written request for Substantial Completion.
 - d. Schedule target date for completion of Initial Punch List items.
 - e. Schedule delivery times for Owner-furnished items to be installed by Contractor, Owner's own forces or others under separate Contracts.
 - f. Schedule dates for Demonstration and Training of equipment and systems specified.
 - g. Schedule completion dates of testing and balancing reports for engineered Systems.
 - h. Scheduling and Sequencing of Construction operations around areas partially occupied.
 - i. Review job site security during transition of Owner occupancy.
 - j. Schedule dates for final inspections from authorities having jurisdiction for Occupancy Permits.
 - k. Review protocol for claims from potential move-in damage.
 - I. Review procedures for final cleaning.
 - m. Review potential concerns regarding environmental conditions.
 - 4. Record minutes and distribute copies within three days after meeting to participants and those affected by decisions made.
- B. Substantial Completion Procedures will be in accordance with the General Conditions of the Contract for Construction, Article 9.8 and include the following:
 - 1. When the Work or a portion of the Work is considered to be substantially complete, the Contractor inspects the project and prepares a comprehensive list of outstanding items to be completed or corrected, Initial Punch List.
 - 2. Contractor submits notice of Substantial Completion.
 - 3. Contractor completes items on the Initial Punch List.

- 4. Architect/Engineer inspects the project to verify substantial completion and prepares a Final Punch List.
- 5. Architect/Engineer prepares Certificate of Substantial Completion, acceptance is required by Owner and Contractor.

1.04 FINAL COMPLETION PROCEDURES

- A. Final Completion Procedures will be in accordance with the General Conditions of the Contract for Construction, Article 9.10, and include the following:
 - 1. When items on Initial and Final Punch Lists are complete, the Contractor submits notice of final completion and final application for payment.
 - 2. Contractor submits Final Closeout Submittals as specified in Section 01 78 00.
 - 3. Architect inspects project and verifies the Work is acceptable and conforms with the Contract Documents.
 - 4. Architect processes final application for payment and closeout submittals.

1.05 CORRECTION PERIOD

- A. Correction Period commences on the date of Substantial Completion and expires two years from that date.
- B. Owner: document non-conforming or defective work over course of Correction Period. Notify Contractor in writing of nonconforming or defective work. Copy Architect/Engineer.
 - 1. Life safety issues requiring immediate corrective work: Contact Contractor for action.
- C. Post Construction Walk Through:
 - 1. Time: eleven months after the date of Substantial Completion convene a meeting on site.
 - 2. Attendees: Architect/Engineer, Owner's Representative, End User and Maintenance Staff.
 - 3. Minimum Agenda:
 - a. Review Owner's list of non-conforming or defective work.
 - b. Conduct a walk through of the building and grounds
 - c. Prepare a list of additional non-conforming or defective work items.
 - 4. Architect/Engineer:
 - a. Prepare written report of findings within two weeks of meeting.
 - b. Notify Contractor of impending corrective work requiring action.
 - c. Monitor execution of corrective Work.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTION - NOT USED.

SECTION 01 78 00 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 30 00 Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Section 01 70 00 Execution and Closeout Requirements: Contract closeout procedures.
- C. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect/Engineer with claim for final Application for Payment.
- B. 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: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract drawings.

3.02 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. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible company principal.
- F. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- G. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal. END OF SECTION

SECTION 02 41 00 DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Selective demolition of building elements for alteration purposes.

1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 Summary: Limitations on Contractor's use of site and premises.
- B. Section 01 50 00 Temporary Facilities and Controls: Protective barriers and waste removal.
- C. Section 01 70 00 Execution and Closeout Requirements: Project conditions and existing construction to remain.
- D. Section 07 01 50.19 Preparation for Re-Roofing: Removal of existing roofing, roof insulation, flashing, trim, and accessories.

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; 2013.

PART 2 PRODUCTS -- NOT USED

PART 3 EXECUTION

3.01 SCOPE

- A. Remove portions of existing building surfaces to accommodate new materials installation.
- B. Remove other items indicated, for salvage, relocation, and recycling.

3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with other requirements specified in Section 01 70 00.
- B. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - 2. Provide, erect, and maintain temporary barriers and security devices.
 - 3. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
 - 4. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 - 5. Do not close or obstruct roadways or sidewalks without permit.
 - 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.
 - 7. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.

- C. Do not begin removal until built elements to be salvaged or relocated have been removed.
- D. Hazardous Materials: Comply with 29 CFR 1926 and state and local regulations.
- E. Perform demolition in a manner that maximizes salvage and recycling of materials.
 - 1. Dismantle existing construction and separate materials.
 - 2. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.

3.03 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction are based on casual field observation and existing record documents only.
 - 1. Verify that construction are as shown.
 - 2. Report discrepancies to Architect/Engineer 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. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
- C. 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.
- D. Services (Including but not limited to HVAC, Plumbing, and Electrical): Remove existing systems and equipment as indicated.
 - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
 - Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - 3. See Section 01 10 00 for other limitations on outages and required notifications.
 - 4. Verify that abandoned services serve only abandoned facilities before removal.
 - 5. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.
- 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.

3.04 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. **END OF SECTION**

SECTION 06 10 00 ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Structural dimension lumber framing.
- B. Roof-mounted curbs.
- C. Roofing nailers.
- D. Roofing cant strips.
- E. Preservative treated wood materials.
- F. Miscellaneous framing and sheathing.
- G. Miscellaneous wood nailers, furring, and grounds.

1.02 REFERENCE STANDARDS

- A. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.
- B. ASTM C557 Standard Specification for Adhesives for Fastening Gypsum Wallboard to Wood Framing; 2003 (Reapproved 2009).
- C. ASTM D2898 Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing; 2010.
- D. ASTM D3498 Standard Specification for Adhesives for Field-Gluing Wood Structural Panels (Plywood or Oriented Strand Board) to Wood Based Floor System Framing; 2018a.
- E. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2018b.
- F. AWC (WFCM) Wood Frame Construction Manual for One- and Two-Family Dwellings; 2015.
- G. AWPA U1 Use Category System: User Specification for Treated Wood; 2012.
- H. ICC (IBC) International Building Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- I. PS 1 Structural Plywood; 2009.
- J. PS 2 Performance Standard for Wood-Based Structural-Use Panels; 2010.
- K. PS 20 American Softwood Lumber Standard; 2010.
- L. WWPA G-5 Western Lumber Grading Rules; 2011.

1.03 DELIVERY, STORAGE, AND HANDLING

A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

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

2.02 DIMENSION LUMBER

- A. Grading Agency: Western Wood Products Association; WWPA G-5.
- 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):
 - 1. Species: Douglas Fir-Larch.
 - 2. Grade: No. 2.
- E. Joist and Rafter Framing (2 by 6 through 4 by 16):
 - 1. Species: Douglas Fir-Larch.
 - 2. Grade: No. 1 and Better.
- F. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
 - 1. Lumber: S4S, No. 2 or Standard Grade.
 - 2. Boards: Standard or No. 3.

2.03 CONSTRUCTION PANELS

- A. Roof Sheathing: PS 2 type, rated Structural I Sheathing.
 - 1. Bond Classification: Exterior.
 - 2. Span Rating: 60.
 - 3. Performance Category: 3/4 PERF CAT.
- B. Other Applications:
 - 1. Plywood Concealed From View But Located Within Exterior Enclosure: PS 1, C-C Plugged or better, Exterior grade.
 - 2. Plywood Exposed to View But Not Exposed to Weather: PS 1, A-D, or better.
 - 3. Other Locations: PS 1, C-D Plugged or better.

2.04 ACCESSORIES

A. Fasteners and Anchors:

- 1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
- B. Joist Hangers: Hot dipped galvanized steel, sized to suit framing conditions.
 - 1. For contact with preservative treated wood in exposed locations, provide minimum G185 galvanizing complying with ASTM A653/A653M.
- C. Sill Flashing: As specified in Section 07 62 00.
- D. Subfloor Adhesives: Waterproof, air cure type, cartridge dispensed; adhesives designed for subfloor applications and complying with either ASTM C557 or ASTM D3498.
 - 1. Construction Adhesives: Adhesives complying with ASTM C557 or ASTM D3498.

2.05 FACTORY WOOD TREATMENT

- A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
 - 1. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements.
 - Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.
- B. Fire Retardant Treatment:
 - Exterior Type: AWPA Use Category UCFB, Commodity Specification H (Treatment C20 for lumber and C27 for plywood), chemically treated and pressure impregnated; capable of providing a maximum flame spread rating of 25 when tested in accordance with ASTM E 84, with no evidence of significant combustion when test is extended for an additional 20 minutes both before and after accelerated weathering test performed in accordance with ASTM D 2898.
 - a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
 - b. Do not use treated wood in direct contact with the ground.
 - Interior Type A: AWPA Use Category UCFA, Commodity Specification H (Treatment C20 for lumber and C27 for plywood), low temperature (low hygroscopic) type, chemically treated and pressure impregnated; capable of providing a maximum flame spread rating of 25 when tested in accordance with ASTM E 84, 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 scheduled.
 - c. Do not use treated wood in applications exposed to weather or where the wood may become wet.
- C. Preservative Pressure Treatment of Lumber Above Grade: AWPA Use Category UC3B, Commodity Specification A (Treatment C2) using waterborne preservative to 0.25 lb/cu ft retention.
 - 1. Kiln dry lumber after treatment to maximum moisture content of 15 percent.
 - 2. Treat lumber in contact with roofing, flashing, or waterproofing.
 - 3. Treat lumber in contact with masonry or concrete.

- 4. Treat lumber less than 18 inches above grade.
- Preservative Pressure Treatment of Plywood Above Grade: AWPA Use Category UC2 and UC3B, Commodity Specification F (Treatment C9) using waterborne preservative to 0.25 lb/cu ft retention.
 - a. Kiln dry plywood after treatment to maximum moisture content of 15 percent.
 - b. Treat plywood in contact with roofing, flashing, or waterproofing.
 - c. Treat plywood in contact with masonry or concrete.
 - d. Treat plywood less than 18 inches above grade.

PART 3 EXECUTION

3.01 PREPARATION

- A. Where wood framing bears on cementitious foundations or tops pf masonry walls, install full width flashing continuous over top of foundation or top of masonry wall, lap ends of flashing minimum of 4 inches 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 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 span as detailed. Fit solid blocking at ends of members.
- H. Frame wall openings with two or more studs at each jamb; support headers on cripple studs.

3.04 ROOF-RELATED CARPENTRY

- A. Coordinate installation of roofing carpentry with deck construction, framing of roof openings, and roofing assembly installation.
- B. Provide wood curb at all roof openings except where specifically indicated otherwise. Form corners by alternating lapping side members.

3.05 INSTALLATION OF CONSTRUCTION PANELS

- A. Roof Sheathing: Secure panels with long dimension perpendicular to framing members, with ends staggered and over firm bearing.
 - 1. At long edges use sheathing clips where joints occur between roof framing members.
 - 2. Nail panels to framing; staples are not permitted.

3.06 SITE APPLIED WOOD TREATMENT

- A. Apply preservative treatment compatible with factory applied treatment at site-sawn cuts, complying with manufacturer's instructions.
- B. Allow preservative to dry prior to erecting members.

3.07 TOLERANCES

- A. Framing Members: 1/4 inch from true position, maximum.
- B. Surface Flatness of Floor: 1/8 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.
- C. Variation from Plane (Other than Floors): 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

3.08 CLEANING

- A. Waste 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.

3.09 SCHEDULES

- A. Upper Level Floor and Ceiling Joists, Rafters: Spruce-Pine-Fir, No. 2 Grade.
- B. Roof Blocking: Pressure preservative treated.
- C. Plywood Sheathing for patching former roof openings: Fire retardent treated.

END OF SECTION

SECTION 07 01 50.19 PREPARATION FOR RE-ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Partial removal of existing roofing system in preparation for patching of roofing membrane to match existing.
- B. Partial replacement of existing roofing system in preparation for replacement roofing system in designated areas as indicated on drawings.
- C. Removal of existing flashing and counterflashings.
- D. Temporary roofing protection.

1.02 RELATED REQUIREMENTS

- A. Section 07 53 00 Elastomeric Membrane Roofing.
- B. Section 07 62 00 Sheet Metal Flashing and Trim: Replacement of flashing and counterflashings.

1.03 REFERENCE STANDARDS

A. ASTM C208 - Standard Specification for Cellulosic Fiber Insulating Board; 2012.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate with affected mechanical and electrical work associated with roof penetrations.
- B. Preinstallation Meeting: Convene one week before starting work of this section.
 - 1. Attendees:
 - a. Architect/Engineer.
 - b. Contractor.
 - c. Owner.
 - d. Roofing system manufacturer's field representative.
 - 2. Meeting Agenda: Provide agenda to participants prior to meeting in preparation for discussions on the following:
 - a. Removal and installation schedule.
 - b. Necessary preparatory work.
 - c. Protection before, during, and after roofing system installation.
 - d. Removal of existing roofing system.
 - e. Installation of new roofing system.
 - f. Temporary roofing and daily terminations.
 - g. Transitions and connection to and with other work.
 - h. Inspections and testing of installed systems.
- C. Schedule work to coincide with commencement of installation of new roofing system.

1.05 QUALITY ASSURANCE

A. Materials Removal Firm Qualifications: Company specializing in performing the work of this section with minimum 5 years ofdocumented experience.

1. Comply with removal and disposal regulations of local authorities having jurisdiction (AHJ).

1.06 FIELD CONDITIONS

- A. Existing Roofing System: Varies: Modified Bitumen & Built-Up roofing.
- B. Do not remove existing roofing membrane when weather conditions threaten the integrity of building contents or intended continued occupancy.
- C. Maintain continuous temporary protection prior to and during installation of new roofing system.
- D. Provide notice at least three days before starting activities that will affect normal building operations.
- E. Verify that occupants have been evacuated from building areas when work on structurally impaired roof decking is scheduled to begin.
- F. Owner will occupy building areas directly below re-roofing area.
 - 1. Provide Owner with at least 48 hours written notice of roofing activities that may affect their operations and to allow them to prepare for upcoming activities as necessary.
 - 2. Do not disrupt Owner's operations or activities.
 - 3. Maintain access of Owner's personnel to corridors, existing walkways, and adjacent buildings.

PART 2 PRODUCTS

2.01 COMPONENTS

- A. Refer to following sections for additional information on components relating to this work:
 - 1. Partial removal of existing roofing system in preparation for new roofing system in designated areas as indicated on drawings, refer to Section 07 53 00.
 - 2. Remove existing flashing and counterflashings in preparation for replacement of these materials as part of this work, see Section 07 62 00 for material requirements.

2.02 MATERIALS

- A. Temporary Roofing Protection Materials:
 - 1. Contractor's responsibility to select appropriate materials for temporary protection of roofing areas as determined necessary for this work.

2.03 ACCESSORIES

A. Fasteners: Type and size as required and compatible with existing and new roofing system to resist local wind uplift.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that existing roof surface has been cleared of materials being removed from existing roofing system and ready for next phase of work as required.

3.02 PREPARATION

A. Sweep roof surface clean of loose matter.

B. Remove loose refuse and dispose of properly off-site.

3.03 MATERIAL REMOVAL

- A. Remove only existing roofing materials that can be replaced with new materials the same day.
- B. Remove metal counter flashings.
- C. Remove roofing membrane, perimeter base flashings, flashings around roof protrusions, pitch pans and pockets.
- D. Remove insulation and fasteners, cant strips, wood blockingin areas of affected work.
- E. Remove vapor retarder and underlay.
- F. Repair existing wood or concrete deck surface to provide smooth working surface for new roof system.

3.04 INSTALLATION

A. Coordinate scope of this work with requirements for installation of new roofing system, refer to Section 07 53 00 for additional requirements.

3.05 PROTECTION

- A. Provide protection of existing roofing system that is not having work performed on it.
- B. Provide temporary protective sheeting over uncovered deck surfaces.
- C. Turn sheeting up and over parapets and curbing. Retain sheeting in position with weights.
- D. Provide for surface drainage from sheeting to existing drainage facilities.
- E. Do not permit traffic over unprotected or repaired deck surface.

END OF SECTION

SECTION 07 21 00 THERMAL INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Batt insulation and vapor retarder in exterior roof construction.
- B. Batt insulation for filling perimeter crevices in roof openings.

1.02 RELATED REQUIREMENTS

A. Section 06 10 00 - Rough Carpentry: Installation requirements for board insulation over steep slope roof sheathing or roof structure.

1.03 REFERENCE STANDARDS

- A. ASTM C552 Standard Specification for Cellular Glass Thermal Insulation; 2015.
- B. ASTM C553 Standard Specification for Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications; 2013.
- C. ASTM C665 Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing; 2012.
- D. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2018b.
- E. ASTM E136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace At 750 Degrees C; 2012.

1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements for submittal procedures.
- B. Product Data: Provide data on product characteristics, performance criteria, and product limitations.

PART 2 PRODUCTS

2.01 APPLICATIONS

A. Insulation in Wood Framed Ceiling Structure: Batt insulation with integral vapor retarder.

2.02 BATT INSULATION MATERIALS

- A. Where batt insulation is indicated, either glass fiber or mineral fiber batt insulation may be used, at Contractor's option.
- B. Glass Fiber Batt Insulation: Flexible preformed batt or blanket, complying with ASTM C665; friction fit.
 - 1. Smoke Developed Index: 450 or less, when tested in accordance with ASTM E84.
 - 2. Combustibility: Non-combustible, when tested in accordance with ASTM E136, except for facing, if any.
 - 3. Thermal Resistance: R-value of 38.

- 4. Facing: Asphalt treated Kraft paper, one side.
- 5. Products:
 - a. CertainTeed Corporation: www.certainteed.com/#sle.
 - b. Johns Manville: www.jm.com/#sle.
 - c. Owens Corning Corporation: www.ocbuildingspec.com/#sle.
 - d. Substitutions: See Section 01 60 00 Product Requirements.

2.03 ACCESSORIES

- A. Tape: Reinforced polyethylene film with acrylic pressure sensitive adhesive.
 - 1. Application: Sealing of interior circular penetrations, such as pipes or cables.
 - 2. Width: Are required for application.
- B. Nails or Staples: Steel wire; electroplated or galvanized; type and size to suit application.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that substrate, adjacent materials, and insulation materials are dry and that substrates are ready to receive insulation.
- B. Verify substrate surfaces are flat, free of honeycomb, fins, irregularities, or materials or substances that may impede adhesive bond.

3.02 BATT INSTALLATION

- A. Install insulation and vapor retarder in accordance with manufacturer's instructions.
- B. Install in exterior roof spaces without gaps or voids. Do not compress insulation.
- C. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.
- D. Fit insulation tightly in cavities and tightly to exterior side of mechanical and electrical services within the plane of the insulation.
- E. Install with factory-applied vapor retarder membrane facing warm side of building spaces. Lap ends and side flanges of membrane over framing members.
- F. Staple or nail facing flanges in place at maximum 6 inches on center.
- G. Tape seal butt ends, lapped flanges, and tears or cuts in membrane.
- H. At wood framing, place vapor retarder on warm side of insulation by stapling at 6 inches on center. Lap and seal sheet retarder joints over face of member.
- I. Tape seal tears or cuts in vapor retarder.
- J. Extend vapor retarder tightly to full perimeter of adjacent window and door frames and other items interrupting the plane of the membrane. Tape seal in place.

3.03 PROTECTION

A. Do not permit installed insulation to be damaged prior to its concealment.

END OF SECTION

SECTION 07 53 00 ELASTOMERIC MEMBRANE ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Elastomeric roofing membrane, mechanically fastened conventional and adhered conventional application.
- B. Insulation, flat and tapered.
- C. Vapor retarder.
- D. Flashings.
- E. Roofing cant strips, stack boots, roofing expansion joints, and walkway pads.

1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 Rough Carpentry: Wood nailers, curbs and sheathing and patching materials for removed roof penetrations.
- B. Section 06 10 00 Rough Carpentry: Wood cant strips.
- C. Section 07 01 50.19 Preparation for Re-Roofing.
- D. Section 07 62 00 Sheet Metal Flashing and Trim: Flashings and counterflashings.
- E. Section 07 71 23 Manufactured Gutters and Downspouts.
- F. Section 07 72 00 Roof Accessories: Non-penetrating pipe support pedestals.

1.03 REFERENCE STANDARDS

- A. ASCE 7 Minimum Design Loads for Buildings and Other Structures; 2010, with 2013 Supplements and Errata.
- B. ASTM C1289 Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2014.
- C. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers--Tension; 2016.
- D. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers; 2000 (Reapproved 2012).
- E. ASTM D746 Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact; 2014.
- F. ASTM D2240 Standard Test Method for Rubber Property--Durometer Hardness; 2005 (Reapproved 2010).
- G. ASTM D4637/D4637M Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane; 2015.
- H. ASTM E96/E96M Standard Test Methods for Water Vapor Transmission of Materials; 2016.

- I. ASTM E1980 Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces; 2011.
- J. FM DS 1-28 Wind Design; 2007.
- K. NRCA (WM) The NRCA Waterproofing Manual; 2005.
- L. FM DS 1-29 Property Loss Prevention Data Sheet Roof Deck Securement and Above-Deck Roof Components, February 2007 edition.
- M. UL (DIR) Online Certifications Directory; Current Edition.
- N. UL (FRD) Fire Resistance Directory; Current Edition.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate with installation of associated counterflashings installed under other sections.
- B. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by all affected installers; review preparation and installation procedures and coordination and scheduling necessary for related work.

1.05 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data indicating membrane materials, flashing materials, insulation, vapor retarder, and fasteners.
- C. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, setting plan for tapered insulation, mechanical fastener layout, and paver layout.
- D. Calculations: Demonstrating compliance with specified area-weighted overall R-Value for insulation setting plan.
- E. Manufacturer's Installation Instructions: Indicate membrane seaming precautions, special procedures, and perimeter conditions requiring special attention.
- F. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- G. Manufacturer's Field Reports: Indicate procedures followed, ambient temperatures, humidity, wind velocity during application, and supplementary instructions given.
- H. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum ten years of documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section with minimum ten years documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original containers, dry and undamaged, with seals and labels intact.
- B. Store materials in weather protected environment, clear of ground and moisture.
- C. Ensure storage and staging of materials does not exceed static and dynamic load-bearing capacities of roof decking.
- D. Protect foam insulation from direct exposure to sunlight.

1.08 FIELD CONDITIONS

- A. Do not apply roofing membrane during unsuitable weather.
- B. Do not apply roofing membrane when ambient temperature is below 40 degrees F or above 95 degrees F.
- C. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
- D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.
- E. Schedule applications so that no partially completed sections of roof are left exposed at end of workday.

1.09 WARRANTY

- A. See Section 01 78 00 Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a two year period after Date of Substantial Completion.
- C. Provide manufacturer's extended fifteen (15) year "total roof system" material and labor warranty to cover failure to prevent penetration of water. Include entire roof system, from top of roof decking to top of roofing membrane, including associated metal flashings and counterflashings.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. EPDM Membrane Materials:
 - 1. Carlisle Roofing Systems, Inc; Sure-Seal EPDM: www.carlisle-syntec.com.
 - 2. Firestone Building Products, LLC; Black EPDM: www.firestonebpco.com.
 - 3. Versico, a division of Carlisle Construction Materials Inc; VersiGard EPDM: www.versico.com/sle.
 - 4. Substitutions: Not permitted.
- B. Insulation:
 - 1. Same manufacturer as Membrane Materials, for inclusion in total system warranty.

2.02 ROOFING

- A. Elastomeric Membrane Roofing: One ply membrane, fully adhered conventional application at all roof surfaces, over vapor retarder and insulation.
- B. Roofing Assembly Requirements:
 - 1. Roof Covering External Fire Resistance Classification: UL (DIR) certified Class A.
 - 2. Factory Mutual Classification: Class 1 and windstorm resistance of 1-90, in accordance with FM DS 1-28.
 - Securement of Roofing Components: Adhesive based installation in accordance with Manufacturer's specifications for all roofing components at concrete decking locations of City Hall Building areas. Mechanical fastening of roofing components is allowed at wood decking building locations.
 - 4. Insulation Thermal Value (R), nominal: R-30 Min.; provide total insulation thickness to achieve the specified R-Value as an area-weighted average across the entire roof surface, considering the areas of tapered insulation.
- C. Acceptable Insulation Types Constant Thickness Application:
 - 1. Minimum 2 layers of polyisocyanurate board.
- D. Acceptable Insulation Types Tapered Application:
 - 1. Tapered polyisocyanurate board.

2.03 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

- A. Membrane: Ethylene-propylene-diene-terpolymer (EPDM); non-reinforced; complying with minimum properties of ASTM D4637/D4637M.
 - 1. Thickness: 0.060 inch (60 mil).
 - 2. Sheet Width: 120 inch, minimum; factory-fabricate into largest sheets possible.
 - a. Adhered Application: Limit width to 120 inches, maximum, when ambient temperatures are less than 40 degrees F for extended period of time during installation.
 - 3. Color: Black.
 - 4. Tensile Strength: 1,300 psi, measured in accordance with ASTM D412.
 - 5. Ultimate Elongation: 300 percent, measured in accordance with ASTM D412.
 - 6. Durometer Hardness, Type A: 30, minimum, in accordance with ASTM D2240
 - 7. Tear Strength: 150 lbf/inch, measured in accordance with ASTM D624.
 - 8. Water Vapor Permeability: 2.0 perm inch, measured in accordance with ASTM E96/E96M.
 - 9. Brittleness Temperature: -49 degrees F, measured in accordance with ASTM D746.
- B. Seaming Materials: As recommended by membrane manufacturer.
- C. Membrane Fasteners: As recommended by and approved by membrane manufacturer.
- D. Vapor Retarder: 40 mil composite complying with requirements of fire rating classification; compatible with roofing and insulation materials.
 - 1. Self-adhesive type.
 - 2. Vapor permeability: Not more than 0.015 perms, measured in accordance with ASTM D1970.
 - 3. Products:
 - a. VapAir Seal 725TR manufactured by Carlisle.

- b. V-Force Vapor Barrier Membrane manufactured by Firestone.
- E. Flexible Flashing Material: Same material as membrane.

2.04 INSULATION

- A. Polyisocyanurate (ISO) Board Insulation: Rigid cellular foam, complying with ASTM C1289.
 - 1. Classifications:
 - a. Type II:
 - 1) Class 1 Faced with glass fiber reinforced cellulosic felt facers on both major surfaces of core foam.
 - 2) Compressive Strength: Classes 1-2-3, Grade 1 16 psi (110 kPa), minimum.
 - 3) Thermal Resistance, R-value: At 1-1/2 inch thick; Class 1, Grades 1-2-3 8.4 (1.48) at 75 degrees F.
 - 2. Board Size: 48 by 96 inch.
 - 3. Board Thickness: Base Insulation: (2) Layers; 2.5" thick over 3 inches thick layer; Total 5.5 inches thick. (Tapered boards are in addition to the base insulation thickness).
 - 4. Maximum Board Thickness: 3 inches per layer.
 - 5. Tapered Board: Slope as indicated; minimum thickness 1/2 inch; fabricate of fewest layers possible.
 - 6. Long-Term Thermal Resistance: R-value of 5.7 (min.) per inch thickness.

2.05 ACCESSORIES

- A. Roofing Expansion Joint Flashing: Same material as membrane.
- B. Stack Boots: Prefabricated flexible boot and collar for pipe stacks through membrane; same material as membrane.
- C. Cant Strips: Wood, pressure preservative treated; see Section 06 10 00.
- D. Insulation Joint Tape: Glass fiber reinforced type as recommended by insulation manufacturer, compatible with roofing materials; 6 inches wide; self adhering.
- E. Insulation Fasteners: (Wood or metal deck application): Appropriate for purpose intended and approved by roofing manufacturer.
 - 1. Length as required for thickness of insulation material and penetration of deck substrate.
- F. Insulation Adhesive: (Concrete deck application): Low-rise polyurethane foam type; approved by insulation manufacturer.
- G. Membrane Adhesive: As recommended by membrane manufacturer.
- H. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.
- I. Thinners and Cleaners: As recommended by adhesive manufacturer, compatible with membrane.
- J. Sealants: As recommended by membrane manufacturer.
- K. Walkway Pads: Suitable for maintenance traffic, contrasting color or otherwise visually distinctive from roof membrane.
 - 1. Composition: Rubber with mineral granule surface.
 - 2. Size: 24 by 24 inch.

- 3. Surface Color: Black.
- 4. Quantity: Provide sufficient quantity at perimeter of each mechanical roof top unit and roof access point plus walkway areas between each mechanical unit from roof hatch.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work.
- B. Verify deck is supported and secure.
- C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.
- D. Verify deck surfaces are dry and free of snow or ice.
- E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

3.02 PREPARATION - WOOD DECK

- A. Verify flatness and tightness of joints of wood decking. Fill knot holes with latex filler.
- B. Confirm dry deck by moisture meter with 12 percent moisture maximum.

3.03 CONCRETE DECK PREPARATION

A. Fill surface honeycomb and other void variations with latex filler. Grind high spots flush with surrounding surface.

3.04 VAPOR RETARDER AND INSULATION - UNDER MEMBRANE

- A. Apply vapor retarder to deck surface with adhesive in accordance with manufacturer's instructions.
 - 1. Extend vapor retarder under perimeter blocking, past deck edge, up backside face of parapets and under new parapet top blocking.
 - 2. Extend vapor retarder up outside faces of roof curbs to level of top of new insulation and seal top edge of vapor retarder to faces of roof curbs.
 - 3. Install flexible flashing from vapor retarder to air seal material of wall construction, lap and seal to provide continuity of the air barrier plane.
 - 4. Seal vapor retarder to roof drain bodies and other roof deck penetrations.
- B. Ensure vapor retarder is clean and dry, continuous, and ready for application of insulation.
- C. Attachment of Insulation (Wood or Metal decking):
 - 1. Mechanically fasten first layer of insulation to metal or wood roof deck in accordance with roofing manufacturer's instructions and Factory Mutual requirements.
 - 2. Embed second layer of insulation into full bed of adhesive in accordance with roofing and insulation manufacturers' instructions.
- D. Attachment of Insulation: (Concrete decking): Embed each layer of insulation in adhesive to vapor retarder and subsequent insulation layers in full contact, in accordance with roofing and insulation manufacturers' instructions.

- E. Weight corners of insulation boards, using suitably-weighted objects, for the full duration of the adhesive cure time.
- F. Lay subsequent layers of insulation with joints staggered minimum 6 inch from joints of preceding layer.
- G. Place tapered insulation to the required slope pattern in accordance with manufacturer's instructions.
- H. On metal deck, place boards perpendicular to flutes with insulation board edges bearing on deck flutes.
- I. Lay boards with edges in moderate contact without forcing. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.
- J. Tape joints of insulation in accordance with roofing and insulation manufacturers' instructions.
- K. At roof drains, use factory-tapered boards to slope down to roof drains over a distance of 24 inches. Adjust roof drain heights as required to accommodate new insulation thickness.
- L. Do not apply more insulation than can be covered with membrane in same day.

3.05 MEMBRANE APPLICATION

- A. Apply elastomeric membrane roofing system in accordance with manufacturer's recommendations and NRCA (WM) applicable requirements.
- B. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.
- C. Shingle joints on sloped substrate in direction of drainage.
- D. Fully Adhered Application: Apply adhesive to substrate. Fully embed membrane in adhesive except in areas directly over or within 3 inches of expansion joints. Fully adhere one roll before proceeding to adjacent rolls.
- E. Overlap edges and ends and seal seams by contact adhesive, minimum 3 inches. Seal permanently waterproof. Apply uniform bead of sealant to joint edge.
- F. At intersections with vertical surfaces and coping locations:
 - 1. Secure flexible flashing attachment strip to nailing strips at 4 inches on center.
 - 2. Extend membrane over flexible flashing and nailing strips and up a minimum of 12 inches onto vertical surfaces. Continue membrane past tops of parapets and lip membrane over tops of parapets so that membrane extends a minimum of 1 inch down past bottom of roof blocking on exterior faces of parapets.
 - 3. Fully adhere membrane to flexible flashing attachment strip.
 - 4. Install in accordance with NRCA Detail Plate EPDM-1 & EPDM-5.
- G. At gravel stops and roof edge flashings, extend membrane under gravel stop and onto the outside face of the wall, then strip in gravel stop or roof edge flashing with flexible flashing.
 1. Install in accordance with NRCA Detail Plate EPDM-3 & EPDM-4.
- H. At gutter with perimeter metal edge material:
 - 1. Install in accordance with NRCA Detail Plate EPDM-29.

- I. At Through-Wall Scupper with metal flashings:
 - 1. Install in accordance with NRCA Deytail Plate EPDM-27.
- J. Around plumbing vent, Stack Vent (hot or cold) and round roof penetrations, seal flanges and flashings with flexible flashing:
 - 1. Install in accordance with NRCA Detail Plate EPDM-18, EPDM-19 & EDPM-19A.
- K. Install roofing expansion joints. Make joints watertight.
 - 1. Fabricate and install in accordance with NRCA Detail Plate TS-6-2001 EDITION at interfaces with vertical surfaces.
- L. Coordinate installation of roof drains and sumps and related flashings.
 - 1. Install in accordance with NRCA Detail Plate EPDM-25.
- M. Coordinate installation of associated counterflashings installed under other sections.

3.06 FINISHING UNBALLASTED SURFACES

A. Install walkway pads. Space pad joints to permit drainage.

3.07 FIELD QUALITY CONTROL

A. Require site attendance of roofing material manufacturer at mobilization and upon completion of the Work.

3.08 CLEANING

- A. Remove bituminous markings from finished surfaces.
- B. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and comply with their documented instructions.
- C. Repair or replace defaced or damaged finishes caused by work of this section.

3.09 PROTECTION

- A. Protect installed roofing and flashings from construction operations.
- B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

END OF SECTION

SECTION 07 62 00 SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fabricated sheet metal items, including flashings, counterflashings, and other items indicated in Schedule.
- B. Sealants for joints within sheet metal fabrications.

1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 Rough Carpentry: Wood nailers for sheet metal work.
- B. Section 07 53 00 Elastomeric Membrane Roofing: Roofing system.
- C. Section 07 71 23 Manufactured Gutters and Downspouts.
- D. Section 07 92 00 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 (with Coil Coating Appendix); 2017a.
- B. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2014.
- C. ASTM B209M Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate [Metric]; 2014.
- D. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014.
- E. ASTM D4479/D4479M Standard Specification for Asphalt Roof Coatings Asbestos-Free; 2007 (Reapproved 2018).
- F. CDA A4050 Copper in Architecture Handbook; current edition.
- G. SMACNA (ASMM) Architectural Sheet Metal Manual; 2012.

1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
- C. Samples: Submit two samples 3 by 5 inch in size illustrating metal finish color.

1.05 QUALITY ASSURANCE

A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.

B. Fabricator and Installer Qualifications: Company specializing in sheet metal work with 10 years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- B. Prevent contact with materials that could cause discoloration or staining.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Sheet Metal Flashing and Trim Manufacturers:
 - 1. OMG Roofing Products: www.omgroofing.com/#sle.
 - 2. Petersen Aluminum Corporation: www.pac-clad.com/sle.
 - 3. Berridge Roofing Systems, Inc.: www.berridge.com.
 - 4. Substitutions: See Section 01 60 00 Product Requirements.

2.02 SHEET MATERIALS

- A. Pre-Finished Aluminum: ASTM B209 (ASTM B209M); 20 gage (0.032 inch) thick and 0.050 thick as scheduled; plain finish shop pre-coated with fluoropolymer coating.
 - 1. Fluoropolymer Coating: High Performance Organic Finish, AAMA 2605; multiple coat, thermally cured fluoropolymer finish system.
 - 2. Color: As selected by Architect/Engineer from manufacturer's standard colors.

2.03 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; 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 long legs; seam for rigidity, seal with sealant.
- F. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.
- G. Fabricate flashings to allow toe to extend 2 inches over roofing gravel. Return and brake edges.

2.04 ACCESSORIES

- A. Fasteners: Same material and finish as flashing metal, with soft neoprene washers.
- B. Primer: Zinc chromate type.
- C. Protective Backing Paint: Asphaltic mastic, ASTM D4479 Type I.
- D. Concealed Sealants: Non-curing butyl sealant.

- E. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material.
- F. Plastic Cement: ASTM D4586/D4586M, Type I.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.
- B. Verify roofing termination and base flashings are in place, sealed, and secure.

3.02 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Install surface mounted reglets true to lines and levels, and seal top of reglets with sealant.
- C. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil.

3.03 INSTALLATION

- A. Insert flashings into reglets to form tight fit; secure in place with lead wedges; pack remaining spaces with lead wool; seal flashings into reglets with sealant.
- B. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted..
- C. Apply plastic cement compound between metal flashings and felt flashings.
- D. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- E. Exterior Flashing Receivers: Install in accordance with manufacturer's recommendations, and in proper relationship with adjacent construction, and as follows:
 - 1. Secure receiver at perimeter of wall opening with adhesives or fasteners.
 - 2. Place flashing into receiver channel.
 - 3. Secure flashing with receiver clip.
- F. Seal metal joints watertight.

3.04 SCHEDULE

- A. Fascia and Cornices:
 - 1. Material: Pre-Finished Aluminum.
 - 2. Thickness: 0.050 inch.
 - 3. Finish: Fluoropolymer Coating.
- B. Scuppers:
 - 1. Material: Pre-Finished Aluminum.
 - 2. Thickness: 0.032 inch.

- 3. Finish: Fluoropolymer Coating.
- C. Coping, Cap, Parapet, and Ledge Flashings:
 - 1. Material: Pre-Finished Aluminum.
 - 2. Thickness: 0.050 inch.
 - 3. Finish: Fluoropolymer Coating.
- D. Flashings Associated with continuous gutters:
 - 1. Material: Pre-Finished Aluminum.
 - 2. Thickness: 0.032 inch.
 - 3. Finish: Fluoropolymer Coating.
- E. Counterflashings at Roofing Terminations (over roofing base flashings):
 - 1. Material: Pre-Finished Aluminum.
 - 2. Thickness: 0.032 inch.
 - 3. Finish: Fluoropolymer Coating.
 - 4. Provide unitized inside and outside corners.

END OF SECTION

SECTION 07 71 23 MANUFACTURED GUTTERS AND DOWNSPOUTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Pre-finished aluminum gutters and downspouts.
- B. Precast concrete splash pads.

1.02 RELATED REQUIREMENTS

- A. Section 07 53 00 Elastomeric Membrane Roofing.
- B. Section 07 62 00 Sheet Metal Flashing and Trim.

1.03 REFERENCE STANDARDS

- A. AAMA 2604 Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2017a.
- B. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2014.
- C. ASTM B209M Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate [Metric]; 2014.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Comply with applicable code for size and method of rain water discharge.

1.05 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on prefabricated components.
- C. Shop Drawings: Indicate locations, configurations, jointing methods, fastening methods, locations, and installation details.
- D. Samples: Submit two samples, 12 inch long illustrating component design, finish, color, and configuration.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Stack material to prevent twisting, bending, or abrasion, and to provide ventilation. Slope to drain.
- B. Prevent contact with materials that could cause discoloration, staining, or damage.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Gutters and Downspouts:
 - 1. Quality Edge; www.qualityedge.com.
 - 2. Spectra Metal Sales, Inc.; www.spectrametals.com.

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- 3. Alsco Metals Products; alscometals.com.
- 4. Substitutions: See Section 01 60 00 Product Requirements.

2.02 MATERIALS

- A. Pre-Finished Aluminum Sheet: ASTM B209 (ASTM B209M); 0.032 inch thick for extruded, seamless Ogee profile gutters and 0.024 inch thick for ribbed downspouts.
 - 1. Finish: Plain, shop pre-coated with PVDF (polyvinylidene fluoride) coating.
 - 2. Color: As selected from Manufacturer's complete color line.

2.03 COMPONENTS

- A. Gutters: Profile as indicated. Style K OGEE; size 6 inch.
- B. Downspouts: Ribbed Rectangular profile. Size 3 inches x 4 inches.
- C. Anchors and Supports: Profiled to suit gutters and downspouts.
 - 1. Anchoring Devices: In accordance with SMACNA requirements.
 - 2. Gutter Supports: Brackets.
 - 3. Downspout Supports: Brackets.
- D. Fasteners: Galvanized steel, with soft neoprene washers.

2.04 ACCESSORIES

A. Splash Pads: Precast concrete type, size and profiles indicated; minimum 3000 psi at 28 days, with minimum 5 percent air entrainment. Place on top of an EPDM Roof membrane slip sheet for splash pads located below downspouts discharge points.

2.05 FABRICATION

- A. Form gutters and downspouts of profiles and size indicated.
- B. Fabricate with required connection pieces.
- C. Form sections square, true, and accurate in size, in maximum possible lengths, free of distortion or defects detrimental to appearance or performance. Allow for expansion at joints.
- D. Hem exposed edges of metal.
- E. Fabricate gutter and downspout accessories; seal watertight.

2.06 FINISHES

A. Fluoropolymer Coating: High Performance Organic Finish, AAMA 2604; multiple coat, thermally cured fluoropolymer finish system; color as selected from manufacturer's standard colors.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that surfaces are ready to receive work.

3.02 PREPARATION

A. Paint concealed metal surfaces and surfaces in contact with dissimilar metals with protective backing paint to a minimum dry film thickness of 15 mil.

3.03 INSTALLATION

- A. Install gutters, downspouts, and accessories in accordance with manufacturer's instructions.
- B. Sheet Metal: Join lengths with formed seams sealed watertight. Flash and seal gutters to downspouts and accessories.
- C. Slope gutters 1/16 inch per foot, 0.5 percent minimum.
- D. Set splash pads under downspouts not connected to storm water piping.

END OF SECTION

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SECTION 07 72 00 ROOF ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Non-penetrating pedestals.

1.02 RELATED REQUIREMENTS

A. Section 07 71 23 - Manufactured Gutters and Downspouts.

1.03 REFERENCE STANDARDS

- A. ASTM A123/A123M Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.
- B. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.

1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for 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.
 - 1. Non-penetrating Rooftop Supports: Submit design calculations for loadings and spacings.

1.05 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.

PART 2 PRODUCTS

2.01 NON-PENETRATING ROOFTOP SUPPORTS/ASSEMBLIES

- A. Non-Penetrating Rooftop Support/Assemblies: Manufacturer-engineered and factory-fabricated, with pedestal bases that rest on top of roofing membrane, and not requiring any attachment to roof structure and not penetrating roofing assembly.
 - 1. Design Loadings and Configurations: As required by applicable codes.
 - 2. Support Spacing and Base Sizes: As required to distribute load sufficiently to prevent indentation of roofing assembly.
 - 3. Steel Components: Stainless steel, or carbon steel hot-dip galvanized after fabrication in accordance with ASTM A123/A123M.

- 4. Hardware, Bolts, Nuts, and Washers: Stainless steel, or carbon steel hot-dip galvanized after fabrication in accordance with ASTM A153/A153M.
- 5. Manufacturers:
 - a. PHP Systems/Design; SS8-C: www.phpsd.com/#sle.
 - b. Portals Plus; Pedestal Plus: www.portalsplus.com/#sle.
 - c. Substitutions: See Section 01 60 00 Product Requirements.

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/Engineer 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. Install in accordance with manufacturer's instructions, in manner that maintains roofing system weather-tight integrity.

3.04 CLEANING

A. Clean installed work to like-new condition.

3.05 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Date of Substantial Completion. **END OF SECTION**

SECTION 07 84 00 FIRESTOPPING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Firestopping systems.
- B. Firestopping of joints and penetrations in fire resistance rated and smoke resistant assemblies, whether indicated on drawings or not, and other openings indicated.
- C. Smoke-stopping of all penetrations of and joints in smoke partitions, whether indicated on drawings or not, and other openings indicated.

1.02 RELATED REQUIREMENTS

A. Section 01 70 00 - Execution and Closeout Requirements: Cutting and patching.

1.03 REFERENCE STANDARDS

- A. ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials; 2015.
- B. ASTM E814 Standard Test Method for Fire Tests of Through-Penetration Fire Stops; 2013a.
- C. ITS (DIR) Directory of Listed Products; current edition.
- D. FM 4991 Approval Standard for Firestop Contractors; 2013.
- E. FM (AG) FM Approval Guide; current edition.
- F. SCAQMD 1168 South Coast Air Quality Management District Rule No.1168; current edition.
- G. UL 1479 Standard for Fire Tests of Penetration Firestops; Current Edition, Including All Revisions.
- H. UL (FRD) Fire Resistance Directory; Current Edition.

1.04 DEFINITIONS

- A. Assembly: Particular arrangement of materials specific to given type of construction described or detailed in referenced documents.
- B. Barriers: Time rated fire walls, smoke barrier walls, time rated ceiling/floor assemblies and structural floors.
- C. Firestopping: Methods and materials applied in penetrations and unprotected openings to limit spread of heat, fire gasses and smoke.
- D. Penetration: Opening or foreign material passing through or into barrier or structural floor such that full thickness of rated materials is not obtained.
- E. Joint: Interruption to a fire-rated assembly occurring at interface between 1) adjacent sections of wall, 2) intersecting walls, 3) top of wall and ceiling, structural floor or roof deck, 4) wall and edge of structural floor, 5) adjacent sections of structural floor.

- F. System: Specific products and applications, classified and numbered by Underwriters Laboratories, Inc. to close specific barrier penetrations and joints.
- G. Sleeve: Metal fabrication or pipe section extending through thickness of barrier and used to permanently guard penetration. Sleeves are described as part of penetrating system in other sections and may or may not be required.

1.05 SYSTEM DESCRIPTION

- A. Design Requirements:
 - 1. Fire-rated construction: Maintain barrier and structural floor fire resistance ratings including resistance to cold smoke at all penetrations, connections with other surfaces or types of construction, at separations required to permit building movement and sound or vibration absorption, and at other construction gaps.
 - 2. Smoke barrier construction: Maintain barrier and structural floor resistance to cold smoke at all penetrations, connections with other surfaces and types of construction and at all separations required to permit building movement and sound or vibration absorption, and at other construction gaps.

1.06 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Schedule of Firestopping: List each type of penetration, fire rating of the penetrated assembly, and firestopping test or design number.
 - 1. Provide manufacturer's qualified engineering judgements for non-standard applications.
- C. Product Data: Provide data on product characteristics, performance ratings, and limitations.
- D. Sustainable Design Submittal: Submit VOC content documentation for all non-preformed materials.
- E. Manufacturer's Installation Instructions: Indicate preparation and installation instructions.
- F. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.07 QUALITY ASSURANCE

- A. Fire Testing: Provide firestopping assemblies of designs that provide the scheduled fire ratings when tested in accordance with methods indicated.
 - 1. Listing in UL (FRD), FM (AG), or ITS (DIR) will be considered as constituting an acceptable test report.
 - 2. Submission of actual test reports is required for assemblies for which none of the above substantiation exists.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- C. Installer Qualifications: Company specializing in performing the work of this section and:
 - 1. Approved by Factory Mutual Research Corporation under FM 4991, or meeting any two of the following requirements:
 - 2. Verification of minimum three years documented experience installing work of this type.

- 3. Verification of at least five satisfactorily completed projects of comparable size and type.
- 4. Licensed by local authorities having jurisdiction (AHJ).

1.08 MOCK-UP

- A. Install one firestopping assembly representative of each fire rating design required on project.
 - 1. Where one design may be used for different penetrating items or in different wall constructions, install one assembly for each different combination.
 - 2. Where firestopping is intended to fill a linear opening, install minimum of 1 linear ft.
- B. Obtain approval of authorities having jurisdiction (AHJ) before proceeding.
- C. If accepted, mock-up will represent minimum standard for the Work.
- D. If accepted, mock-up may remain as part of the Work. Remove and replace mock-ups not accepted.

1.09 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in original, unopened packaging with legible manufacturer's identification.
- B. Coordinate delivery with scheduled installation date to minimize storage time at site.
- C. Store materials in a clean, dry, ventilated location. Protect materials from freezing if required by manufacturer.

1.10 FIELD CONDITIONS

- A. Comply with firestopping manufacturer's recommendations for temperature and conditions during and after installation; maintain minimum temperature before, during, and for three days after installation of materials.
- B. Provide ventilation in areas where solvent-cured materials are being installed.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Firestopping Manufacturers:
 - 1. 3M Fire Protection Products: www.3m.com/firestop.
 - 2. A/D Fire Protection Systems Inc: www.adfire.com.
 - 3. Hilti, Inc: www.us.hilti.com/#sle.
 - 4. Nelson FireStop Products: www.nelsonfirestop.com.
 - 5. Specified Technologies Inc: www.stifirestop.com/#sle.
 - 6. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.
 - 7. Substitutions: See Section 01 60 00 Product Requirements.

2.02 MATERIALS

- A. Firestopping Materials: Any materials meeting requirements.
- B. Volatile Organic Compound (VOC) Content: Provide products having VOC content lower than that required by SCAQMD 1168.

- C. Primers, Sleeves, Forms, Insulation, Packing, Stuffing, and Accessories: Provide type of materials as required for tested firestopping assembly.
- D. Fire Ratings: Refer to drawings for required systems and ratings.

2.03 FIRESTOPPING SYSTEMS

- A. Firestopping: Any material meeting requirements.
 - 1. Fire Ratings: Use system that is listed by FM (AG), ITS (DIR), or UL (FRD) and tested in accordance with ASTM E814, ASTM E119, or UL 1479 with F Rating equal to fire rating of penetrated assembly and minimum T Rating Equal to F Rating and in compliance with other specified requirements.
- B. Acceptable Manufacturers: As listed in UL (FRD) for specific UL Design Number.
- C. Fill, Void or Cavity Materials: Conform to UL (FRD) XHHW.
- D. Firestop Devices: Conform to UL (FRD) XHJI.
- E. Forming Materials: Conform to UL (FRD) XHKU.
- F. Mechanical Joint Assemblies: Conform to UL (FRD) XHLP.
- G. Packing Material: As required by specific UL Design Number for joint system or through-penetration firestop system.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify openings are ready to receive the work of this section.
 - 1. Verify barrier joints and penetrations are properly sized and in suitable condition for application of materials.

3.02 PREPARATION

- A. Clean substrate surfaces of dirt, dust, grease, oil, loose material, or other materials that could adversely affect bond of firestopping material.
- B. Remove incompatible materials that could adversely affect bond.

3.03 INSTALLATION

- A. Install materials in manner described in UL (FRD) or fire test report and in accordance with manufacturer's instructions, completely closing openings.
- B. Do not cover installed firestopping until inspected by authorities having jurisdiction.
- C. Install peel and stick labeling to identify fire-resistant rated assemblies on each side of fire barrier walls at 48 inches on center that are indicated on the drawings as a fire barrier. Labeling shall be installed in above acoustical ceiling cavities at public accessed areas, on wall surfaces in rooms without finished ceilings at 96" AFF or in areas as directed by the Authority Having Jurisdiction.

3.04 CLEANING

A. Clean adjacent surfaces of firestopping materials.

3.05 PROTECTION

- A. Protect adjacent surfaces from damage by material installation.
- B. Patch or replace firestopping damaged by work of other sections. END OF SECTION

SECTION 07 92 00 JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Nonsag gunnable joint sealants.
- B. Joint backings and accessories.

1.02 RELATED REQUIREMENTS

A. Section 07 84 00 - Firestopping: Firestopping sealants.

1.03 REFERENCE STANDARDS

- A. ASTM C794 Standard Test Method for Adhesion-In-Peel of Elastomeric Joint Sealants; 2018.
- B. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014.
- C. ASTM C1087 Standard Test Method for Determining Compatibility of Liquid-Applied Sealants with Accessories Used in Structural Glazing Systems; 2016.
- D. ASTM C1193 Standard Guide for Use of Joint Sealants; 2013.
- E. ASTM C1248 Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2008 (Reapproved 2012).
- F. ASTM C1311 Standard Specification for Solvent Release Sealants; 2014.
- G. ASTM D2240 Standard Test Method for Rubber Property--Durometer Hardness; 2005 (Reapproved 2010).
- H. SCAQMD 1168 South Coast Air Quality Management District Rule No.1168; current edition.
- I. SWRI (VAL) SWR Institute Validated Products Directory; Current Edition.

1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following.
 - 1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
 - 2. List of backing materials approved for use with the specific product.
 - 3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
 - 4. Substrates the product should not be used on.
 - 5. Substrates for which use of primer is required.
 - 6. Substrates for which laboratory adhesion and/or compatibility testing is required.
 - 7. Installation instructions, including precautions, limitations, and recommended backing materials and tools.
 - 8. Sample product warranty.
 - 9. Certification by manufacturer indicating that product complies with specification requirements.

- 10.SWRI Validation: Provide currently available sealant product validations as listed by SWRI (VAL) for specified sealants.
- C. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.
- D. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.
- E. Samples for Verification: Where custom sealant color is specified, obtain directions from Architect/Engineer and submit at least two physical samples for verification of color of each required sealant.
- F. Preconstruction Laboratory Test Reports: Submit at least four weeks prior to start of installation.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section and with at least three years of documented experience.
- C. Preconstruction Laboratory Testing: Arrange for sealant manufacturer(s) to test each combination of sealant, substrate, backing, and accessories.
 - 1. Adhesion Testing: In accordance with ASTM C794.
 - 2. Compatibility Testing: In accordance with ASTM C1087.
 - 3. Allow sufficient time for testing to avoid delaying the work.
 - 4. Deliver to manufacturer sufficient samples for testing.
 - 5. Report manufacturer's recommended corrective measures, if any, including primers or techniques not indicated in product data submittals.
 - 6. Testing is not required if sealant manufacturer provides data showing previous testing, not older than 24 months, that shows satisfactory adhesion, lack of staining, and compatibility.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Non-Sag Sealants: Permits application in joints on vertical surfaces without sagging or slumping.
 - 1. Dow Corning Corporation: www.dowcorning.com/construction.
 - 2. Hilti, Inc: www.us.hilti.com.
 - 3. Master Builders Solutions by BASF: www.master-builders-solutions.basf.us/en-us.
 - 4. Momentive Performance Materials, Inc (formerly GE Silicones): www.momentive.com.
 - 5. Pecora Corporation: www.pecora.com.
 - 6. Sika Corporation: www.usa-sika.com.
 - 7. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com.
 - 8. W.R. Meadows, Inc: www.wrmeadows.com.

2.02 JOINT SEALANT APPLICATIONS

- A. Scope:
 - 1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to, the following items.
 - a. Wall expansion and control joints.
 - b. Joints between different exposed materials.
 - c. Lap joints in sheet metal flashing.
 - d. Other joints indicated below.
 - 2. Do not seal the following types of joints.
 - a. Intentional weep holes in masonry.
 - b. Joints indicated to be treated with manufactured expansion joint cover or some other type of sealing device.
 - c. Joints where sealant is specified to be provided by manufacturer of product to be sealed.
 - d. Joints where installation of sealant is specified in another section.
 - e. Joints between suspended panel ceilings/grid and walls.
- B. Exterior Joints: Use non-sag non-staining silicone sealant, unless otherwise indicated.
 - 1. Lap Joints in Sheet Metal Fabrications: Butyl rubber, non-curing.

2.03 JOINT SEALANTS - GENERAL

A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168.

2.04 NONSAG JOINT SEALANTS

- A. Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
 - 1. Movement Capability: Plus 100 percent and minus 50 percent, minimum.
 - 2. Non-Staining To Porous Stone: Non-staining to light-colored natural stone when tested in accordance with ASTM C1248.
 - 3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
 - 4. Color: To be selected by Architect/Engineer from manufacturer's standard range.
 - 5. Cure Type: Single-component, neutral moisture curing.
 - 6. Manufacturers:
 - a. Dow Chemical Company; DOWSIL 790 Silicone Building Sealant: consumer.dow.com/en-us/industry/ind-building-construction.html.
 - b. Sika Corporation; Sikasil WS-290: www.usa-sika.com.
 - c. Sika Corporation; Sikasil 728NS: www.usa-sika.com.
 - d. Tremco Commercial Sealants & Waterproofing; Spectrem 1: www.tremcosealants.com.
 - e. Tremco Commercial Sealants & Waterproofing; Tremsil 200: www.tremcosealants.com.
 - f. Substitutions: See Section 01 60 00 Product Requirements.
- B. Non-Curing Butyl Sealant: Solvent-based, single component, non-sag, non-skinning, non-hardening, non-bleeding; non-vapor-permeable; intended for fully concealed applications.

2.05 ACCESSORIES

- A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
- B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
- C. Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.
- D. Joint Cleaner: Non-corrosive and non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.
- E. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that joints are ready to receive work.
- B. Verify that backing materials are compatible with sealants.
- C. Verify that backer rods are of the correct size.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C1193.
- C. Measure joint dimensions and size joint backers to achieve the following:
 - 1. Width/depth ratio of 2:1.
 - 2. Neck dimension no greater than 1/3 of the joint width.
 - 3. Surface bond area on each side not less than 75 percent of joint width.
- D. Install bond breaker backing tape where backer rod cannot be used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.

- F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
- G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

END OF SECTION