



ST. TAMMANY PARISH

MICHAEL B. COOPER
PARISH PRESIDENT

NOTICE TO BIDDERS

ST. TAMMANY PARISH

Sealed bids will be received by the Department of Procurement, until 2:00 p.m., **Wednesday, June 4, 2025**, and then opened and read publicly at that time by the Procurement Staff for the following project:

Bid # 25-15-2 - Safe Haven Cardinal Cove Cabin Renovations – Phase 1

Each paper bid must be submitted in a sealed envelope. The outside of the envelope shall show the Name and Address of the Bidder, the State Contractor's License Number of the Bidder (if the work is estimated at \$50k or more), the Bid Name and the Bid Number.

The project classification is:

Building Construction

This bid package is available online at www.bidexpress.com or LaPAC <https://wwwcfprd.doa.louisiana.gov/osp/lapac/pubmain.cfm>. It is the Vendor's responsibility to check Bid Express, or LaPAC frequently for any possible addenda that may be issued. The Parish is not responsible for a Vendor's failure to download any addenda documents required to complete a submission.

Bids will be received at 21454 Koop Dr., Suite 2F, Mandeville, LA 70471 from each bidder or his agent and given a written receipt, by certified mail with return receipt requested, or electronically at www.bidexpress.com.

Procurement Department

BID PROPOSAL

ST. TAMMANY PARISH
GOVERNMENT



BID PACKAGE FOR

Safe Haven Cardinal Cove Cabin Renovations Phase 1

BID NO.: 25-15-2

April 17, 2025

Section 01

Table of Contents

Section 01	Table of Contents
Section 02	Instructions to Bidders
Section 03	Summary of Work
Section 04	LA Uniform Public Work Bid Form Unit Price Form
Section 05	Affidavits, Louisiana (Pursuant to LSA-R.S. 38:2224, 38:2227 and 38:2212.10)
Section 06	Insurance Requirements
Section 07	Project Sign
Section 08	General Conditions
Section 09	Sample Corporate Resolution
Section 10	Sample Certificate of Insurance
Section 11	Sample Contract
Section 12	Specifications
01 2300	Alternatives
01 3000	Administrative Requirements
01 3226	Construction Progress Schedule
01 4000	Quality Requirements
01 4100	Regulatory Requirements
01 4216	Definitions
01 5000	Temporary Facilities and Controls
01 6000	Product Requirements
01 7000	Execution and Closeout Requirements
02 4100	Demolition
07 2500	Weather Barriers
07 3113	Asphalt Shingles
07 4113	Metal Roof Panels

07 4646	Fiber-Cement Siding
07 6200	Sheet Metal Flashing and Trim
07 9200	Joint Sealants
08 1113	Hollow Metal Doors and Frames
08 7100	Door Hardware
Section 13	Specifications For Asbestos Abatement & Microbial Remediation
Section 14	Federal Clauses
Section 15	Contract Provisions / Davis Bacon Wage Determination
Section 16	Plans

Section 02

Instructions to Bidders

Bidders are urged to promptly review the requirements of this specification and submit questions for resolution as early as possible during the bid period. Questions or concerns must be submitted in writing to the Procurement Department no later than 2:00 CST seven (7) working days prior to the bid opening date. Otherwise, this will be construed as acceptance by the bidders that the intent of the specifications is clear and that competitive bids may be obtained as specified herein. Protests with regard to the specification documents will not be considered after bids are opened.

1. Bid security is required. Be sure that your bid includes such security as is necessary to meet Parish requirements and is properly signed. The bid must be fully completed. All applicable Louisiana license numbers must be affixed.
2. The Owner is the St. Tammany Parish Government (the “Parish”).
3. The terms “he/his” and “it/its” may be used interchangeably.
4. The terms “Owner,” the “Parish,” and “St. Tammany Parish” may be used interchangeably.
5. The successful Bidder understands the limited contract time in the contract is **100 Calendar days**, and shall submit any request for an extension of time in accordance with the General and Supplementary Conditions. Said request will reflect the days requested and the reason for same. No extension request is guaranteed or absolute.
6. Bidder specifically understands that acknowledgment of the General Conditions is required. Bidder specifically understands that signature of receipt of the General Conditions is mandated. **The Bidder’s signature on the “Louisiana Uniform Public Work Bid Form” will serve as acknowledgment of the Bidder’s receipt and understanding of the General Conditions as well as any Supplementary Conditions.**
7. ***If any additional work is performed by the contractor without written approval by owner, the cost of the work will be borne by the contractor and will not be reimbursed by the Parish.***
8. **Only** the Louisiana Uniform Public Bid Form, the Unit Price Form (if necessary), the bid security, and written evidence of authority of person signing the bid shall be submitted on or before the bid opening time and date provided for in the Bid Documents. Necessary copies of the Louisiana Uniform Public Work Forms and Unit Price Forms (if necessary) will be furnished for Bidding. Bound sets of the Contract Documents are for Bidder's information and should not be used in submitting Bids.
9. All other documents and information required are to be submitted by the low Bidder within ten (10) days after the opening of the bids, and at the same time of day and location as given for the opening of the bids in the Bid Documents.
10. Each Bid must be submitted in a sealed envelope, unless submitted electronically. The outside of the envelope shall show the name and address of the Bidder, the State Contractor’s License Number of the Bidder (if work requires contractor’s license), and the Project name and the Bid number. In the case of an electronic bid proposal, a contractor may submit an authentic digital signature on the electronic bid proposal accompanied by the contractor's license number, Project name and the Bid number.
11. The price quoted for the Work shall be stated in words and figures on the Bid Form, and in figures only on the Unit Price Form. The price in the Bid shall include all costs necessary for the complete performance of the Work in full conformity with the conditions of the Contract Documents, and shall include all applicable Federal, State, Parish, Municipal or other taxes. The price bid for the items listed on the Unit Price Form will include the cost of all related items not listed, but which are normally required to do the type of Work bid.

12. The Bid shall be signed by the Bidder. The information required on the Louisiana Uniform Public Work Bid Form must be provided. Evidence of agency, corporate, or partnership authority is required and shall be provided in conformance with LSA-R.S. 38:2212(B).
13. Only a Contractor licensed by the State to do the type of Work as indicated on the Notice to Bidders can submit a Bid. The Bidder's signature on the Bid Form certifies that he holds an active license under the provisions of Chapter 24 of Louisiana Revised Statutes Title 37. Failure to be properly licensed constitutes authority for the Owner to reject the Bid.
14. Bidders shall not attach any conditions or provisions to the Bid. Any conditions or provisions so attached may, at the sole option of the Owner, cause rejection of the Bid.
15. A Bid Guarantee of five percent (5%) of the amount of the total Bid, including Alternates, must accompany the Proposal and, at the option of the Bidder, may be a cashier's check, certified check or a satisfactory Bid Bond. The Bid Guarantee must be attached to the Louisiana Uniform Public Work Bid Form. No Bid will be considered unless it is so guaranteed. Cashier's check or certified check must be made payable to the order of the Owner. Cash deposits will not be accepted. The Owner reserves the right to cash or deposit the cashier's check or certified check. Such guarantees shall be made payable to the Parish of St. Tammany. In accordance with LSA-R.S. 38:2218(C), if a bid bond is used, it shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide or by an insurance company in good standing licensed to write bid bonds which is either domiciled in Louisiana or owned by Louisiana residents. It is **not** required to be on any AIA form.
16. Bid securities of the three (3) lowest Bidders will be retained by the Owner until the Contract is executed or until final disposition is made of the Bids submitted. Bid securities of all other Bidders will be returned promptly after the canvas of Bids. Bids shall remain binding for forty-five (45) days after the date set for Bid Opening. The Parish shall act within the forty-five (45) days to award the contract to the lowest responsible bidder or reject all bids. However, the Parish and the lowest responsible bidder, by mutual written consent, may agree to extend the deadline for award by one or more extensions of thirty (30) calendar days. In the event the Owner issued the Letter of Award during this period, or any extension thereof, the Bid accepted shall continue to remain binding until the execution of the Contract.
17. A Proposal may be withdrawn at any time prior to the scheduled closing time for receipt of Bids, provided the request is in writing, executed by the Bidder or its duly authorized representative and is filed with the Owner prior to that time. When such a request is received, the Proposal will be returned to the Bidder unopened. A bid withdrawn under the provisions of LSA-R.S. 38:2214(C) cannot be resubmitted.
18. Written communications, over the signature of the Bidder, to modify Proposals will be accepted and the Proposal corrected in accordance therewith if received by the Owner prior to the scheduled closing time for receipt of Bids. Oral, telephonic or telegraphic Modifications will not be considered.
19. No oral interpretation obligating the Owner will be made to any Bidder as to the meaning of the Drawings, Specifications and Contract Documents. Every request for such an interpretation shall be made in writing and addressed and forwarded to the Owner. Inquiries received within seven (7) days prior to the day fixed for opening of the Bids may not be given consideration. Every interpretation made to the Bidder shall be in the form of an addendum to the Specifications. All such Addenda shall become part of the Contract Documents. Failure of the Owner to send or failure of Bidder to receive any such interpretation shall not relieve any Bidder from any obligation under this Bid as submitted without Modification. All Addenda shall be issued in accordance with the Public Bid Law, LSA-R.S. 38:2212(O).
20. The Owner reserves the right to reject any or all Bids for just cause in accordance with the Public Bid Law, LSA-R.S. 38:2214(B). Incomplete, informal, illegible, or unbalanced Bids may be rejected. Reasonable grounds for belief that any one Bidder is concerned directly or indirectly with more than one Bid will cause rejection of all Bids wherein such Bidder

is concerned. If required, a Bidder shall furnish satisfactory evidence of its competence and ability to perform the Work stipulated in its Proposal. Incompetence will constitute cause for rejection. If the Parish determines that the bidder is not responsive or responsible for any reason whatsoever, the bid may be rejected in accordance with State law.

21. Contractor shall be liable without limitation to the Parish for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors.
22. Upon notice of any claim, demand, suit, or cause of action against the Parish, alleged to arise out of or be related to this Contract, Contractor shall investigate, handle, respond to, provide defense for, and defend at its sole expense, even if the claim, demand, suit, or cause of action is groundless, false, or fraudulent. The Parish may, but is not required to, consult with or assist the Contractor, but this assistance shall not affect the Contractor's obligations, duties, and responsibilities under this section. Contractor shall obtain the Parish's written consent before entering into any settlement or dismissal.
23. It is understood and agreed that neither party can foresee the exigencies beyond the control of each party which arise by reason of an Act of God or force majeure; therefore, neither party shall be liable for any delay or failure in performance beyond its control resulting from an Act of God or force majeure. The Parish shall determine whether a delay or failure results from an Act of God or force majeure based on its review of all facts and circumstances. The parties shall use reasonable efforts, including but not limited to, use of continuation of operations plans (COOP), business continuity plans, and disaster recovery plans, to eliminate or minimize the effect of such events upon the performance of their respective duties under this Contract.
24. Contractor shall fully indemnify and hold harmless the Parish, without limitation, for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors. The Contractor shall not indemnify for the portion of any loss or damage arising from the Parish's act or failure to act.
25. Contractor shall fully indemnify and hold harmless the Parish, without limitation, from and against damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities in any action for infringement of any intellectual property right, including but not limited to, trademark, trade-secret, copyright, and patent rights.

When a dispute or claim arises relative to a real or anticipated infringement, the Contractor, at its sole expense, shall submit information and documentation, including formal patent attorney opinions, as required by the Parish.

If the use of the product, material, service, or any component thereof is enjoined for any reason or if the Contractor believes that it may be enjoined, Contractor, while ensuring appropriate migration and implementation, data integrity, and minimal delays of performance, shall at its sole expense and in the following order of precedence: (i) obtain for the Parish the right to continue using such product, material, service, or component thereof; (ii) modify the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; (iii) replace the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; or, (iv) provide the Parish monetary compensation for all payments made under the Contract related to the infringing product, material, service, or component, plus for all costs incurred to procure and implement a non-infringing product, material, or service of at least equal quality and performance. Until this obligation has been satisfied, the Contractor remains in default.

The Contractor shall not be obligated to indemnify that portion of a claim or dispute based upon the Parish's unauthorized: i) modification or alteration of the product, material or service; ii) use of the product, material or service in combination with other products not

furnished by Contractor; or, iii) use of the product, material or service in other than the specified operating conditions and environment.

26. Bidders shall familiarize themselves with and shall comply with all applicable Federal and State Laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over construction of the Project, which may directly or indirectly affect the Work or its prosecution. These laws and/or ordinances will be deemed to be included in the Contract, as though herein written in full.
27. Each Bidder shall visit the site of the proposed Work and fully acquaint itself with all surface and subsurface conditions as they may exist so that it may fully understand this Contract. Bidder shall also thoroughly examine and be familiar with drawings, Specifications and Contract Documents. The failure or omission of any Bidder to receive or examine any form, instrument, Drawing or document or to visit the site and acquaint itself with existing conditions shall in no way relieve any Bidder from any obligation with respect to its Bid and the responsibility in the premises.
28. The standard contract form enclosed with the Proposal documents is a prototype. It is enclosed with the Contract Documents for the guidance of the Owner and the Contractor. It has important legal consequences in all respects and consultation with an attorney is encouraged. Contractor shall be presumed to have consulted with its own independent legal counsel.
29. When one set of Contract plans show the Work to be performed by two or more prime Contractors, it is the responsibility of each Bidder to become knowledgeable of the Work to be performed by the other where the Work upon which this bid is submitted is shown to come into close proximity or in conflict with the Work of the other. In avoiding conflicts, pressure pipe lines must be installed to avoid conflict with gravity pipe lines and the Bidder of the smaller gravity pipe line in conflict with the larger gravity pipe line must include in his Bid the cost of a conflict box at these locations. The location of and a solution to the conflicts do not have to be specifically noted as such on the plans.
30. Bidder shall execute affidavit(s) attesting compliance with LSA-R.S. 38:2212.10, 38:2224, 38:2227, each as amended, and other affidavits as required by law, prior to execution of the contract.
31. In accordance with Louisiana Law, all Corporations (See LA R.S. 12:26.1) and Limited Liability Companies (See LA R.S. 12:1308.2) should be registered and in good standing with the Louisiana Secretary of State in order to hold a contract.
32. Sealed Bids shall be delivered to St. Tammany Parish Government at the office of **St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471**, and a receipt given, until the time and date denoted in Notice to Bidders, at which time and place the Bids shall be publicly opened and read aloud to those present. In accordance with LSA-R.S. 38:2212(H), the designer's final estimated cost of construction shall be read aloud upon opening bids. Sealed Bids may also be mailed by certified mail to **St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471**, and must be received before the bid opening. Bids may also be submitted electronically. Information concerning links for electronic bidding is contained in the Notice to Bidders. It is the responsibility of the Bidders to ensure that bids are delivered in a timely fashion. **Late bids, regardless of reason, will not be considered, and will be returned to bidder.**
33. Paper bids shall be placed in a sealed envelope, marked plainly and prominently as indicated in the Notice to Bidders, and these Instructions, and addressed:

**St. Tammany Parish Government
Department of Procurement
21454 Koop Drive, Suite 2-F
Mandeville, LA 70471**
34. See Notice to Bidders for availability of Drawings, Specifications and Contract Documents via electronic methods.

35. The successful Bidder shall be required to post in each direction a public information sign, 4' x 4' in size, at the location of the project containing information required by the Owner. The Owner shall supply this information.
36. The award of the Contract, if it is awarded, will be to the lowest responsible Bidder, in accordance with State Law. No award will be made until the Owner has concluded such investigations as it deems necessary to establish the responsibility and qualifications of the Bidder to do the Work in accordance with the Contract Documents to the satisfaction of the Owner within the time prescribed as established by the Department based upon the amount of work to be performed and the conditions of same. The written contract and bond shall be issued in conformance with LSA-R.S. 38:2216. If the Contract is awarded, the Owner shall give the successful Bidder written notice of the award within forty-five (45) calendar days after the opening of the Bids in conformance with LSA-R.S. 38:2215(A), or any extension as authorized thereunder.
37. At least three days prior to the execution of the Contract, the Contractor shall deliver to the Owner the required Bonds.
38. Failure of the successful Bidder to execute the Contract and deliver the required Bonds within ten (10) days of the Notice of the Award shall be just cause for the Owner to annul the award and declare the Bid and any guarantee thereof forfeited. Award may then be made to the next lowest responsible bidder.
39. In order to ensure the faithful performance of each and every condition, stipulation and requirement of the Contract and to indemnify and hold harmless the Owner from any and all damages, either directly or indirectly arising out of any failure to perform same, the successful Bidder to whom the Contract is awarded shall furnish a Performance and Payment Bond in an amount of at least equal to one hundred percent (100%) of the Contract Price. The Contract shall not be in force or binding upon the Owner until such satisfactory Bond has been provided to and approved by the Parish. The cost of the Bond shall be paid for by the Contractor unless otherwise stipulated in the Special Provisions.
40. No surety Company will be accepted as a bondsman which has no permanent agent or representative in the State upon whom notices referred to in the General Conditions of these Specifications may be served. Service of said notice on said agent or representative in the State shall be equal to service of notice on the President of the Surety Company, or such other officer as may be concerned.
41. In conformance with LSA-R.S. 38:2219(A)(1)(a), (b), and (c):

Any surety bond written for a public works project shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide, to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide or by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds.

For any public works project, no surety or insurance company shall write a bond which is in excess of the amount indicated as approved by the U.S. Department of the Treasury Financial Management Service list or by a Louisiana domiciled insurance company with an A- rating by A.M. Best up to a limit of ten percent of policyholders' surplus as shown by A.M. Best; companies authorized by this Paragraph who are not on the treasury list shall not write a bond when the penalty exceeds fifteen percent of its capital and surplus, such capital and surplus being the amount by which the company's assets exceed its liabilities as reflected by the most recent financial statements filed by the company with the Department of Insurance.

In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed to do business in the state of Louisiana. All contractors must comply with any other applicable provisions of LSA-R.S. 38:2219.

42. Should the Contractor's Surety, even though approved and accepted by the Owner, subsequently remove its agency or representative from the State or become insolvent,

bankrupt, or otherwise fail, the Contractor shall immediately furnish a new Bond in another company approved by the Owner, at no cost to the Owner. The new Bond shall be executed under the same terms and conditions as the original Bond. The new bond shall be submitted within thirty (30) days of such time as the Owner notifies Contractor or from the time Contractor learns or has reason to know that the original surety is no longer financially viable or acceptable to the Parish, whichever occurs first. In the event that Contractor fails or refuses to timely secure additional surety, then the Owner may secure such surety and thereafter deduct such cost or expense from any sum due, or to become due to Contractor.

43. The Contractor's bondsman shall obligate itself to all the terms and covenants of these Specifications and of contracts covering the Work executed hereunder. The Owner reserves the right to do Extra Work or make changes by altering, adding to deducting from the Work under the conditions and in the manner herein before described without notice to the Contractor's surety and without in any manner affecting the liability of bondsman or releasing it from any of its obligations hereunder.
44. The Bond shall also secure for the Owner the faithful performance of the Contract in strict accordance with plans, specifications, and other Contract Documents. It shall protect the Owner against all lien laws of the State and shall provide for payment of reasonable attorney's fees for enforcement of Contract and institution or concursus proceedings, if such proceedings become necessary. Likewise, it shall provide for all additional expenses of the Owner occurring through failure of the Contractor to perform.
45. The surety of the Contractor shall be and does hereby declare and acknowledge itself by acceptance to be bound to the Owner as a guarantor, jointly and in solido, with the Contractor, for fulfillment of terms of the Contract.
46. The performance Bond and Labor and Material Bond forming part of this Contract shall be continued by Contractor and its Surety for a period of one (1) year from date of acceptance of the Work/Project by Owner to assure prompt removal and replacement of all defective material, equipment, components thereof, workmanship, etc., and to assure payment of any damage to property of Owner or others as a result of such defective materials, equipment, workmanship, etc.
47. Contractor authorizes Parish to deduct from any payment due herein costs and service fees for recordation of this Contract in full or an excerpt hereof, or any revisions or modifications thereof as required by law. Contractor agrees to execute an excerpt or extract of this agreement for recordation purposes. If Contractor fails to execute such an excerpt, then the Parish shall file and record the entire Contract and all attachments at the expense of Contractor and Parish is hereby authorized to deduct all related costs from any proceeds due to the Contractor.
48. Contractor shall secure and maintain at its expense such insurance that will protect it and the Parish from claims for injuries to persons or damages to property which may arise from or in connection with the performance of Services or Work hereunder by the Contractor, his agents, representatives, employees, and/or subcontractors. The cost of such insurance shall be included in Contractor's bid.
49. The Contractor shall not commence work until it has obtained all insurance as required for the Parish Project. If the Contractor fails to furnish the Parish with the insurance protection required and begins work without first furnishing Parish with a currently dated certificate of insurance, the Parish has the right to obtain the insurance protection required and deduct the cost of insurance from the first payment due the Contractor. Further deductions are permitted from future payments as are needed to protect the interests of the Parish including, but not limited to, renewals of all policies.
50. Payment of Premiums: The insurance companies issuing the policy or policies shall have no recourse against the Parish of St. Tammany for payment of any premiums or for assessments under any form of policy.
51. Deductibles: Any and all deductibles in the described insurance policies shall be assumed by and be at the sole risk of the Contractor.

52. Authorization of Insurance Company(ies) and Rating: All insurance companies must be authorized to do business in the State of Louisiana and shall have an A.M. Best rating of no less than A-, Category VII.
53. Policy coverages and limits must be evidenced by Certificates of Insurance issued by Contractor's carrier to the Parish and shall reflect:

Date of Issue: Certificate must have current date.

Named Insured: The legal name of Contractor under contract with the Parish and its principal place of business shall be shown as the named insured on all Certificates of Liability Insurance.

Name of Certificate Holder: St. Tammany Parish Government, Office of Risk Management, P. O. Box 628, Covington, LA 70434

Project Description: A brief project description, including Project Name, Project Number and/or Contract Number, and Location.

Endorsements and Certificate Reference: All policies must be endorsed to provide, and certificates of insurance must evidence the following:

Waiver of Subrogation: The Contractor's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance. *Policy endorsements required for all coverages.*

Additional Insured: The Parish of St. Tammany shall be named as additional named insured with respect to general liability, marine liability, pollution/environmental liability, automobile liability and excess liability coverages. *Policy endorsements required.*

Hold Harmless: Contractor's liability insurers shall evidence their cognizance of the Hold Harmless and Indemnification in favor of St. Tammany Parish Government by referencing same on the face of the Certificate(s) of Insurance.

Cancellation Notice: Producer shall provide thirty (30) days prior written notice to the Parish of policy cancellation or substantive policy change.

54. The types of insurance coverage the Contractor is required to obtain and maintain throughout the duration of the Contract shall be designated by a separate document issued by the Office of Risk Management.
55. It is the intent of these instructions that they are in conformance with State Bid Laws. Should there be any discrepancy or ambiguity in these provisions, the applicable State Bid Law shall apply.
56. The letting of any public contract in connection with funds that are granted or advanced by the United States of America shall be subject to the effect, if any, of related laws of said United States and valid rules and regulations of federal agencies in charge, or governing use and payment of such federal funds.
57. Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial proposals must be filed with and received by the Procurement Department BEFORE two (2) working days of the bid opening. Any other protest shall be filed no later than ten (10) calendar days after: the opening of the bid; the basis of the protest is known; or the basis of the protest should have been known (whichever is earlier).
58. It is the Parish's policy to provide a method to protest exclusion from a competition or from the award of a contract, or to challenge an alleged solicitation irregularity. It is always better to seek a resolution within the Parish system before resorting to outside agencies and/or litigation to resolve differences. All protests must be made in writing, and shall be

concise and logically presented to facilitate review by the Parish. The written protest shall include:

The protester’s name, address, and fax and telephone numbers and the solicitation, bid, or contract number;

A detailed statement of its legal and factual grounds, including a description of the resulting prejudice to the protester;

Copies of relevant documents;

All information establishing that the protester is an interested party and that the protest is timely; and

A request for a ruling by the agency; and a statement of the form of relief requested.

The protest shall be addressed to St. Tammany Parish Government Department of Procurement, P.O. Box 628, Covington, LA 70434

The protest review shall be conducted by the Parish Legal Department.

Only protests from interested parties will be allowed. Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial proposals, must be filed with and received by the Department of Procurement BEFORE those deadlines.

Any other protest shall be filed no later than ten (10) calendar days after the basis of the protest is known, or should have been known (whichever is earlier).

The Parish will use its best efforts to resolve the protest within thirty (30) days of the date that it is received by the Parish. The written response will be sent to the protestor via mail and fax, if a fax number has been provided by the protestor. The protester can request additional methods of notification.

- 59. The last day to submit questions to Procurement shall be no later than 2:00 pm CST, seven (7) working days prior to the opening of bids, and verification on comparable products will be no later than 2:00 pm CST, fourteen (14) working days prior to the opening date of the bid/proposal due date. Further, any questions or inquiries must be submitted via fax to 985-898-5227, or via email to Procurement@stpgov.org. Any questions or inquiries received after the required deadline to submit questions or inquiries will not be answered.

Schedule of Events

	<u>Date</u>	<u>Time (CT)</u>
Bid Due Date	June 4, 2025	2:00 PM
Inquiry Deadline	May 23, 2025	2:00 PM
Addendum Deadline	May 30, 2025	2:00 PM

NOTE: The Parish reserves the right to revise this schedule. Any such revision will be formalized by the issuance of an addendum to the Bid Request.

- 60. St. Tammany Parish Government contracts to be awarded are dependent on the available funding and/or approval by members designated and/or acknowledged by St. Tammany Parish Government. At any time, St. Tammany Parish Government reserves the right to cancel the award of a contract if either or both of these factors is deficient.
- 61. Any action by the Parish to disqualify any Bidder on the grounds that they are not a responsible Bidder shall be conducted in accordance with LSA-R.S. 38:2212(X).
- 62. Failure to complete or deliver within the time specified or to provide the services as specified in the bid or response will constitute a default and may cause cancellation of the contract. Where the Parish has determined the contractor to be in default. The Parish reserves the right to purchase any or all products or services covered by the contract on the open market and to charge the contractor with the cost in excess of the contract price. Until

such assessed charges have been paid, no subsequent bid or response from the defaulting contractor will be considered.

63. If any part of the provisions contained herein and/or in the Specifications and Contract for the Work shall for any reason be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement or attachment, but it shall be construed as if such invalid, illegal, or unenforceable provision or part of a provision had never been contained herein.

Section 03

Summary of Work

I. Work to Include:

This work includes selective demolition of buildings and walkways, hazardous materials abatement, roof and siding replacement, and structural repairs to walkway and Living Unit roof structures.

II. Location of Work:

Safe Haven Campus
23929 Cardinal Cove
Mandeville, LA 70448

III. Documents: Bid Documents dated April 17, 2025, and entitled:

Safe Haven Cardinal Cove Cabin Renovations - Phase 1

Bid No.: 25-15-2

IV. OTHER REQUIREMENTS (as applicable)

This project is federally grant funded and therefore requires the Contractor to have a Unique Entity Identification number (UEI). The Contractor should submit with their response their UEI number. If the Contractor does not have a UEI already, then they must register at the below link before an award can be made.

<https://sam.gov/content/entity-registration>

Table 3.1

Liquidated Damages	
Original Contract Amount	Daily Charge
Dollars	Dollars
0 - 250,000	500
250,000 – 1 Million	1,000
> 1 Million – 5 Million	1,500
> 5 Million – 10 Million	2,000
> 10 Million	3,000

- Parish reserves the right to increase the Daily charge rate due to additional provisions required in order to complete the project as described in the specifications

Section 04

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: St. Tammany Parish Government
21454 Koop Dr., Suite 2F
Mandeville, La 70471

(Owner to provide name and address of owner)

BID FOR: Safe Haven Cardinal Cove Cabin Renovations
Phase 1
Bid No. 25-15-2

(Owner to provide name of project and other identifying information.)

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: _____
MSH Architects and dated: April 17, 2025.
(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) _____ .

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated “Base Bid” * but not alternates) the sum of:

_____ Dollars (\$ _____)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 (ADD for Metal Roof Panels, see Section 01 2300 ALTERNATES) for the lump sum of:

_____ Dollars (\$ _____)

Alternate No. 2 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:
NOT APPLICABLE _____ Dollars (\$ _____)

Alternate No. 3 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:
NOT APPLICABLE _____ Dollars (\$ _____)

NAME OF BIDDER: _____
ADDRESS OF BIDDER: _____

LOUISIANA CONTRACTOR’S LICENSE NUMBER: _____
NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____
TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____
DATE: _____

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

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** **A CORPORATE RESOLUTION OR WRITTEN EVIDENCE** of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

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

Section 05

**AFFIDAVIT PURSUANT TO LSA-R.S. 38:2224 and 38:2227
FOR BIDDERS FOR PUBLIC WORKS CONTRACTS**

STATE OF _____

PARISH/COUNTY OF _____

BEFORE ME, the undersigned authority, in and for the above stated State and Parish (or County), personally came and appeared:

Print Name

who, after first being duly sworn, did depose and state:

1. That affiant is appearing on behalf of _____, who is seeking a public contract with St. Tammany Parish Government.
2. That affiant employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for affiant; and
3. That no part of the contract price received by affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for affiant.
4. If affiant is a sole proprietor, that after July 2, 2010, he/she has not been convicted of, or has not entered a plea of guilty or *nolo contendere* to any of the crimes or equivalent federal crimes listed in LSA-R.S. 38:2227(B).
5. If affiant is executing this affidavit on behalf of a juridical entity such as a partnership, corporation, or LLC, etc., that no individual partner, incorporator, director, manager, officer, organizer, or member, who has a minimum of a ten percent ownership in the bidding entity, has been convicted of, or has entered a plea of guilty or *nolo contendere* to any

of the crimes or equivalent federal crimes listed in LSA-R.S. 38:2227(B).

6. If affiant is a sole proprietor, that neither affiant, nor his/her immediate family is a public servant of St. Tammany Parish Government or the Contract is not under the supervision or jurisdiction of the public servant’s agency.
7. If affiant is executing this affidavit on behalf of a juridical entity such as a partnership, corporation, or LLC, etc., that no public servant of St. Tammany Parish Government, or his/her immediate family, either individually or collectively, has more than a 25% ownership interest in the entity seeking the Contract with St. Tammany Parish Government if the Contract will be under the supervision or jurisdiction of the public servant’s agency.

Printed Name: _____

Title: _____

Entity name: _____

THUS SWORN TO AND SUBSCRIBED BEFORE ME,
THIS _____, DAY OF _____, 202__.

Notary Public

Print Name: _____

Notary I.D./Bar No.: _____

My commission expires: _____

**AFFIDAVIT PURSUANT TO LSA-R.S. 38:2212.10 CONFIRMING
REGISTRATION AND PARTICIPATION IN A STATUS VERIFICATION
SYSTEM**

STATE OF _____
PARISH/COUNTY OF _____

BEFORE ME, the undersigned authority, in and for the above stated State and Parish (or County), personally came and appeared:

Print Name

who, after first being duly sworn, did depose and state:

- 1. That affiant is appearing on behalf of _____,
a private employer seeking a bid or a contract with St. Tammany Parish Government for the physical performance of services within the State of Louisiana.

- 2. That affiant is registered and participates in a status verification system to verify that all employees in the state of Louisiana are legal citizens of the United States or are legal aliens; and

- 3. That affiant shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.

- 4. That affiant shall require all subcontractors to submit to the affiant a sworn affidavit verifying compliance with this law.

Printed Name: _____
Title: _____
Name of Entity: _____

THUS SWORN TO AND SUBSCRIBED BEFORE ME,
THIS _____, **DAY OF** _____, **202**__.

Notary Public
Print Name: _____
Notary I.D./Bar No.: _____
My commission expires: _____



INSURANCE REQUIREMENTS*

Construction Project: Safe Haven Cardinal Cove Cabin Renovations – Phase 1
 Project/Quote/Bid#: 25-15-2

*****IMPORTANT – PLEASE READ*****

Prior to submitting your quote or bid, it is recommended that you review these insurance requirements with your insurance broker/agent.

These requirements modify portions of the insurance language found in the General Conditions and/or Supplementary General Conditions; however, there is no intention to remove all sections pertaining to insurance requirements and limits set forth in the General Conditions and/or Supplementary General Conditions, only to amend and specify those items particular for this Project.

- A. The Provider shall secure and maintain at its expense such insurance that will protect it and St. Tammany Parish Government (the "Parish") from claims for bodily injury, death or property damage as well as from claims under the Workers' Compensation Acts that may arise from the performance of services under this agreement. All certificates of insurance shall be furnished to the Parish and provide thirty (30) days prior notice of cancellation to the Parish, in writing, on all of the required coverage.

- B. All policies shall provide for and certificates of insurance shall indicate the following:
 - 1. Waiver of Subrogation: The Provider's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance.
 - 2. Additional Insured: St. Tammany Parish Government shall be named as Additional Insured with respect to general liability, automobile liability and excess liability coverages, as well as marine liability and pollution/environmental liability, when those coverages are required or necessary.
 - 3. Payment of Premiums: The insurance companies issuing the policy or policies will have no recourse against St. Tammany Parish Government for payment of any premiums or for assessments under any form of policy.
 - 4. Project Reference: The project(s) and location(s) shall be referenced in the Comment or Description of Operations section of the Certificate of Insurance (Project ##-###, or Bid # if applicable, Type of Work, Location).

- C. Coverage must be issued by insurance companies authorized to do business in the State of Louisiana. Companies must have an A.M. Best rating of no less than A-, Category VII. St. Tammany Parish Risk Management Department may waive this requirement only for Workers Compensation coverage at their discretion.

Provider shall secure and present proof of insurance on forms acceptable to St. Tammany Parish Government, Office of Risk Management no later than the time of submission of the Contract to the Parish. However, should any work performed under this Contract by or on behalf of Provider include exposures that are not covered by those insurance coverages, Provider is not relieved of its obligation to maintain appropriate levels and types of insurance necessary to protect itself, its agents and employees, its subcontractors, St. Tammany Parish Government (Owner), and all other interested third parties, from any and all claims for damage or injury in connection with the services performed or provided throughout the duration of this Project, as well as for any subsequent periods required under this Contract.

The insurance coverages checked (✓) below are those required for this Contract.

- ☒ 1. **Commercial General Liability*** insurance – **Occurrence Form** - with a Combined Single Limit for bodily injury and property damage of at least \$1,000,000 per Occurrence / \$2,000,000 General Aggregate and \$2,000,000 Products-Completed Operations. Contracts over \$1,000,000 may require higher limits. The insurance shall provide for and the certificate(s) of insurance shall indicate the following coverages:
- a) Premises - operations;
 - b) Broad form contractual liability;
 - c) Products and completed operations;
 - d) Personal/Advertising Injury;
 - e) Broad form property damage (for Projects involving work on Parish property);
 - f) Explosion, Collapse and Damage to underground property.
 - g) Additional Insured forms CG 2010 and CG 2037 in most current edition are required.
- ☒ 2. **Business Automobile Liability*** insurance with a Combined Single Limit of \$1,000,000 per Occurrence for bodily injury and property damage, and shall include coverage for the following:
- a) Any auto;
 - or**
 - b) Owned autos; **and**
 - c) Hired autos; **and**
 - d) Non-owned autos.
- ☒ 3. **Workers' Compensation/Employers Liability insurance*** - Workers' Compensation coverage as required by State law. Employers' liability limits shall be a minimum of \$1,000,000 each accident, \$1,000,000 each disease, \$1,000,000 disease policy aggregate. When water activities are expected to be performed in connection with this project, coverage under the USL&H Act, Jones Act and/or Maritime Employers Liability (MEL) must be included. **Coverage for owners, officers and/or partners in any way engaged in the Project shall be included in the policy.** The names of any excluded individual must be shown in the Description of Operations/Comments section of the Certificate.
- ☒ 4. **Pollution Liability and Environmental Liability*** insurance in the minimum amount of \$1,000,000 per occurrence / \$2,000,000 aggregate including full contractual liability and third party claims for bodily injury and/or property damage, for all such hazardous waste, pollutants and/or environmental exposures that may be affected by this project stemming from pollution/environmental incidents as a result of Contractor's operations.

If coverage is provided on a claims-made basis, the following conditions apply:

- 1) the retroactive date must be prior to or coinciding with the effective date of the Contract, or prior to the commencement of any services provided by the Contractor on behalf of the Parish, whichever is earlier; AND
- 2) continuous coverage must be provided to the Parish with the same retro date for 24 months following acceptance or termination of the Project by the Parish either by
 - a) continued renewal certificates **OR**
 - b) a 24 month Extended Reporting Period

*The Certificate must indicate whether the policy is written on an occurrence or claims-made basis and, if claims-made, the applicable retro date must be stated.

- ☐ 5. **Contractor's Professional Liability/Errors and Omissions*** insurance in the sum of at least \$1,000,000 per claim / \$2,000,000 aggregate is required when work performed by Contractor or on behalf of Contractor includes professional or technical services including, but not limited to, construction administration and/or management, engineering services such as design, surveying, and/or inspection, technical services such as testing and laboratory analysis, and/or environmental assessments. An occurrence basis policy is preferred.

If coverage is provided on a claims-made basis, the following conditions apply:

- 1) the retroactive date must be prior to or coinciding with the effective date of the Contract, or prior to the commencement of any services provided by the Contractor on behalf of the Parish, whichever is earlier; AND
- 2) continuous coverage must be provided to the Parish with the same retro date for 24 months following acceptance or termination of the Project by the Parish either by
 - a) continued renewal certificates **OR**
 - b) a 24 month Extended Reporting Period

*The Certificate must indicate whether the policy is written on an occurrence or claims-made basis and, if claims-made, the applicable retro date must be stated.

- ☐ 6. **Marine Liability/Protection and Indemnity*** insurance is required for any and all vessel and/or marine operations in the minimum limits of \$1,000,000 per occurrence / \$2,000,000 per project general aggregate. The coverage shall include, but is not limited to, the basic coverages found in the Commercial General Liability insurance and coverage for third party liability

***Excess/Umbrella Liability** insurance may be provided to meet the limit requirements for any Liability coverage. For example: if the General Liability requirement is \$3,000,000 per occurrence, but the policy is only \$1,000,000 per occurrence, then the excess policy should be at least \$2,000,000 per occurrence thereby providing a combined per occurrence limit of \$3,000,000.)

- ☐ 7. **Owners Protective Liability (OPL)** shall be furnished by the Contractor and shall provide coverage in the minimum amount of \$1,000,000 CSL each occurrence / \$1,000,000 aggregate. **St. Tammany Parish Government, ATTN: Risk Management Department, P. O. Box 628, Covington, LA 70434 shall be the first named insured on the policy.**

- ☐ 8. **Builder's Risk Insurance** written as an "all-risk" policy providing coverage in an amount at or greater than one hundred percent (100%) of the completed value of the contracted project. Any contract modifications increasing the contract cost will require an increase in the limit of the Builder's Risk policy. Deductibles should not exceed \$5,000 and Contractor shall be responsible for all policy deductibles. This insurance shall cover materials at the site, stored off the site, and in transit. The Builder's Risk Insurance shall include the interests of the Owner, Contractor and Subcontractors and shall terminate only when the Project is accepted in writing. **St. Tammany Parish Government, ATTN: Risk Management Department, P. O. Box 628, Covington, LA 70434 shall be named as a Loss Payee on the policy.**

- ☐ 9. **Installation Floater Insurance**, on an "all-risk" form, shall be furnished by Contractor and carried for the full value of the materials, machinery, equipment and labor for each location. The Contractor shall be responsible for all policy deductibles. The Installation Floater Insurance shall provide coverage for property owned by others and include the interests of the Owner, Contractor and Subcontractors and shall terminate only when the Project is accepted in writing. **St. Tammany Parish Government, ATTN: Risk Management Department, P. O. Box 628, Covington, LA 70434 shall be named as a Loss Payee on the policy.**

- D. All policies of insurance shall meet the requirements of the Parish prior to the commencing of any work. The Parish has the right, but not the duty, to approve all insurance coverages prior to commencement of work. If any of the required policies are or become unsatisfactory to the Parish as to form or substance; or if a company issuing any policy is or becomes unsatisfactory to the Parish, the Provider shall promptly obtain a new policy, timely submit same to the Parish for approval, and submit a certificate thereof as provided above. The Parish agrees not to unreasonably withhold approval of any insurance carrier selected by Provider. In the event that Parish cannot agree or otherwise authorize a carrier, Provider shall have the option of selecting and submitting a new insurance carrier within 30 days of said notice by the Parish. In the event that the second submission is insufficient or is not approved, then the Parish shall have the unilateral opportunity to thereafter select a responsive and responsible insurance carrier all at the cost of Provider and thereafter deduct from Provider's fee the cost of such insurance.
- E. Upon failure of Provider to furnish, deliver and/or maintain such insurance as above provided, this contract, at the election of the Parish, may be declared suspended, discontinued or terminated. Failure of the Provider to maintain insurance shall not relieve the Provider from any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligation of the Provider concerning indemnification.
- F. Provider shall maintain a current copy of all annual insurance policies and agrees to provide a certificate of insurance to the Parish on an annual basis or as may be reasonably requested for the term of the contract or any required Extended Reporting Period. Provider further shall ensure that all insurance policies are maintained in full force and effect throughout the duration of the Project and shall provide the Parish with annual renewal certificates of insurance evidencing continued coverage, without any prompting by the Parish.
- G. It shall be the responsibility of Provider to require that these insurance requirements are met by all contractors and sub-contractors performing work for and on behalf of Provider. Provider shall further ensure the Parish is named as an additional insured on all insurance policies provided by said contractor and/or sub-contractor throughout the duration of the project.
- H. Certificates of Insurance shall be issued as follows:

**St. Tammany Parish Government
Attn: Risk Management
P O Box 628
Covington, LA 70434**

To avoid contract processing delays, be certain the project name/number is included on all correspondence including Certificates of Insurance.

***NOTICE: St. Tammany Parish Government reserves the rights to remove, replace, make additions to and/or modify any and all of the insurance requirements at any time.**

Any inquiry regarding these insurance requirements should be addressed to:

**St. Tammany Parish Government
Office of Risk Management
P O Box 628
Covington, LA 70434
Telephone: 985-898-5226
Email: riskman@stpgov.org**

Section 07

Project Signs

1. General

- a. Work to include providing and installing project sign(s) at the beginning of the project. Some projects may require multiple signs. Should more than one sign be required, it will be reflected in the bidding documents.

2. Materials

- a. The printed project sign(s) shall be 3/8" primed Medium Density Overlay (MDO) **OR** 3-millimeter corrugated plastic secured to exterior plywood (4' x 4').
- b. Contractor shall not use previously provided templates and/or fonts.

3. Execution

- a. The sign(s) shall be printed on a project-by-project basis in black and white, using the template and font provided to the Contractor by the St. Tammany Parish Government Project Manager.
- b. All signage proofed and approved by State Tammany Parish Government before project sign(s) are to be produced by the Contractor.
- c. Exact placement of the project sign(s) must be coordinated with, and approved by, the St. Tammany Parish Government Project Manager prior to sign installation.
- d. The sign(s) is to be installed such that the bottom of the sign is a minimum of 5' above the existing ground elevation.
- e. Sign(s) is to be maintained throughout the period of construction. If sign(s) is damaged or destroyed, repair and/or replacement of sign(s) will be at Contractor's expense.
- f. Contractor is responsible for the removal of all project signs upon issuance of final acceptance by the St. Tammany Parish Government Project Manager at no direct pay.
- g. Cost to be included in "Temporary Signs and Barricades

Blank Template of Parish Project Sign:

PROGRESS



MICHAEL B. COOPER
Parish President

Councilmember Name
Council District X

\$XXX,XXX.XX

Total Dollar \$
amount specified here

Project Name

Description of
Project Work

Name of Street, Bridge,
Subdivision, etc. stated here

Short Description of Project stated here
(if deemed applicable by the Parish)

Example of a Completed Parish Project Sign:

PROGRESS



MICHAEL B. COOPER
Parish President

RYKERT O. TOLEDANO, JR
Council District 5

\$514,444.40

Dove Park
Subdivision Drainage
Drainage Improvements along
Swallow St., Sparrow St.,
Partridge St. and Egret St.

Section 08

General Conditions for St. Tammany Parish Government

This index is for illustrative purposes only and is not intended to be complete nor exhaustive.

All bidders/contractors are presumed to have read and understood the entire document. Some information contained in these conditions may not be applicable to all projects.

GENERAL CONDITIONS INDEX

A.A.S.H.T.O	01.01
A.C.I.	01.02
ADDENDA	01.03, 01.05, 01.12, 02.13, 02.13, 06.02, 06.03
ADVERTISEMENT	01.04, 01.12, 02.21, 02.22, 02.23
AGREEMENT	01.05, 01.11, 01.12, 01.14, 01.15, 01.19, 03.02, 03.03, 03.04, 06.01, 06.02, 10.01, 11.03, 12.01, 14.02, 29.06, 32.01, 32.02, 33.06, 33.07
APPLICATION FOR PAYMENT	01.06, 29.07
A.S.T.M.	01.07
AWARD	03.00, 03.01, 03.04, 03.05
BID	01.08, 01.12, 01.26, 02.02, 02.04, 02.08, 02.09, 02.10, 02.13, 02.14, 02.17, 02.19, 02.21, 03.01, 03.04, 04.02, 14.03, 22.01, 23.01, 28.08
BIDDER	01.04, 01.08, 01.09, 01.26, 01.28, 02.02, 02.04, 02.06, 02.08, 02.09, 02.10, 02.12, 03.13, 02.14, 02.16, 02.17, 02.19, 02.20, 02.21, 02.24, 03.01, 03.04, 03.05, 23.01
BONDS	01.10, 01.12 02.02, 02.09, 03.00, 03.03, 03.04, 03.05, 03.07, 03.08, 03.10, 03.12, 03.13, 27.06
CHANGE ORDER	01.11, 01.19, 04.01, 09.04, 11.07, 16.02, 16.06, 16.07, 21.06, 21.08, 21.10, 21.11, 29.06, 33.07
CLAIMS	02.15, 04.05, 09.05, 14.01, 16.04, 16.05, 21.16, 24.01
CLOSING ROADS COMMENCE WORK	16.06, 16.07, 16.15 04.04, 07.04, 09.02, 11.02, 14.02, 16.13, 24.02
COMPLETION OF WORK OR PROJECT	01.14, 02.15, 08.03, 09.01, 09.04, 11.00, 11.03, 12.01, 13.01, 13.11, 20.01, 25.01, 28.02, 29.04
CONDITIONS AT JOB SITE	16.17
CONTRACT DOCUMENTS	01.03, 01.03, 01.10, 01.12, 01.13, 01.16, 01.17, 01.18, 01.19, 01.29, 01.22, 01,25, 01.30, 01.33, 02.02, 02.05, 02.13, 02.17, 02.18, 02.23, 03.01, 03.02, 04.01, 04.02, 04.03, 04.04, 04.05, 06.00, 06.01, 06.02, 06.03, 07.02, 07.03, 07.05, 08.01, 10.06, 11.03, 13.01, 13.02, 21.01, 21.09, 21.10, 21.11, 28.01, 28.04, 33.01
CONTRACT PRICE	01.11, 01.13, 03.05, 04.01, 12.01, 14.02, 21.06, 21.10, 21.11, 27.05, 28.01, 28.02, 28.03, 28.08

CONTRACT TIME	01.11, 01.14, 01.22, 10.06, 11.01, 21.06, 29.04
CONTRACTOR - (Defined)	01.15
DAMAGE	02.15, 03.05, 03.12, 04.05, 09.05, 11.09, 13.11, 14.01, 14.02, 16.01, 16.02, 16.03, 16.04, 16.05, 19.01, 19.03, 20.01, 20.08, 23.03, 24.01, 24.07, 24.12, 26.03, 28.05, 28.01, 28.10, 33.07
DEFECTIVE WORK	01.16, 10.03, 21.00, 21.01, 21.07, 21.08, 21.09, 21.10, 28.03
DELAYS	07.02, 11.05, 11.09, 12.01, 16.07, 18.02, 19.01, 28.04
DRAWINGS	01.12, 01.17, 02.13, 02.17, 02.23, 06.01, 06.02, 06.03, 13.15, 22.02, 01.27, 01.33, 03.12, 04.01, 06.02, 09.01, 10.01, 10.02, 11.07, 13.00, 13.01, 13.03, 13.05, 13.11, 13.12, 13.15, 14.02, 14.07, 14.08, 14.09, 16.09, 16.13, 21.01, 21.06, 21.07, 21.14, 24.07, 27.05, 27.07, 28.01, 28.05, 28.10, 29.03, 13.00, 13.11
ENGINEER STATUS (NOT APPLICABLE)	15.00
EXTRA WORK	03.09, 14.00, 14.03, 14.04, 14.05, 14.08, 14.09, 14.10, 14.11, 14.12, 16.01, 22.02
FAILURE OF CONTRACTOR	03.10, 04.05, 06.02, 09.05, 10.01, 10.03, 13.10, 16.03, 20.01, 24.09, 27.02, 28.10
FAILURE OF OWNER	02.13
FAILURE OF SUCCESSFUL BIDDER	02.13, 02.17, 03.04
FIELD ORDER	01.18
FORCE ACCOUNT	14.04, 14.05, 14.11, 14.12
FUNDING	33.09
INDEMNIFY / HOLD HARMLESS	02.15, 03.05, 04.05, 13.11, 16.04, 16.05, 20.02, 24.06, 24.09
INDEMNIFYING INFRINGEMENT CLAUSE	02.15
INJURIES	16.00, 16.01, 16.02, 19.01, 19.03, 20.01, 24.02, 24.07
INSPECTION FEES	13.12
INSPECTIONS, GENERALLY	01.16, 13.05, 16.13, 21.00, 21.03, 21.04, 21.05, 21.06, 21.14, 21.15, 28.04, 29.02, 29.03
INSURANCE	01.05, 14.05, 16.13, 24.00 - 12, 27.07, 28.05
INTENTION OF CONTRACT DOCUMENTS	06.00, 06.01
INTENTION OF GENERAL CONDITIONS	31.00

LABOR	01.33, 03.12, 09.01, 13.00, 13.01, 13.02, 13.08, 13.10, 13.11, 13.12, 14.05, 16.06, 16.07, 21.06, 21.07, 21.15, 27.01, 28.10, 29.03
LAWS	01.10, 01.20, 02.06, 02.13, 02.14, 02.16, 02.20, 03.01, 03.10, 13.12, 16.06, 16.07, 20.02, 21.02, 21.09, 27.01, 29.06, 33.00, 33.01, 33.08
LIQUIDATED DAMAGES	11.03, 12.00, 12.01, 29.04
MATERIALS	01.33, 03.12, 04.01, 06.02, 07.01, 09.01, 10.01, 10.02, 13.00, 13.01, 13.03, 13.04, 13.05, 13.12, 13.13, 13.15, 14.01, 14.11, 20.01, 12.01, 21.07, 21.14, 21.15, 23.03, 27.01, 27.05, 27.07, 28.01, 28.05, 28.07, 28.08, 28.10
MODIFICATIONS	01.12, 01.19, 02.12, 02.13, 06.01, 06.02, 24.07, 32.02
NOTICE OF AWARD	01.20, 03.01, 03.04, 04.01
NOTICE OF DEFAULT	12.01, 33.08
NOTICE TO BIDDER	2.21
NOTICE TO CONTRACTOR	01.12, 01.21, 21.11, 30.01
NOTICE TO OWNER	13.07, 24.06, 27.07
NOTICE TO PROCEED	01.22, 09.02, 11.01, 11.03
OBSTRUCTIONS	16.09, 16.11, 16.15, 23.00, 23.01, 23.02
OCCUPANCY	25.00
ORAL INTERPRETATIONS	02.13
OWNER - (Defined)	01.23
PAYMENT	01.30, 03.10, 03.12, 03.13, 04.12, 09.03, 11.04, 11.09, 14.04, 14.12, 16.02, 16.16, 19.02, 21.07, 21.08, 21.09, 21.10, 21.11, 21.16, 24.02, 24.03, 24.12, 27.01, 27.07, 28.00, 28.01, 28.02, 28.03, 28.04, 28.05, 28.06, 28.08, 28.09, 28.10, 29.00, 29.03, 29.05, 29.07
PERMITS	13.00, 13.12, 16.13, 28.08
PRICE	02.05, 14.02, 14.03, 14.04, 14.05, 22.01
PROGRESS PAYMENT	01.06, 28.06
PROGRESS SCHEDULE	09.03, 09.05, 21.11
PROGRESS OF WORK	09.00, 11.09, 13.07, 16.01, 16.12, 21.11, 21.12, 22.02, 27.02
PROJECT	01.24, 01.29, 01.30, 02.04, 03.07, 06.01, 07.03, 10.02, 11.04, 11.06, 13.08, 13.13, 14.08, 14.11, 16.15, 24.07, 24.11, 28.07, 29.03, 29.07

PROJECT REPRESENTATIVE	01.23, 21.16
PROPERTY	16.00, 16.01, 16.02, 16.03, 16.12, 16.13, 16.17, 18.01, 19.00, 19.01, 19.02, 19.03, 23.03, 24.01, 24.07, 26.03, 28.10, 29.08, 33.05
PROPOSAL	01.26, 02.00, 02.01, 02.03, 02.05, 02.06, 02.07, 02.08, 02.09, 02.10, 02.11, 02.12, 02.14, 02.18, 02.21, 02.22, 11.03, 12.01, 14.01, 14.02, 14.03, 19.02, 23.02, 28.08
PROTESTS	33.10
PUNCH LIST	29.03, 29.04
QUANTITIES OF ESTIMATES	14.00, 14.01, 14.02, 14.04
RAILROADS	16.13, 19.01
RECORD DRAWINGS	08.00, 18.01, 18.02, 18.03
RECORDATION OF DOCUMENTS	03.13, 28.03, 29.05, 29.06
REJECTION OF BIDS	02.03, 02.07, 02.08, 02.10, 02.14, 03.01
RENTAL OF EQUIPMENT	14.07, 14.09
RIGHTS OF WAY	18.00
SAFETY	16.01, 16.07, 16.14, 16.17
SANITARY PROVISIONS	13.01, 17.00
SCHEDULE OF WORK	09.03, 09.04, 9.05, 11.06, 13.09
SEVERABILITY	32.01, 32.02
SHOP DRAWINGS	01.27, 06.03, 07.00, 07.01, 07.02, 07.03, 07.04, 07.05
SITE	02.17, 7.04, 13.05, 13.07, 13.11, 14.06, 16.09, 21.08, 21.09, 21.12, 22.02, 23.01, 24.07
SOLICITATION OF EMPLOYMENT	13.14
SPECIFICATIONS	01.01, 01.02, 01.05, 01.07, 01.12, 01.28, 02.13, 02.17, 02.23, 03.06, 03.09, 03.10, 03.13, 06.01, 06.02, 06.03, 07.04, 07.05, 11.03, 13.05, 13.15, 20.01, 21.12, 22.02, 28.01, 28.04, 32.01
SUBCONTRACTOR	01.27, 01.29, 04.01, 04.02, 04.03, 04.04, 04.05, 16.02, 16.04, 16.05, 20.01, 20.02, 21.07, 24.01, 24.07, 27.01, 28.07
SUBCONTRACTS	04.00, 13.09
SUBSURFACE CONDITIONS	02.17, 22.00, 22.01, 22.02
SUBSTANTIAL COMPLETION	01.30, 11.04, 21.09, 28.04, 29.01, 29.02, 29.03, 29.04, 29.06
SUPERINTENDENT	01.21, 01.31, 13.07, 14.05

SUPERVISION	13.01, 13.06
SURETY	01.05, 01.10, 02.09, 03.05, 03.06, 03.07, 03.08, 03.09, 03.11, 03.12, 04.05, 05.01, 14.03, 27.03, 27.05
SURVEY	13.02, 26.00, 26.01
TAXES	02.05, 13.00, 13.12, 13.13, 14.05, 28.07, 28.08, 28.10
TERMINATION OF CONTRACT	13.10, 24.09, 27.00, 27.01, 27.02, 27.03, 27.04, 27.05, 27.06, 27.07
TESTS, GENERALLY	21.00, 21.02, 21.03, 21.04, 21.05, 21.06
TIME	01.32
TRAFFIC	16.06, 16.07, 16.10, 16.15, 16.16
TRAFFIC HAZARDS	16.16
TREES AND SHRUBS	19.02
VERBAL INSTRUCTIONS	21.16
WAIVERS	24.06, 29.03, 33.08
WARNING DEVICES	16.13, 16.14, 16.15
WARRANTY	21.01, 21.08, 21.09, 33.04, 33.06
WORK	01.31, 20.01
WORK BY OTHERS	10.03, 10.04, 10.05
WORK BY OWNER	10.02, 10.04, 10.05
WORK FOR OTHER, RESTRICTIONS	16.12
WORK ORDER	28.01

01.00 DEFINITIONS OF TERMS

Whenever used in these General Conditions or in other Contract Documents, the following terms shall have the meanings indicated, and these shall be applicable to both the singular and plural thereof.

- 01.01 A.A.S.H.T.O American Association of State Highway and Transportation Officials. When A.A.S.H.T.O. is referred to in these Specifications it takes the meaning of the specification for materials and methods of testing specified by this association and the specification stated is considered to be a part of the Specifications as if written herein in full.
- 01.02 A.C.I American Concrete Institute. When A.C.I. is referred to in these Specifications it takes the meaning of the specification for materials and methods of testing specified by this institute and the specification stated is considered to be a part of the Specifications as if written herein in full.
- 01.03 Addenda Written or graphic instruments issued prior to the opening of bids which clarify, correct, modify or change the bidding or Contract Documents.
- 01.04 Advertisement The written instrument issued by the Owner at the request of the Owner used to notify the prospective bidder of the nature of the Work. It becomes part of the Contract Documents.
- 01.05 Agreement The written agreement or contract between the Owner and the Contractor covering the Work to be performed and the price that the Owner will pay. Other documents, including the Proposal, Addenda, Specifications, plans, surety, insurance, etc., are made a part thereof.
- 01.06 Application for Payment The form furnished by the Owner which is to be used by the Contractor in requesting incremental (progress) payments and which is to include information required by Section 28.01 and an affidavit of the Contractor. The affidavit shall stipulate that progress payments theretofore received from the Owner on account of the Work have been applied by Contractor to discharge in full of all Contractor's obligations reflected in prior applications for payment.
- 01.07 A.S.T.M. American Society of Testing Materials. When A.S.T.M. is referred to in these Specifications it takes the meaning of the specification for materials and methods of testing specified by this society and the specification stated is considered to be a part of the Specifications as if written herein in full.
- 01.08 Bid The offer or Proposal of the Bidder submitted on the prescribed form setting forth all the prices for the Work to be performed.
- 01.09 Bidder Any person, partnership, firm or corporation submitting a Bid for the Work.
- 01.10 Bonds Bid, performance and payment bonds and other instruments of security, furnished by the Contractor and its surety in accordance with the Contract Documents and Louisiana law.
- 01.11 Change Order A written order to the Contractor signed by the Owner authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time after execution of the Agreement.
- 01.12 Contract Documents The Agreement, Addenda, Contractor's Bid and any documentation accompanying or post-bid documentation when attached as an exhibit, the Bonds, these General Conditions, the Advertisement for Bid, Notice to Contractor, all supplementary conditions, the Specifications, the Drawings, together with all Modifications issued after the execution of the Agreement.
- 01.13 Contract Price The total monies payable to the Contractor under the Contract Documents.

- 01.14 Contract Time The number of consecutive calendar days stated in the Agreement for the completion of the Work.
- 01.15 Contractor The person, firm, corporation or Contractor with whom the Owner has executed the Agreement.
- 01.16 Defective Work When work which is unsatisfactory, faulty or deficient for any reason whatsoever, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to the Owner's recommendation or acceptance.
- 01.17 Drawings The Drawings and plans which show the character and scope of the Work to be performed and which have been prepared or approved by the Owner and are referred to in the Contract Documents.
- 01.18 Field Order A written order issued by the Owner or his agent which clarifies or interprets the Contract Documents.
- 01.19 Modification (a) A written amendment of the Contract Documents signed by both parties, (b) A Change Order, (c) A written clarification or interpretation issued by the Owner or his agent. Modification may only be issued after execution of the Agreement.
- 01.20 Notice of Award The written notice by Owner to the lowest responsible Bidder stating that upon compliance of the conditions enumerated in the Notice of Award, or enumerated in the Bid documents, the Owner will deliver the Contract Documents for signature. The time for the delivery of the Contract Documents can be extended in conformance with Louisiana Law.
- 01.21 Notice to Contractor Instructions, written or oral given by Owner to Contractor and deemed served if given to the Contractor's superintendent, foreman or mailed to Contractor at his last known place of business.
- 01.22 Notice to Proceed A written notice given by the Owner fixing the date on which the Contract Time will commence, and on which date the Contractor shall start to perform his obligation under the Contract Documents. Upon mutual consent by both parties, the Notice to Proceed may be extended.
- 01.23 Owner St. Tammany Parish Government, acting herein through its duly constituted and authorized representative, including but not limited to the Office of the Parish President or its designee, its Chief Administrative Officer, and/or Legal Counsel. St. Tammany Parish Government (hereinafter, the "Parish") and Owner may be used interchangeably.
- 01.24 Project The entire construction to be performed as provided in the Contract Documents.
- 01.25 Project Representative The authorized representative of the Owner who is assigned to the Project or any parts thereof.
- 01.26 Proposal The Bid submitted by the Bidder to the Owner on the Proposal form setting forth the Work to be done and the price for which the Bidder agrees to perform the Work.
- 01.27 Shop Drawings All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, Subcontractor, Manufacturer, Supplier or Distributor and which illustrate the equipment, material or some portion of the Work.
- 01.28 Specifications The Instructions to Bidders, these General Conditions, the Special Conditions and the Technical Provisions. All of the documents listed in the "Table of Contents."
- 01.29 Subcontractor An individual, firm or corporation having a direct Contract with the Contractor or with any other Subcontractor for the performance of a part of the Project Work.
- 01.30 Substantial Completion The date as certified by the Owner or its agent when the construction of the Project or a specified part thereof is sufficiently complete in accordance with the Contract Documents so that the Project or specified part can be utilized for the

purposes for which it was intended; or if there is no such certification, the date when final payment is due in accordance with Section 28.

- 01.31 Superintendent Contractor's site representative. The person on the site who is in full and complete charge of the Work.
- 01.32 Time Unless specifically stated otherwise, all time delays shall be calculated in calendar days.
- 01.33 Work Any and all obligations, duties and responsibilities necessary to the successful completion of the Project assigned to or undertaken by the Contractor under the Contract Documents, usually including the furnishing of all labor, materials, equipment and other incidentals.
- 01.34 The terms "he/himself" may be used interchangeably with "it/itself."

02.00 PROPOSAL

- 02.01 All papers bound with or attached to the Proposal Form are a necessary part thereof and must not be detached.
- 02.02 For submitting Bids, the only forms allowed shall be the "Louisiana Uniform Public Work Bid Form", "Louisiana Uniform Public Works Bid Form Unit Price Form" (if necessary), the Bid Bond, and written evidence of authority of person signing the bid. Necessary copies of the Louisiana Uniform Public Work Forms will be furnished for Bidding. Bound sets of the Contract Documents are for Bidder's information and should not be used in submitting Bids.
- 02.03 Proposal forms must be printed in ink or typed, unless submitted electronically. Illegibility or ambiguity therein may constitute justification for rejection of the Bid.
- 02.04 Each Bid must be submitted in a sealed envelope, unless submitted electronically. The outside of the envelope shall show the name and address of the Bidder, the State Contractor's License Number of the Bidder (if work requires contractor's license), and the Project name and number for which the Bid is submitted, along with the Bid number.
- 02.05 The price quoted for the Work shall be stated in words and figures on the Bid Form, and in numbers only on the Unit Price Form. The price in the Proposal shall include all costs necessary for the complete performance of the Work in full conformity with the conditions of the Contract Documents, and shall include all applicable Federal, State, Parish, Municipal or other taxes. The price bid for the items listed on the Unit Price Form will include the cost of all related items not listed, but which are normally required to do the type of Work bid.
- 02.06 The Bid shall be signed by the Bidder. The information required on the Louisiana Uniform Public Work Bid Form must be provided. Evidence of agency, corporate, or partnership authority is required and shall be provided in conformance with LSA-R.S. 38:2212(B).
- 02.07 Only the Contractors licensed by the State to do the type of Work involved can submit a Proposal for the Work. The envelope containing the Proposal shall have the Contractor's license number on it. Failure to be properly licensed constitutes authority by the Owner for rejection of Bid.
- 02.08 Bidders shall not attach any conditions or provisions to the Proposal. Any conditions or provisions so attached may, at the sole option of the Owner, cause rejection of the Bid or Proposal.
- 02.09 A Bid Guarantee of five percent (5%) of the amount of the total Bid, including Alternates, must accompany the Proposal and, at the option of the Bidder, may be a cashier's check, certified check or a satisfactory Bid Bond. The Bid Guarantee must be attached to the Louisiana Uniform Public Work Bid Form. No Bid will be considered unless it is so guaranteed. Cashier's check or certified check must be made payable to the order of the Owner. Cash deposits will not be accepted. The Owner reserves the right to cash or deposit the cashier's check or certified check. Such guarantees shall be made payable to the Parish

of St. Tammany. In accordance with LSA-R.S. 38:2218(C), if a bid bond is used, it shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide, or by an insurance company in good standing licensed to write bid bonds which is either domiciled in Louisiana or owned by Louisiana residents. It is **not** required to be on any AIA form.

- 02.10 Bid securities of the three (3) lowest Bidders will be retained by the Owner until the Contract is executed or until final disposition is made of the Bids submitted. Bid securities of all other Bidders will be returned promptly after the canvas of Bids. Bids shall remain binding for forty-five (45) days after the date set for Bid Opening. The Parish shall act within the forty-five (45) days to award the contract to the lowest responsible bidder or reject all bids as permitted by Public Bid Law. However, the Parish and the lowest responsible bidder, by mutual written consent, may agree to extend the deadline for award by one or more extensions of thirty (30) calendar days. In the event the Owner issued the Letter of Award during this period, or any extension thereof, the Bid accepted shall continue to remain binding until the Execution of the Contract.
- 02.11 A Proposal may be withdrawn at any time prior to the scheduled closing time for receipt of Bids, provided the request is in writing, executed by the Bidder or its duly authorized representative and is filed with the Owner prior to that time. When such a request is received, the Proposal will be returned to the Bidder unopened.
- 02.12 Written communications, over the signature of the Bidder, to modify Proposals will be accepted and the Proposal corrected in accordance therewith if received by the Owner prior to the scheduled closing time for receipt of Bids. Oral, telephonic or telegraphic Modifications will not be considered.
- 02.13 No oral interpretation obligating the Owner will be made to any Bidder as to the meaning of the Drawings, Specifications and Contract Documents. Every request for such an interpretation shall be made in writing and addressed and forwarded to the Owner. No inquiry received within seven (7) days prior to the day fixed for opening of the Bids shall be given consideration. Every interpretation made to the Bidder shall be in the form of an addendum to the Specifications. All such Addenda shall become part of the Contract Documents. Failure of Bidder to receive any such interpretation shall not relieve any Bidder from any obligation under this Bid. All Addenda shall be issued in accordance with the Public Bid Law, LSA-R.S. 38:2212(O)(2)(a) and (b).
- 02.14 The Owner reserves the right to reject any or all Bids for just cause in accordance with the Public Bid Law, LSA-R.S. 38:2214(B). Incomplete, informal or unbalanced Bids may be rejected. Reasonable grounds for belief that any one Bidder is concerned directly or indirectly with more than one Bid will cause rejection of all Bids wherein such Bidder is concerned. If required, a Bidder shall furnish satisfactory evidence of its competence and ability to perform the Work stipulated in its Proposal. Incompetence will constitute cause for rejection. If the Parish determines that the bidder is not responsive or responsible for any reason whatsoever, the bid may be rejected in accordance with State law.
- 02.15 The Contractor shall indemnify and hold harmless the Owner from any and all suits, costs, penalties or claims for infringement by reason of use or installation of any patented design, device, material or process, or any trademark and copyright in connection with the Work agreed to be performed under this Contract, and shall indemnify and hold harmless the Owner for any costs, expenses and damages which it may be obliged to pay by reason of any such infringement at any time during the prosecution or after completion of the Work.
- 02.16 Bidders shall familiarize themselves with and shall comply with all applicable Federal and State Laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over construction of the Project, which may directly or indirectly affect the Work or its prosecution. These laws and/or ordinances will be deemed to be included in the Contract, as though herein written in full.
- 02.17 Each Bidder shall visit the site of the proposed Work and fully acquaint itself with all surface and subsurface conditions as they may exist so that it may fully understand this

Contract. Bidder shall also thoroughly examine and be familiar with drawings, Specifications and Contract Documents. The failure or omission of any Bidder to receive or examine any form instrument, Drawing or document or to visit the site and acquaint itself with existing conditions, shall in no way relieve any Bidder from any obligation with respect to its Bid and the responsibility in the premises.

- 02.18 The standard contract form enclosed with the Proposal documents is a prototype. It is enclosed with the Contract Documents for the guidance of the Owner and the Contractor. It has important legal consequences in all respects and consultation with an attorney is encouraged. Contractor shall be presumed to have consulted with its own independent legal counsel.
- 02.19 When one set of Contract plans show the Work to be performed by two or more prime Contractors, it is the responsibility of each Bidder to become knowledgeable of the Work to be performed by the other where the Work upon which this bid is submitted is shown to come into close proximity or into conflict with the Work of the other. In avoiding conflicts, pressure pipe lines must be installed to avoid conflict with gravity pipe lines and the Bidder of the smaller gravity pipe line in conflict with the larger gravity pipe line must include in his Bid the cost of a conflict box at these locations. The location of and a solution to the conflicts do not have to be specifically noted as such on the plans.
- 02.20 Bidder shall execute affidavit(s) attesting compliance with LSA-R.S. 38:2212.10, 38:2224, 38:2227, each as amended, and other affidavits as required by law, prior to execution of the contract.
- 02.21 Sealed Proposals (Bid) shall be received by St. Tammany Parish Government at the office of St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471, until the time and date denoted in Notice to Bidders, at which time and place the Proposals (Bids), shall be publicly opened and read aloud to those present. In accordance with LSA-R.S. 38-2212(A)(3)(c)(i), the designer's final estimated cost of construction shall be read aloud upon opening bids. Sealed Proposals (Bids) may also be mailed by certified mail to St. Tammany Parish Government, Department of Procurement, 21454 Koop Drive, Suite 2-F, Mandeville, LA 70471, and must be received before the bid opening. Bids may also be submitted electronically. Information concerning links for electronic bidding is contained in the Notice to Bidders.
- 02.22 Proposals (Bids) shall be executed on Forms furnished and placed in a sealed envelope, marked plainly and prominently as indicated in the Notice to Bidders, and these General Conditions, and addressed:

St. Tammany Parish Government
Department of Procurement
21454 Koop Drive, Suite 2-F
Mandeville, LA 70471

- 02.23 See Notice to Bidders for availability of Drawings, Specifications and Contract Documents via electronic methods.
- 02.24 The successful Bidder shall be required to post in each direction a public information sign, 4' x 4' in size, at the location of the project containing information required by the Owner. The Owner shall supply this information.

03.00 AWARD, EXECUTION OF DOCUMENTS, BONDS, ETC.

- 03.01 The award of the Contract, if it is awarded, will be to the lowest responsible Bidder, in accordance with State Law. No award will be made until the Owner has concluded such investigations as it deems necessary to establish the responsibility, qualifications and financial ability and stability of the Bidder to do the Work in accordance with the Contract Documents to the satisfaction of the Owner within the time prescribed as established by the Department based upon the amount of work to be performed and the conditions of same. The written contract and bond shall be issued in conformance with LSA-R.S. 38:2216. The Owner reserves the right to reject the Bid of any Bidder in accordance with the Public Bid Law, LSA-R.S. 38:2214. If the Contract is awarded, the Owner shall give the successful Bidder written notice of the award within forty-five (45) calendar days after

the opening of the Bids in conformance with LSA-R.S. 38:2215(A), or any extension as authorized thereunder.

- 03.02 At least three counterparts of the Agreement and of such other Contract Documents as practicable shall be signed by the Owner and the Contractor. The Owner shall identify those portions of the Contract Documents not so signed and such identification shall be binding on both parties. The Owner and the Contractor shall each receive an executed counterpart of the Contract Documents.
- 03.03 Prior to the execution of the Agreement, the Contractor shall deliver to the Owner the required Bonds.
- 03.04 Failure of the successful Bidder to execute the Agreement and deliver the required Bonds within twenty (20) days of the Notice of the Award shall be just cause for the Owner to annul the award and declare the Bid and any guarantee thereof forfeited.
- 03.05 In order to ensure the faithful performance of each and every condition, stipulation and requirement of the Contract and to indemnify and save harmless the Owner from any and all damages, either directly or indirectly arising out of any failure to perform same, the successful Bidder to whom the Contract is awarded shall furnish a surety Bond in an amount of at least equal to one hundred percent (100%) of the Contract Price. The Contract shall not be in force or binding upon the Owner until such satisfactory Bond has been provided to and approved by the Parish. The cost of the Bond shall be paid for by the Contractor unless otherwise stipulated in the Special Provisions.
- 03.06 No surety Company will be accepted as a bondsman who has no permanent agent or representative in the State upon whom notices referred to in the General Conditions of these Specifications may be served. Services of said notice on said agent or representative in the State shall be equal to service of notice on the President of the Surety Company, or such other officer as may be concerned.
- 03.07 In conformance with LSA-R.S. 38:2219(A)(1)(a), (b), and (c):

Any surety bond written for a public works project shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A- rating in the latest printing of the A.M. Best's Key Rating Guide, to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide or by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds.

For any public works project, no surety or insurance company shall write a bond which is in excess of the amount indicated as approved by the U.S. Department of the Treasury Financial Management Service list or by a Louisiana domiciled insurance company with an A- rating by A.M. Best up to a limit of ten percent of policyholders' surplus as shown by A.M. Best; companies authorized by this Paragraph who are not on the treasury list shall not write a bond when the penalty exceeds fifteen percent of its capital and surplus, such capital and surplus being the amount by which the company's assets exceed its liabilities as reflected by the most recent financial statements filed by the company with the Department of Insurance.

In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed to do business in the state of Louisiana. All contractors must comply with any other applicable provisions of LSA-R.S. 38:2219.

- 03.08 Should the Contractor's Surety, even though approved and accepted by the Owner, subsequently remove its agency or representative from the State or become insolvent, bankrupt, or otherwise fail, the Contractor shall immediately furnish a new Bond in another company approved by the Owner, at no cost to the Owner. The new Bond shall be executed under the same terms and conditions as the original Bond. The new bond shall be submitted within thirty (30) days of such time as the Owner notifies Contractor or from the time Contractor learns or has reason to know that the original surety is no longer financially viable or acceptable to the Parish, whichever occurs first. In the event that Contractor fails

or refuses to timely secure additional surety, then the Owner may secure such surety and thereafter deduct such cost or expense from any sum due or to become due Contractor.

- 03.09 The Contractor's bondsman shall obligate itself to all the terms and covenants of these Specifications and of contracts covering the Work executed hereunder. The Owner reserves the right to do Extra Work or make changes by altering, adding to deducting from the Work under the conditions and in the manner herein before described without notice to the Contractor's surety and without in any manner affecting the liability of bondsman or releasing it from any of its obligations hereunder.
- 03.10 The Bond shall also secure for the Owner the faithful performance of the Contract in strict accordance with plans and Specifications. It shall protect the Owner against all lien laws of the State and shall provide for payment of reasonable attorney fees for enforcement of Contract and institution or concursus proceedings, if such proceedings become necessary. Likewise, it shall provide for all additional expenses of the Owner occurring through failure of the Contractor to perform.
- 03.11 The surety of the Contractor shall be and does hereby declare and acknowledge itself by acceptance to be bound to the Owner as a guarantor, jointly and in solido, with the Contractor, for fulfillment of terms of Section 03.00.
- 03.12 The performance Bond and Labor and Material Bond forming part of this Contract shall be continued by Contractor and its Surety for a period of one (1) year from date of acceptance of this Contract by Owner to assure prompt removal and replacement of all defective material, equipment, components thereof, workmanship, etc., and to assure payment of any damage to property of Owner or others as a result of such defective materials, equipment, workmanship, etc.
- 03.13 Contractor shall pay for the cost of recording the Contract and Bond and the cost of canceling same. Contractor shall also secure and pay for all Clear Lien and Privilege Certificates (together with any updates) which will be required before any final payment is made, and that may be required before any payment, at the request of the Owner, its representative, agent, architect, engineer and the like. All recordation and Clear Lien and Privilege Certificate requirements shall be in accordance with those requirements noted herein before in contract Specifications.

04.00 SUBCONTRACTS

- 04.01 Contractor shall be fully responsible for all acts and omissions of its Subcontractors and of persons and organizations for whose acts any of them may be liable to the same extent that it is responsible for the acts and omissions of persons directly employed by it. Nothing in the Contract Documents shall create any contractual relationship between Owner and any Subcontractor or other person or organization having a direct Contract with Contractor, nor shall it create any obligation on the part of the Owner to pay or to see to the payment of any monies due any Subcontractor.
- 04.02 Nothing in the Contract Documents shall be construed to control the Contractor in dividing the Work among approved Subcontractors or delineating the Work to be performed by any trade.
- 04.03 The Contractor agrees to specifically bind every Subcontractor to all of the applicable terms and conditions of the Contract Documents prior to commencing Work. Every Subcontractor, by undertaking to perform any of the Work, shall thereby automatically be deemed bound by such terms and conditions.
- 04.04 The Contractor shall indemnify and hold harmless the Owner 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 Contractor's failure to bind every Subcontractor and Contractor's surety to all of the applicable terms and conditions of the Contract Documents.

05.00 ASSIGNMENT

- 05.01 Neither party to this Contract shall assign or sublet its interest in this Contract without prior written consent of the other, nor shall the Contractor assign any monies due or to become due to it under this Contract without previous written consent of the Owner, nor without the consent of the surety unless the surety has waived its right to notice of assignment.

06.00 CORRELATION, INTERPRETATION AND INTENT OF CONTRACT DOCUMENTS.

- 06.01 It is the intent of the Specifications and Drawings to describe a complete Project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Agreement between Owner and Contractor. Alterations, modifications and amendments shall only be in writing between these parties.
- 06.02 The Contract Documents are intended to be complimentary and to be read *in pari materii*, and what is called for by one is as binding as if called for by all. If Contractor finds a conflict, error or discrepancy in the Contract Documents, it shall call it to the Owner's attention, in writing, at once and before proceeding with the Work affected thereby; however, it shall be liable to Owner for its failure to discover any conflict, error or discrepancy in the Specifications or Drawings. In resolving such conflicts, errors and discrepancies, the documents shall be given precedence in the following order: Agreement, Modifications, Addenda, Special Conditions, General Conditions, Construction Specifications and Drawings. The general notes on the plans shall be considered special provisions. Figure dimensions on Drawings shall govern over scale dimensions and detail Drawings shall govern over general Drawings. Where sewer connections are shown to fall on a lot line between two lots, the Contractor shall determine this location by measurement not by scale. Any Work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials or equipment described herein which so applied to this Project are covered by a well-known technical meaning or specification shall be deemed to be governed by such recognized standards unless specifically excluded.
- 06.03 Unless otherwise provided in the Contract Documents, the Owner will furnish to the Contractor (free of charge not to exceed ten (10) copies) Drawings and Specifications for the execution of Work. The Drawings and Specifications are the property of the Owner and are to be returned to it when the purpose for which they are intended have been served. The Contractor shall keep one copy of all Drawings and Specifications, including revisions, Addenda, details, Shop Drawings, etc. on the Work in good order and available to the Owner or the regulatory agency of the governmental body having jurisdiction in the area of the Work.

07.00 SHOP DRAWINGS, BROCHURES AND SAMPLES

- 07.01 After checking and verifying all field measurements, Contractor shall submit to Owner for approval, five copies (or at Owner's option, one reproducible copy) of all Shop Drawings, which shall have been checked by and stamped with the approval of Contractor and identified as Owner may require. The data shown on the Shop Drawings will be complete with respect to dimensions, design criteria, materials of construction and the like to enable Owner to review the information as required.
- 07.02 Contractor shall also submit to Owner, for review with such promptness as to cause no delay in Work, all samples as required by the Contract Documents. All samples will have been checked by and stamped with the approval of Contractor identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended. At the time of each submission, Contractor shall in writing call Owner's attention to any deviations that the Shop Drawings or samples may have from the requirements of the Contract Documents.
- 07.03 Owner will review with reasonable promptness Shop Drawings and samples, but its review shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The review of a separate item as such will not indicate approval of the assembly in which the item functions. Contractor shall make any corrections required by Owner and shall return the required number of

corrected copies of Shop Drawings and resubmit new samples for review. Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections called for by Owner on previous submissions. Contractor's stamp of approval on any Shop Drawing or sample shall constitute a representation to Owner that Contractor has determined and verified all quantities, dimensions, field construction criteria, materials catalog numbers and similar data and thereafter assumes full responsibility for doing so, and that it has reviewed or coordinated each Shop Drawing or sample with the requirements of the Work and the Contract Documents.

- 07.04 Where a Shop Drawing or sample submission is required by the Specifications, no related Work shall be commenced until the submission has been reviewed by Owner. A copy of each reviewed shop Drawing and each inspected sample shall be kept in good order by Contractor at the site and shall be available to Owner.
- 07.05 Owner's review of Shop Drawings or samples shall not relieve Contractor from its responsibility for any deviations from the requirements of the Contract Documents unless Contractor has in writing called Owner's attention to such deviation at the time of submission and Owner has given written approval to the specific deviation, nor shall any review by Owner relieve Contractor from responsibility for errors or omissions in the Shop Drawings. The mere submittal of shop drawings which contain deviations from the requirements of plans, specifications and/or previous submittals in itself does not satisfy this requirement.

08.00 RECORD DRAWINGS

- 08.01 The Contractor shall keep an accurate record in a manner approved by the Owner of all changes in the Contract Documents during construction. In Work concerning underground utilities, the Contractor shall keep an accurate record in a manner approved by the Owner of all valves, fittings, etc. Before the Work is accepted by the Owner, and said acceptance is recorded, the Contractor shall furnish the Owner a copy of this record.
- 08.02 Contractor shall keep an accurate drawing measured in the field to the nearest 0.1' of the location of all sewer house connections. The location shown shall be the end of the connection at the property line measured along the main line of pipe from a manhole.
- 08.03 Contractor shall keep an accurate drawing of the storm water drainage collection system. Inverts to the nearest 0.01' and top of castings shall be shown as well as location of all structures to the nearest 0.1'. Upon completion of the Work, the plan will be given to the Owner.

09.00 PROGRESS OF WORK

- 09.01 Contractor shall conduct the Work in such a professional manner and with sufficient materials, equipment and labor as is considered necessary to ensure its completion within the time limit specified.
- 09.02 The Owner shall issue a Notice to Proceed to the Contractor within twenty (20) calendar days from the date of execution of the Contract. Upon mutual consent by both parties, the Notice to Proceed may be extended. The Contractor is to commence Work under the Contract within ten (10) calendar days from the date the Notice to Proceed is issued by the Owner.
- 09.03 The Contractor, immediately after being awarded the Contract, shall prepare and submit for the Owner's approval an estimated progress schedule for the work to be performed, as well as a construction signing layout for all roads within the project area. The Contractor shall not start work or request partial payment until the work schedule has been submitted to the Owner for approval.
- 09.04 Revisions to the original schedule will be made based on extension of days granted for inclement weather or change orders issued under the contract. No other revision shall be made which affects the original completion or updated completion date, whichever is applicable.

- 09.05 Failure of the Contractor to submit an estimated progress schedule or to complete timely and on schedule the Work shown on the progress schedule negates any and all causes or claims by the Contractor for accelerated completion damages. These accelerated damage claims shall be deemed forfeited.
- 09.06 Meetings will be held as often as necessary to expedite the progress of the job. Meetings will be held during normal working hours at the jobsite and shall be mandatory for the Contractor and all Sub-Contractors working on the project. Meetings may be requested by the Owner at any time and at the discretion of the Owner.

10.00 OWNER'S RIGHT TO PROCEED WITH PORTIONS OF THE WORK

- 10.01 Upon failure of the Contractor to comply with any notice given in accordance with the provisions hereof, the Owner shall have the alternative right, instead of assuming charge of the entire Work, to place additional forces, tools, equipment and materials on parts of the Work. The cost incurred by the Owner in carrying on such parts of the Work shall be payable by the Contractor. Such Work shall be deemed to be carried on by the Owner on account of the Contractor. The Owner may retain all amounts of the cost of such Work from any sum due Contractor or those funds that may become due to Contractor under this Agreement.
- 10.02 Owner may perform additional Work related to the Project by itself or it may let any other direct contract which may contain similar General Conditions. Contractor shall afford the other contractors who are parties to such different contracts (or Owner, if it is performing the additional Work itself) reasonable opportunity for the introduction and storage of materials and equipment and the execution of Work, and shall properly connect and coordinate its Work with the subsequent work.
- 10.03 If any part of Contractor's Work depends upon proper execution or results upon the Work of any such other contractor (or Owner), Contractor shall inspect and promptly report to Owner in writing any defects or deficiencies in such Work that render it unsuitable for such proper execution and results. Failure to so report shall constitute an acceptance of the other Work as fit and proper for the relationship of its Work except as to defects and deficiencies which may appear in the other Work after the execution of its Work.
- 10.04 Whatever Work is being done by the Owner, other Contractors or by this Contractor, the parties shall respect the various interests of the other parties at all times. The Owner may, at its sole discretion, establish additional rules and regulations concerning such orderly respect of the rights of various interests.
- 10.05 Contractor shall do all cutting, fitting and patching of its Work that may be required to integrate its several parts properly and fit to receive or be received by such other Work. Contractor shall not endanger any Work of others by cutting, excavating or otherwise altering Work and will only alter Work with the written consent of Owner and of the other contractors whose Work will be affected.
- 10.06 If the performance of additional Work by other contractors or Owner is not noted in the Contract Documents, written notice thereof shall be given to Contractor prior to starting any such additional Work. If Contractor believes that the performance of such additional Work by Owner or others may cause additional expense or entitles an extension of the Contract Time, the Contractor may make a claim therefor. The claim must be in writing to the Owner within thirty (30) calendar days of receipt of notice from the Owner of the planned additional Work by others.

11.00 TIME OF COMPLETION

- 11.01 The Notice to Proceed will stipulate the date on which the Contractor shall begin work. That date shall be the beginning of the Contract Time charges.
- 11.02 Contractor shall notify the Owner through its duly authorized representative, in advance, of where Contractor's work shall commence each day. A daily log shall be maintained by Contractor to establish dates, times, persons contacted, and location of work. Specific notice shall be made to the Owner if the Contractor plans to work on Saturday, Sunday, or

a Parish approved holiday. If notice is not received, no consideration will be given for inclement weather and same shall be considered a valid work day.

- 11.03 The Work covered by the Plans, Specifications and Contract Documents must be completed sufficiently for acceptance within the number of calendar days specified in the Proposal and/or the Contract, commencing from the date specified in the Notice to Proceed. It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the time of completion is an essential condition of this Contract, and it is further mutually understood and agreed that if the Contractor shall neglect, fail or refuse to complete the Work within the time specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as partial consideration for the awarding of this Contract, to pay the Owner based on **Table 3.1** as specified in the Contract, not as a penalty, but as liquidated damages for such breach of contract for each and every calendar day that the Contractor shall be in default after the time stipulated in the Contract for completing the Work. It is specifically understood that the Owner shall also be entitled to receive a reasonable attorney fee and all costs in the event that Contractor fails to adhere to this agreement and this contract is referred to counsel for any reason whatsoever. Reasonable attorney fees shall be the prevailing hourly rate of the private sector, and in no event shall the hourly rate be less than \$175.00 per hour. All attorney fees shall be paid to the operating budget of the Office of the Parish President.
- 11.04 Prior to final payment, the Contractor may, in writing to the Owner, certify that the entire Project is substantially complete and request that the Owner or its agent issue a certificate of Substantial Completion. See Section 29.00.
- 11.05 The Owner may grant an extension(s) of time to the Contractor for unusual circumstances which are beyond the control of the Contractor and could not reasonably be foreseen by the Contractor prior to Bidding. Any such request must be made in writing to the Owner within seven (7) calendar days following the event occasioning the delay. The Owner shall have the exclusive and unilateral authority to determine, grant, and/or deny the validity of any such claim.
- 11.06 Extensions of time for inclement weather shall be processed as follows:

Commencing on the start date of each job, the Parish Inspector assigned to same shall keep a weekly log, indicating on each day whether inclement weather has prohibited the Contractor from working on any project within the specific job, based upon the following:

1. Should the Contractor prepare to begin work on any day in which inclement weather, or the conditions resulting from the weather, prevent work from beginning at the usual starting time, and the crew is dismissed as a result, the Contractor will not be charged for a working day whether or not conditions change during the day and the rest of the day becomes suitable for work.
2. If weather conditions on the previous day prevent Contractor from performing work scheduled, provided that no other work can be performed on any project within the package. The Parish Inspector shall determine if it is financially reasonable to require the Contractor to deviate from the schedule and relocate to another location.
3. If the Contractor is unable to work at least 60% of the normal work day due to inclement weather, provided that a normal working force is engaged on the job.

Any dispute of weather conditions as related to a specific job shall be settled by records of the National Weather Service.

11.07 Extensions of time for change orders

When a change order is issued, the Owner and Contractor will agree on a reasonable time extension, if any, to implement such change. Consideration shall be given for, but not limited to, the following:

1. If material has to be ordered;
2. Remobilization and or relocation of equipment to perform task; and
3. Reasonable time frame to complete additional work.

Time extensions for change orders shall be reflected on the official document signed by the Owner and Contractor.

- 11.08 At the end of each month, the Owner or its agent will furnish to the Contractor a monthly statement which reflects the number of approved days added to the contract. The Contractor will be allowed fourteen (14) calendar days in which to file a written protest setting forth in what respect the monthly statement is incorrect; otherwise, the statement shall be considered accepted by the Contractor as correct.
- 11.09 Apart from extension of time for unavoidable delays, no payment or allowance of any kind shall be made to the Contractor as compensation for damages because of hindrance or delay for any cause in the progress of the Work, whether such delay be avoidable or unavoidable.

12.00 LIQUIDATED DAMAGES

- 12.01 In case the Work is not completed in every respect within the time that may be extended, it is understood and agreed that per diem deductions per **Table 3.1** for liquidated damages, as stipulated in the Proposal and/or Contract, shall be made from the total Contract Price for each and every calendar day after and exclusive of the day on which completion was required, and up to the completion of the Work and acceptance thereof by the Owner. It is understood and agreed that time is of the essence to this Contract, and the above sum being specifically herein agreed upon in advance as the measure of damages to the Owner on account of such delay in the completion of the Work. It is further agreed that the expiration of the term herein assigned or as may be extended for performing the Work shall, *ipso facto*, constitute a putting in default, the Contractor hereby waiving any and all notice of default. The Contractor agrees and consents that the Contract Price, reduced by the aggregate of the entire damages so deducted, shall be accepted in full satisfaction of all Work executed under this Contract. It is further understood and agreed that Contractor shall be liable for a reasonable attorney fee and all costs associated with any breach of this agreement, including but not limited to this subsection. In the event that any dispute or breach herein causes referrals to counsel, then Contractor agrees to pay a reasonable attorney fee at the prevailing hourly rate of the private sector. In no event shall the hourly rate be less than \$175.00 per hour.

13.00 LABOR, MATERIALS, EQUIPMENT, SUPERVISION, PERMITS AND TAXES

- 13.01 The Contractor shall provide and pay for all labor, materials, equipment, supervision, subcontracting, transportation, tools, fuel, power, water, sanitary facilities and all incidentals necessary for the completion of the Work in substantial conformance with the Contract Documents.
- 13.02 The Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. It shall at all times maintain good discipline and order at the site.
- 13.03 Unless otherwise specifically provided for in the Specifications, all workmanship, equipment, materials, and articles incorporated in the Work covered by this Contract are to be new and of the best grade of their respective kinds for the purpose intended. Samples of materials furnished under this Contract shall be submitted for approval to the Owner when and as directed.
- 13.04 Whenever a material or article required is specified or shown on the plans by using the name of a proprietary product or of a particular manufacturer or Contractor, any material or article which shall perform adequately the duties imposed by the general design will be considered equal, and satisfactory, providing the material or article so proposed is of equal substance and function and that all technical data concerning the proposed substitution be approved by the Owner prior to the Bidding. The Owner shall have the exclusive and unilateral discretion to determine quality and suitability in accordance with LSA-R.S. 38:2212(T)(2).

- 13.05 Materials shall be properly and securely stored so as to ensure the preservation of quality and fitness for the Work, and in a manner that leaves the material accessible to inspection. Materials or equipment may not be stored on the site in a manner such that it will interfere with the continued operation of streets and driveways or other contractors working on the site.
- 13.06 The Contractor, by entering into the Contract for this Work, sets itself forth as an expert in the field of construction and it shall supervise and direct the Work efficiently and with its best skill and attention. It shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.
- 13.07 Contractor shall keep on the Work, at all times during its progress, a competent resident Superintendent, who shall not be replaced without written Notice to Owner except under extraordinary circumstances. The Superintendent will be Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given to the Superintendent shall be as binding as if given to the Contractor. Owner specifically reserves the right to approve and/or disapprove the retention of a new superintendent, all to not be unreasonably withheld.
- 13.08 Any foreman or workman employed on this Project who disregards orders or instructions, does not perform his Work in a proper and skillful manner, or is otherwise objectionable, shall, at the written request of the Owner, be removed from the Work and shall be replaced by a suitable foreman or workman.
- 13.09 The Contractor and/or its assigned representative shall personally ensure that all subcontracts and divisions of the Work are executed in a proper and workmanlike manner, on scheduled time, and with due and proper cooperation.
- 13.10 Failure of the Contractor to keep the necessary qualified personnel on the Work shall be considered cause for termination of the Contract by the Owner.
- 13.11 Only equipment in good working order and suitable for the type of Work involved shall be brought onto the job and used by the Contractor. The Contractor is solely responsible for the proper maintenance and use of its equipment and shall hold the Owner harmless from any damages or suits for damages arising out of the improper selection or use of equipment. No piece of equipment necessary for the completion of the Work shall be removed from the job site without approval of the Owner.
- 13.12 All Federal, State and local taxes due or payable during the time of Contract on materials, equipment, labor or transportation, in connection with this Work, must be included in the amount bid by the Contractor and shall be paid to proper authorities before acceptance. The Contractor shall furnish all necessary permits and certificates and comply with all laws and ordinances applicable to the locality of the Work. The cost of all inspection fees levied by any governmental entity whatsoever shall be paid for by the Contractor.
- 13.13 In accordance with St. Tammany Police Jury Resolution 86-2672, as amended, the Contractor must provide in a form suitable to the Owner an affidavit stating that all applicable sales taxes for materials used on this project have been paid.
- 13.14 During the period that this Contract is in force, neither party to the Contract shall solicit for employment or employ an employee of the other.
- 13.15 All materials or equipment shown on the Drawings or included in these specifications shall be furnished unless written approval of a substitute is obtained from the Designer, or Owner if no separate designer.
- 13.16 If a potential supplier wishes to submit for prior approval a particular product other than a product specified in the contract documents, he shall do so no later than fourteen working days prior to the opening of bids. Within ten days, exclusive of holidays and weekends, after such submission, the prime design professional shall furnish to both the public entity and the potential supplier written approval or denial of the product submitted. The burden of proof of the equality of the proposed substitute is upon the proposer and only that information formally submitted shall be used by the Designer in making its decision.

13.17 The decision of the Designer/Owner shall be given in good faith and shall be final.

14.00 QUANTITIES OF ESTIMATE, CHANGES IN QUANTITIES, EXTRA WORK

- 14.01 Whenever the estimated quantities of Work to be done and materials to be furnished under this Contract are shown in any of the documents, including the Proposal, such are given for use in comparing Bids and the right is especially reserved, except as herein otherwise specifically limited, to increase or diminish same not to exceed twenty-five percent (25%) by the Owner to complete the Work contemplated by this Contract. Such increase or diminution shall in no way vitiate this Contract, nor shall such increase or diminution give cause for claims or liability for damages.
- 14.02 The Owner shall have the right to make alterations in the line, grade, plans, form or dimensions of the Work herein contemplated, provided such alterations do not change the total cost of the Project, based on the originally estimated quantities, and the unit prices bid by more than twenty-five percent (25%) and provided further that such alterations do not change the total cost of any major item, based on the originally estimated quantities and the unit price bid by more than twenty-five (25%). (A major item shall be construed to be any item, the total cost of which is equal to or greater than ten percent (10%) of the total Contract Price, computed on the basis of the Proposal quantity and the Contract unit price). Should it become necessary, for the best interest of the Owner, to make changes in excess of that herein specified, the same shall be covered by supplemental agreement either before or after the commencement of the Work and without notice to the sureties. If such alterations diminish the quantity of Work to be done, such shall not constitute a claim for damages for anticipated profits for the Work dispensed with, but when the reduction in amount is a material part of the Work contemplated, the Contractor shall be entitled to only reasonable compensation as determined by the Owner for overhead and equipment charges which it may have incurred in expectation of the quantity of Work originally estimated, unless specifically otherwise provided herein; if the alterations increase the amount of Work, the increase shall be paid according to the quantity of Work actually done and at the price established for such Work under this Contract except where, in the opinion of the Owner, the Contractor is clearly entitled to extra compensation.
- 14.03 Without invalidating the Contract, the Owner may order Extra Work or make changes by altering, adding to, or deducting from the Work, the Contract sum being adjusted accordingly. The consent of the surety must first be obtained when necessary or desirable, all at the exclusive discretion of the Owner. All the Work of the kind bid upon shall be paid for at the price stipulated in the Proposal, and no claims for any Extra Work or material shall be allowed unless the Work is ordered in writing by the Owner.
- 14.04 Extra Work for which there is no price or quantity included in the Contract shall be paid for at a unit price or lump sum to be agreed upon in advance in writing by the Owner and Contractor. Where such price and sum cannot be agreed upon by both parties, or where this method of payment is impracticable, the Owner may, at its exclusive and unilateral discretion, order the Contractor to do such Work on a Force Account Basis.
- 14.05 In computing the price of Extra Work on a Force Account Basis, the Contractor shall be paid for all foremen and labor actually engaged on the specific Work at the current local rate of wage for each and every hour that said foremen and labor are engaged in such Work, plus ten percent (10%) of the total for superintendence, use of tools, overhead, direct & indirect costs/expenses, pro-rata applicable payroll taxes, pro-rata applicable workman compensation benefits, pro-rata insurance premiums and pro-rata reasonable profit. The Contractor shall furnish satisfactory evidence of the rate or rates of such insurance and tax. The Contractor will not be able to collect any contribution to any retirement plans or programs.
- 14.06 For all material used, the Contractor shall receive the actual cost of such material delivered at the site of the Work, as shown by original receipted bill, to which shall be added five percent (5%). There will be absolutely no additional surcharges or additional fees attached hereto with respect to this subsection.
- 14.07 For any equipment used that is owned by the Contractor, the Contractor shall be allowed a rental based upon the latest prevailing rental price, but not to exceed a rental price as determined by the Associated Equipment Distributors (A.E.D. Green Book).

- 14.08 The Contractor shall also be paid the actual costs of transportation for any equipment which it owns and which it has to transport to the Project for the Extra Work. There will be absolutely no additional surcharges or additional fees attached hereto with respect to this subsection.
- 14.09 If the Contractor is required to rent equipment for Extra Work, but not required for Contract items, it will be paid the actual cost of rental and transportation of such equipment to which no percent shall be added. The basis upon which rental cost are to be charged shall be agreed upon in writing before the Work is started. Actual rental and transportation costs shall be obtained from receipted invoices and freight bills.
- 14.10 No compensation for expenses, fees or costs incurred in executing Extra Work, other than herein specifically mentioned herein above, will be allowed.
- 14.11 A record of Extra Work on Force Account basis shall be submitted to the Owner on the day following the execution of the Work, and no less than three copies of such record shall be made on suitable forms and signed by both the Owner or his representative on the Project and the Contractor. All bids for materials used on extra Work shall be submitted to the Owner by the Contractor upon certified statements to which will be attached original bills covering the costs of such materials.
- 14.12 Payment for Extra Work of any kind will not be allowed unless the same has been ordered in writing by the Owner.

15.00 STATUS OF THE ENGINEER (NOT APPLICABLE)

16.00 INJURIES TO PERSONS AND PROPERTY

- 16.01 The Contractor shall be held solely and exclusively responsible for all injuries to persons and for all damages to the property of the Owner or others caused by or resulting from the negligence of itself, its employees or its agents, during the progress of or in connection with the Work, whether within the limits of the Work or elsewhere under the Contract proper or as Extra Work. This requirement will apply continuously and not be limited to normal working hours or days. The Owner's construction review is for the purpose of checking the Work product produced and does not include review of the methods employed by the Contractor or to the Contractor's compliance with safety measures of any nature whatsoever. The Contractor agrees to pay a reasonable attorney fee and other reasonable attendant costs of the Owner in the event it becomes necessary for the Owner to employ an attorney to enforce this section or to protect itself against suit over the Contractor's responsibilities. Attorney fees shall be at the prevailing hourly rate of the private sector. The attorney fee hourly rate shall not be less than \$175.00 per hour. All attorney fees collected shall be paid to the operating budget of the Office of the Parish President.
- 16.02 The Contractor must protect and support all utility infrastructures or other properties which are liable to be damaged during the execution of its Work. It shall take all reasonable and proper precautions to protect persons, animals and vehicles or the public from the injury, and wherever necessary, shall erect and maintain a fence or railing around any excavation, and place a sufficient number of lights about the Work and keep same burning from twilight until sunrise, and shall employ one or more watchmen as an additional security whenever needed. The Contractor understands and agrees that the Owner may request that security be placed on the premises to ensure and secure same. The Owner shall have exclusive authority to request placement of such security. Contractor agrees to retain and place security as requested, all at the sole expense of Contractor. Additional security shall not be considered a change order or reason for additional payment by the Owner. The Contractor must, as far as practicable and consistent with good construction, permit access to private and public property and leave fire hydrants, catch basins, streets, etc., free from encumbrances. The Contractor must restore at its own expense all injured or damaged property caused by any negligent act of omission or commission on its part or on the part of its employees or subcontractors, including, but not limited to, sidewalks, curbing, sodding, pipes conduits, sewers, buildings, fences, bridges, retaining walls, tanks, power lines, levees or any other building or property whatsoever to a like condition as existed prior to such damage or injury.

- 16.03 In case of failure on the part of the Contractor to restore such property or make good such damage, the Owner may upon forty-eight (48) hours' notice proceed to repair or otherwise restore such property as may be deemed necessary, and the cost thereof will be deducted from any monies due or which may become due under its Contract.
- 16.04 Contractor agrees to protect, defend, indemnify, save, and hold harmless St. Tammany Parish Government, its elected and appointed officials, departments, agencies, boards and commissions, their officers, agents servants, employees, including volunteers, from and against any and all claims, demands, expense and liability arising out of injury or death to any person or the damage, loss or destruction of any property to the extent caused by any negligent act or omission or willful misconduct of Contractor, its agents, servants, employees, and subcontractors, or any and all costs, expense and/or attorney fees incurred by St. Tammany Parish Government as a result of any claim, demands, and/or causes of action that results from the negligent performance or non-performance by Contractor, its agents, servants, employees, and subcontractors of this contract. Contractor agrees to investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at its sole expense and agrees to bear all other costs and expenses related thereto caused by any negligent act or omission or willful misconduct of Contractor, its agents, servants, employees, and subcontractors.
- 16.05 As to any and all claims against Owner, its agents, assigns, representatives or employees by any employee of Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts as may be liable, the indemnification obligation under Paragraph 16.04 shall not be limited in any way or by any limitation on the amount or type of damages, compensation or benefits payable by or for Contractor or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefit acts.
- 16.06 No road shall be closed by the Contractor to the public except by written permission of the Owner. If so closed, the Contractor shall maintain traffic over, through and around the Work included in his Contract, with the maximum practical convenience, for the full twenty-four hours of each day of the Contract, whether or not Work has ceased temporarily. The Contractor shall notify the Owner at the earliest possible date after the Contract has been executed and, in any case, before commencement of any construction that might in any way inconvenience or endanger traffic, in order that necessary and suitable arrangements may be determined. Any and all security, maintenance, labor or costs associated with traffic control herein shall be at the sole expense of Contractor. This expense shall be paid directly by the Contractor. This expense shall not be considered as a change order nor shall it allow the Contractor any additional cost reimbursement whatsoever. All traffic deviations herein shall be coordinated with the appropriate law enforcement officials of this Parish.
- 16.07 The convenience of the general public and residents along the Works shall be provided for in a reasonable, adequate and satisfactory manner. Where existing roads are not available as detours, and unless otherwise provided, all traffic shall be permitted to pass through the Work. In all such cases, the public shall have precedence over Contractor's vehicles insofar as the traveling public's vehicles shall not be unduly delayed for the convenience of the Contractor. In order that all unnecessary delay to the traveling public may be avoided, the Contractor shall provide and station competent flagmen whose sole duties shall consist of directing and controlling the movement of public traffic either through or around the Work. Any and all security, maintenance, labor or costs associated with traffic control herein shall be at the sole expense of Contractor. This expense shall be paid directly by the Contractor. This expense shall not be considered as a change order nor shall it allow the Contractor any additional cost reimbursement whatsoever. All traffic deviations herein shall be coordinated with the appropriate law enforcement officials of this Parish.
- 16.08 The Contractor shall arrange its Work so that no undue or prolonged blocking of business establishments will occur.
- 16.09 Material and equipment stored on the right of way or work site shall be so placed and the Work at times shall be so conducted as to ensure minimum danger and obstruction to the traveling public.
- 16.10 During grading operations when traffic is being permitted to pass through construction, the Contractor shall provide a smooth, even surface that will provide a satisfactory passageway

for use of traffic. The road bed shall be sprinkled with water if necessary to prevent a dust nuisance, provided the dust nuisance is a result of the Work.

- 16.11 Fire hydrants shall be accessible at all times to the Fire Department. No material or other obstructions shall be placed closer to a fire hydrant than permitted by ordinances, rules or regulations or within fifteen (15) feet of a fire hydrant, in the absence of such ordinance, rules or regulations.
- 16.12 The Contractor shall not, without the written permission of the Owner, do Work for a resident or property owner abutting the Work at the time that this Work is in progress.
- 16.13 No Work of any character shall be commenced on railroad right-of-way until the Railroad Company has issued a permit to the Owner and has been duly notified by the Contractor in writing (with a copy forwarded to the Owner) of the date it proposes to begin Work, and until an authorized representative of the Railroad Company is present, unless the Railroad Company waives such requirements. All Work performed by the Contractor within the right-of-way limits of the railroad shall be subject to the inspection and approval of the chief engineer of the Railroad Company or its authorized representative. Any precautions considered necessary by said chief engineer to safeguard the property, equipment, employees and passengers of the Railroad Company shall be taken by the Contractor without extra compensation. The Contractor shall, without extra compensation, take such precautions and erect and maintain such tell-tale or warning devices as the Railroad Company considers necessary to safeguard the operation of its trains. The temporary vertical and horizontal clearance specified by the chief engineer of the Railroad Company in approving these shall be maintained at all times. No steel, brick, pipe or any loose material shall be left on the ground in the immediate vicinity of the railway track. Before any Work is done within Railroad right of way, the Contractor shall provide and pay all costs of any special insurance requirements of the Railroad.
- 16.14 The Contractor, shall, without extra compensation, provide, erect, paint and maintain all necessary barricades. Also, without extra compensation, the Contractor shall provide suitable and sufficient lights, torches, reflectors or other warning or danger signals and signs, provide a sufficient number of watchmen and flagmen and take all the necessary precautions for the protection of the Work and safety of the Public.
- 16.15 The Contractor shall erect warning signs beyond the limits of the Project, in advance of any place on the Project where operations interfere with the use of the road by traffic, including all intermediate points where the new Work crosses or coincides with the existing road. All barricades and obstructions shall be kept well painted and suitable warning signs shall be placed thereon. All barricades and obstructions shall be illuminated at night and all lights or devices for this purpose shall be kept burning from sunset to sunrise.
- 16.16 Whenever traffic is maintained through or over any part of the Project, the Contractor shall clearly mark all traffic hazards. No direct payment will be made for barricades, signs and illumination therefore or for watchmen or flagmen.
- 16.17 The Contractor will be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of the Work. This requirement will apply continuously and not be limited to normal working hours. The duty of the Owner to conduct construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's safety measures, in, or near the construction site.

17.00 SANITARY PROVISIONS

- 17.01 The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of its employees as may be necessary to comply with the rules and regulations of the State Health Agency or of the other authorities having jurisdiction and shall permit no public nuisance.

18.00 RIGHTS OF WAY

- 18.01 The Owner will furnish the Contractor with all necessary rights-of-way for the prosecution of the Work. The rights of way herein referred to shall be taken to mean only permission to use or pass through the locations or space in any street, highway, public or private property in which the Contractor is to prosecute the Work.
- 18.02 It is possible that all lands and rights of way may not be obtained as herein contemplated before construction begins, in which event the Contractor shall begin its Work upon such land and rights of way as the Owner may have previously acquired. Any delay in furnishing these lands by the Owner can be deemed proper cause for adjustment in the Contract amount and/or in the time of completion.

19.00 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

- 19.01 The Contractor shall not enter upon private property for any purpose without first obtaining permission from the Owner, as well as the private property owner and/or and private property Lessees. The Contractor shall use every precaution necessary for the preservation of all public and private property, monuments, highway signs, telephone lines, other utilities, etc., along and adjacent to the Work; the Contractor shall use every precaution necessary to prevent damage to pipes, conduits, and other underground structures; and shall protect carefully from disturbance or damage all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed. The street and highway signs and markers that are to be affected by the Work shall be carefully removed when the Work begins and stored in a manner to keep them clean and dry. The Contractor must obtain all necessary information in regard to existing utilities and shall give notice in writing to the owners or the proper authorities in charge of streets, gas, water, pipes, electric, sewers and other underground structures, including conduits, railways, poles and pole lines, manholes, catch basins, fixtures, appurtenances, and all other property that may be affected by the Contractor's operations, at least forty-eight (48) hours before its operations will affect such property. The Contractor shall not hinder or interfere with any person in the protection of such Work or with the operation of utilities at any time. When property, the operation of railways, or other public utilities are endangered, the Contractor shall at its own expense, maintain flagmen or watchmen and any other necessary precautions to avoid interruption of service or damage to life or property, and it shall promptly repair, restore, or make good any injury or damage caused by its negligent operations in an acceptable manner. The Contractor must also obtain all necessary information in regard to the installation of new cables, conduits, and transformers, and make proper provisions and give proper notifications, in order that same can be installed at the proper time without delay to the Contractor or unnecessary inconvenience to the Owner.
- 19.02 The Contractor shall not remove, cut or destroy trees, shrubs, plants, or grass that are to remain in the streets or those which are privately owned, without the proper authority. Unless otherwise provided in the Special Provisions or the Proposal, the Contractor shall replace and replant all plants, shrubs, grass and restore the grounds back to its original good condition to the satisfaction of the Owner and/or the property owner. The Contractor shall assume the responsibility of replanting and guarantees that plants, shrubs, grass will be watered, fertilized and cultivated until they are in a growing condition. No direct payment will be made for removing and replanting of trees, shrubs, plants or grass unless such items are set forth in the Proposal.
- 19.03 When or where direct damage or injury is done to public or private property by or on account of any negligent act, omission, neglect or otherwise of the Contractor, it shall make good such damage or injury in an acceptable manner.

20.00 CONTRACTORS RESPONSIBILITY FOR WORK

- 20.01 Until final acceptance of the Work by the Owner as evidence by approval of the final estimate, the Work shall be in the custody and under the charge and care of the Contractor and it shall take every necessary precaution against injury or damage to any part thereof by the action of the elements or from the non-execution of the Work; unless otherwise provided for elsewhere in the Specifications or Contract. The Contractor shall rebuild, repair, restore and make good, without extra compensation, all injuries or damages to any portion of the Work occasioned by any of the above causes before its completion and

acceptance, and shall bear the expenses thereof. In case of suspension of the Work from any cause whatever, the Contractor shall be responsible for all materials and shall properly and securely store same, and if necessary, shall provide suitable shelter from damage and shall erect temporary structures where necessary. If in the exclusive discretion of the Owner, any Work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of its Subcontractors to so protect the Work, such materials shall be removed and replaced at the sole expense of the Contractor. Such amount shall be deducted from any sum due or to be due Contractor.

- 20.02 The Contractor shall give all notice and comply with all Federal, State, and local laws, ordinances, and regulations in any manner affecting the conduct of the Work, and all such orders and decrees as exist, or may be enacted by bodies or tribunals having any jurisdiction or authority over the Work, and shall indemnify and hold harmless the Owner against any claim or liability arising from, or based on, the violation of any such law, ordinance, regulation, order or decree, whether by itself, its employees or Subcontractors.

21.00 TESTS AND INSPECTIONS CORRECTION & REMOVAL OF DEFECTIVE WORK

- 21.01 Contractor warrants and guarantees to Owner that all materials and equipment will be new unless otherwise specified and that all Work will be of good quality and free from faults or defects and in accordance with the requirements of the Contract Documents. All unsatisfactory Work, all faulty or Defective Work and all Work not conforming to the requirements of the Contract Documents at the time of acceptance shall be considered Defective. Prompt and reasonable notice of all defects shall be given to the Contractor.
- 21.02 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to specifically be inspected, tested or approved by some public body, Contractor shall assume full responsibility therefor, pay all costs in connection therewith and furnish Owner the required certificates of inspection, testing or approval. All other inspections, tests and approval required by the Contract Documents shall be performed by organizations acceptable to Owner and Contractor and the costs thereof shall be borne by the Contractor unless otherwise specified.
- 21.03 Contractor shall give Owner timely notice of readiness of the Work for all inspections, tests or approvals. If any such Work required to be inspected, tested or approved is covered without written approval of Owner, it must, if requested by Owner, be uncovered for observation, and such uncovering shall be at Contractor's expense unless Contractor has given Owner timely notice of its intention to cover such Work and Owner has not acted with reasonable promptness in response to such notice.
- 21.04 Neither observations by Owner nor inspections, tests or approvals shall relieve Contractor from its obligations to perform the Work in accordance with the requirements of the Contract Document.
- 21.05 Owner and its representatives will at reasonable times have access to the Work. Contractor shall provide proper and safe facilities for such access and observation of the Work and also for any inspection or testing thereof by others.
- 21.06 If any Work is covered contrary to the written request of Owner, it must, be uncovered for Owner's observation and replaced at Contractor's expense. If any Work has been covered which Owner has not specifically requested to observe prior to its being covered, or if Owner considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at Owner's request, shall uncover, expose or otherwise make available for observations, inspections or testing as Owner may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is Defective, Contractor shall bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order shall be issued. If, however, such Work is not found to be Defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.

- 21.07 If the Work is Defective, or Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, or if the Contractor fails to make prompt payments to Subcontractors or for labor, materials or equipment, Owner may order Contractor to stop the Work, or any portion thereof, until the cause of such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor or any other party.
- 21.08 Prior to approval of final payment, Contractor shall promptly, without cost to Owner and as specified by Owner, either correct any Defective Work, whether or not fabricated, installed or completed, or if the Work has been rejected by Owner, remove it from the site and replace it with non-defective Work. If Contractor does not correct such Defective Work or remove and replace such rejected Work within a reasonable time, all as specified in a written notice from Owner, Owner may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement including compensation for additional professional services shall be paid by Contractor, and an appropriate deductive Change Order shall be issued. Contractor shall also bear the expense of making good all Work of others destroyed or damaged by its correction, removal or replacement of its Defective Work.
- 21.09 If, after the approval of final payment and prior to the expiration of one year after the date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be Defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, either correct such Defective Work or if it has been rejected by Owner, remove it from the site and replace it with non-defective Work. If Contractor does not promptly comply with the terms of such instructions, Owner may have the Defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be paid by Contractor. The Contractor agrees to pay a reasonable attorney fee and other reasonable attendant costs of the Owner in the event it becomes necessary for the Owner to employ an attorney to enforce this section or to protect itself against suit over the Contractor's responsibilities. Attorney fees shall be at the prevailing hourly rate of the private sector. The attorney fee hourly rate shall not be less than \$175.00 per hour. All attorney fees collected shall be paid to the operating budget of the Office of the Parish President.
- 21.10 If, instead of requiring correction or removal and replacement of Defective Work, Owner (and prior to approval of final payment) prefers to accept it, the Owner may do so. In such case, if acceptance occurs prior to approval of final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including appropriate reduction in the Contract Price, or, if the acceptance occurs after approval of final payment, an appropriate amount shall be paid by Contractor to Owner.
- 21.11 If Contractor should fail to progress the Work in accordance with the Contract Documents, including any requirements of the Progress Schedule, Owner, after seven (7) days written Notice to Contractor, may, without prejudice to any other remedy Owner may have, make good such deficiencies and the cost thereof including compensation for additional professional services shall be charged against Contractor. In such cases, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents including an appropriate reduction in the Contract Price. If the payments then or thereafter due Contractor are not sufficient to cover such amount, Contractor shall pay the difference to Owner.
- 21.12 The Owner may appoint representatives to make periodic visits to the site and observe the progress and quality of the executed Work. These representatives shall be governed by the same restrictions placed on the Owner by these Specifications. The governing body of the Federal, State or local government exercising authority in the area of the Work may appoint representatives to observe the progress and quality of the Work. Contractor shall cooperate with and assist these representatives in the performance of their duties.
- 21.13 The Contractor shall be responsible for the faithful execution of its Contract and the presence or absence of the Owner's or Government's Representative is in no way or manner to be presumed or assumed to relieve in any degree the responsibility or obligation of the Contractor.

- 21.14 The Contractor shall notify the Owner and the Governmental Agency having jurisdiction as to the exact time at which it is proposed to begin Work so the Owner may provide for inspection of all materials, foundations, excavations, equipment, etc., and all or any part of the Work and to the preparation or manufacture of materials to be used whether within the limits of the Work or at any other place.
- 21.15 The Owner or its representatives shall have free access to all parts of the Work and to all places where any part of the materials to be used are procured, manufactured or prepared. The Contractor shall furnish the Owner all information relating to the Work and the material therefor, which may be deemed necessary or pertinent, and with such samples of materials as may be required. The Contractor, at its own expense, shall supply such labor and assistance as may be necessary in the handling of materials for proper inspection or for inspection of any Work done by it.
- 21.16 No verbal instructions given to the Contractor by the Owner, Project Representative or any of their agents shall change or modify the written Contract. Contractors shall make no claims for additional payments or time based upon verbal instructions.

22.00 SUBSURFACE CONDITIONS

- 22.01 It is understood and agreed that the Contractor is familiar with the subsurface conditions that will be encountered and its price bid for the Work includes all of the costs involved for Work in these conditions and it is furthermore agreed that it has taken into consideration, prior to its Bid and acceptance by Owner, all of the subsurface conditions normal or unusual that might be encountered in the location of the Work.
- 22.02 Should the Contractor encounter during the progress of the Work subsurface conditions at the site materially differing from those shown on the Drawings or indicated in the Specifications, the attention of the Owner shall be directed to such conditions before the conditions are disturbed. If the Owner finds that the conditions materially differ from those shown on the Drawings or indicated in the Specifications, it shall at once make such changes in the Drawings or Specifications as it may find necessary, and any increase or decrease in cost or extension of time resulting from such changes shall be adjusted in the same manner as provided for changes for Extra Work. The Contractor shall submit breakdowns of all costs in a manner as instructed and approved by the Owner.

23.00 REMOVAL AND DISPOSAL OF STRUCTURES AND OBSTRUCTIONS

- 23.01 Bidder shall thoroughly examine the site of the Work and shall include in its Bid the cost of removing all structures and obstructions in the way of the Work.
- 23.02 The Contractor shall remove any existing structures or part of structures, fence, building or other encumbrances or obstructions that interfere in any way with the Work. Compensations for the removal of any structure shall be made only if the item(s) to be removed was/were listed as pay item(s) on the Proposal.
- 23.03 If called for in the Special Conditions, all privately and publicly owned materials and structures removed shall be salvaged without damage and shall be piled neatly and in an acceptable manner upon the premises if it belongs to an abutting property owner, otherwise at accessible points along the improvements. Materials in structures which is the property of the Owner or property of any public body, private body or individual which is fit for use elsewhere, shall remain property of the original Owner. It shall be carefully removed without damage, in sections which may be readily transported; same shall be stored on or beyond the right of way. The Contractor will be held responsible for the care and preservation for a period of ten (10) days following the day the last or final portion of the materials stored at a particular location are placed thereon. When privately owned materials are stored beyond the right of way, the Contractor will be held responsible for such care and preservation for a period of ten (10) days responsibility period for care and preservation of the materials begins. The Contractor must furnish the Owner with evidence satisfactory that the proper owner of the materials has been duly notified by the Contractor that the said owner must assume responsibility for its materials on the date following the Contractor's ten (10) day responsibility.

24.00 INSURANCE

- 24.01 Contractor shall secure and maintain at its expense such insurance that will protect it and the Parish from claims for injuries to persons or damages to property which may arise from or in connection with the performance of Services or Work hereunder by the Contractor, his agents, representatives, employees, and/or subcontractors. The cost of such insurance shall be included in Contractor's bid.
- 24.02 The Contractor shall not commence work until it has obtained all insurance as required for the Parish Project. If the Contractor fails to furnish the Parish with the insurance protection required and begins work without first furnishing Parish with a currently dated certificate of insurance, the Parish has the right to obtain the insurance protection required and deduct the cost of insurance from the first payment due the Contractor. Further deductions are permitted from future payments as are needed to protect the interests of the Parish including, but not limited to, renewals of all policies.
- 24.03 Payment of Premiums: The insurance companies issuing the policy or policies shall have no recourse against the Parish of St. Tammany for payment of any premiums or for assessments under any form of policy.
- 24.04 Deductibles: Any and all deductibles in the described insurance policies shall be assumed by and be at the sole risk of the Contractor.
- 24.05 Authorization of Insurance Company(ies) and Rating: All insurance companies must be authorized to do business in the State of Louisiana and shall have an A.M. Best rating of no less than A-, Category VII.
- 24.06 Policy coverages and limits must be evidenced by Certificates of Insurance issued by Contractor's carrier to the Parish and shall reflect:

Date of Issue: Certificate must have current date.

Named Insured: The legal name of Contractor under contract with the Parish and its principal place of business shall be shown as the named insured on all Certificates of Liability Insurance.

Name of Certificate Holder: St. Tammany Parish Government, Office of Risk Management, P. O. Box 628, Covington, LA 70434

Project Description: A brief project description, including Project Name, Project Number and/or Contract Number, and Location.

Endorsements and Certificate Reference: All policies must be endorsed to provide, and certificates of insurance must evidence the following:

Waiver of Subrogation: The Contractor's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance. *Policy endorsements required for all coverages.*

Additional Insured: The Parish of St. Tammany shall be named as additional named insured with respect to general liability, marine liability, pollution/environmental liability, automobile liability and excess liability coverages. *Policy endorsements required.*

Hold Harmless: Contractor's liability insurers shall evidence their cognizance of the Hold Harmless and Indemnification in favor of St. Tammany Parish Government by referencing same on the face of the Certificate(s) of Insurance.

Cancellation Notice: Producer shall provide thirty (30) days prior written notice to the Parish of policy cancellation or substantive policy change.

24.07 The types of insurance coverage the Contractor is required to obtain and maintain throughout the duration of the Contract, include, but is not limited to:

1. Commercial General Liability insurance with a Combined Single Limit for bodily injury and property damage of at least \$1,000,000 per Occurrence/\$2,000,000 General Aggregate/Products-Completed Operations Per Project. The insurance shall provide for and the certificate(s) of insurance shall indicate the following coverages:
 - a) Premises - operations;
 - b) Broad form contractual liability;
 - c) Products and completed operations;
 - d) Personal Injury;
 - e) Broad form property damage;
 - f) Explosion and collapse.
2. Marine Liability/Protection and Indemnity insurance is required for any and all vessel and/or marine operations in the minimum limits of \$1,000,000 per occurrence/\$2,000,000 per project general aggregate. The coverage shall include, but is not limited to, the basic coverages found in the Commercial General Liability insurance and coverage for third party liability.
3. Contractors' Pollution Liability and Environmental Liability insurance in the minimum amount of \$1,000,000 per occurrence, \$2,000,000 general aggregate and include coverage for full contractual liability and for all such environmental and/or hazardous waste exposures affected by this project.
4. Business Automobile Liability insurance with a Combined Single Limit of \$1,000,000 per Occurrence for bodily injury and property damage, and shall include coverage for the following:
 - a) Any automobiles;
 - b) Owned automobiles;
 - c) Hired automobiles;
 - d) Non-owned automobiles;
 - e) Uninsured motorist.
5. Workers' Compensation/Employers Liability insurance: worker's compensation insurance coverage and limits as statutorily required; Employers' Liability Coverage shall be not less than \$1,000,000 each accident, \$1,000,000 each disease, \$1,000,000 disease policy aggregate, except when projects include exposures covered under the United States Longshoremen and Harbor Workers Act, Maritime and/or Jones Act and/or Maritime Employers Liability (MEL) limits shall be not less than \$1,000,000/\$1,000,000/\$1,000,000. *Coverage for owners, officers and/or partners shall be included in the policy and a statement of such shall be made by the insuring producer on the face of the certificate.*
6. Owners Protective Liability (OPL) (formerly Owners and Contractors Protective Liability (OCP) Insurance) shall be furnished by the Contractor naming St. Tammany Parish Government as the Named Insured and shall provide coverage in the minimum amount of \$1,000,000 combined single limit (CSL) each occurrence, \$2,000,000 aggregate. Any project valued in excess of \$3,000,000 shall be set by the Office of Risk Management. The policy and all endorsements shall be addressed to St. Tammany Parish Government, Office of Risk Management, P. O. Box 628, Covington, LA 70434.
7. Builder's Risk Insurance shall be required on buildings, sewage treatment plants and drainage pumping stations, and shall be written on an "all-risk" or equivalent policy form in the amount of the full value of the initial Contract sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising 100% total value for the entire project including foundations. Deductibles should not exceed \$5,000 and Contractor shall be responsible for any and all policy deductibles. This insurance shall cover portions of the work stored off the site, and also portions of the work in transit. In addition, Installation Floater

Insurance, on an “all-risk” form, will be carried on all pumps, motors, machinery and equipment on the site or installed. Both the Builder’s Risk Insurance and the Installation Floater Insurance shall include the interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors and shall terminate only when the Project has been accepted. St. Tammany Parish Government, P. O. Box 628, Covington, LA 70434 shall be the first named insured on the Builder’s Risk and Installation Floater Insurance.

8. Professional Liability (errors and omissions) insurance in the sum of at least One Million Dollars (\$1,000,000) per claim with Two Million Dollars (\$2,000,000) annual aggregate.
 9. An umbrella policy or excess policy may be required and/or allowed to meet minimum coverage limits, subject to the review and approval by St. Tammany Parish Government, Office of Risk Management.
- 24.08 All policies of insurance shall meet the requirements of the Parish of St. Tammany prior to the commencing of any work. The Parish of St. Tammany has the right, but not the duty, to approve all insurance policies prior to commencing of any work. If at any time, it becomes known that any of the said policies shall be or becomes unsatisfactory to the Parish of St. Tammany as to form or substance; or if a company issuing any such policy shall be or become unsatisfactory to the Parish of St. Tammany, the Contractor shall promptly obtain a new policy, timely submit same to the Parish of St. Tammany for approval and submit a certificate thereof as provided above. The Parish agrees to not unreasonably withhold approval of any insurance carrier selected by Contractor. In the event that Parish cannot agree or otherwise authorize said carrier, Contractor shall have the option of selecting and submitting new insurance carrier within 30 days of said notice by the Parish. In the event that the second submission is insufficient or is not approved, then the Parish shall have the unilateral opportunity to thereafter select a responsive and responsible insurance carrier all at the cost of Contractor and thereafter deduct from Contractor's fee the cost of such insurance.
- 24.09 Upon failure of Contractor to furnish, deliver and/or maintain such insurance as above provided, the contract, at the election of the Parish of St. Tammany, may be forthwith declared suspended, discontinued or terminated. Failure of the Contractor to maintain insurance shall not relieve the Contractor from any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligation of the Contractor concerning indemnification.
- 24.10 Contractor shall maintain a current copy of all annual insurance policies and provide same to the Parish of St. Tammany as may be reasonably requested.
- 24.11 It shall be the responsibility of Contractor to require that these insurance requirements are met by all contractors and sub-contractors performing work for and on behalf of Contractor. Contractor shall further ensure the Parish is named as additional insured on all insurance policies provided by said contractor and/or sub-contractor throughout the duration of the project, and that renewal certificates for any policies expiring prior to the Parish’s final acceptance of the project shall be furnished to St. Tammany Parish Government, Department of Legal, Office of Risk Management, without prompting.

NOTICE:

These are only an indication of the coverages that are generally required. Additional coverages and/or limits may be required for projects identified as having additional risks or exposures. Please note that some requirements listed may not necessarily apply to your specific services. St. Tammany Parish Government reserves the right to remove, replace, make additions to and/or modify any and all of the insurance requirement language upon review of the final scope of services presented to Office of Risk Management prior to execution of a contract for services.

For inquiries regarding insurance requirements, please contact:

**St. Tammany Parish Government
Office of Risk Management
P. O. Box 628
Covington, LA 70434
Telephone: 985-898-5226
Email: riskman@stpgov.org**

- 24.12 Nothing contained in these insurance requirements is to be construed as limiting the extent of the Contractor's Responsibility for payment of damages resulting from its operations under this Contract.

25.00 OWNER'S RIGHT TO OCCUPANCY

- 25.01 The Owner shall have the right to use, at any time, any and all portions of the Work that have reached such a stage of completion as to permit such occupancy, provided such occupancy does not hamper the Contractor or prevent its efficient completion of the Contract or be construed as constituting an acceptance of any part of the Work.
- 25.02 The Owner shall have the right to start the construction of houses, structures or any other building concurrent with the Contractor's Work.

26.00 SURVEY HORIZONTAL AND VERTICAL CONTROL

- 26.01 The Owner shall provide surveys for construction to establish reference points which in its judgment are necessary to enable Contractor to layout and proceed with its Work. Contractor shall be responsible for surveying and laying out the Work and shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of the Owner. Contractor shall report to Owner whenever any reference point is lost or destroyed and the Owner shall decide if the reference point shall be replaced by its or the Contractor's forces.
- 26.02 The Contractor shall establish lines and grades with its own forces in sufficient number and location for the proper execution of the Work.
- 26.03 If the Contractor, during the construction, damages the established property corners and/or other markers and thereafter requests the Owner to re-stake same in order to complete the project, this expense will be borne solely by the Contractor.

27.00 TERMINATION OF THE CONTRACT, OWNER'S AND CONTRACTORS RIGHT TO STOP WORK.

- 27.01 If the Contractor should be adjudged bankrupt (voluntarily or involuntarily) or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or if it should persistently or repeatedly refuse or should fail (except in cases for which extension of time is provided) to supply enough properly skilled workmen or proper materials, or if it should fail to make prompt payment to Subcontractors or for material or labor, or persistently disregard laws, ordinances or the instructions of the Owner, or otherwise be guilty of a substantial violation of any provision of the Contract, then the Owner, upon the certificate of the Owner that, in its unilateral discretion and judgment, believes sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor ten (10) calendar days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools and appliances thereon and finish the Work by whatever method the Owner may deem expedient.
- 27.02 Failure of the Contractor to start the Work within the time limit specified herein or substantial evidence that the progress being made by the Contractor is sufficient to complete the Work within the specified time shall be grounds for termination of the Contract by the Owner.
- 27.03 Before the Contract is terminated, the Contractor and its surety will first be notified in writing by the Owner of the conditions which make termination of the Contract imminent.

When after ten (10) calendar days' notice is given and if satisfactory effort has not been made by the Contractor or its surety to correct the conditions, the Owner may declare, in its exclusive discretion, that the Contract is terminated and so notify the Contractor and its surety accordingly.

- 27.04 Upon receipt of notice from the Owner that the Contract has been terminated, the Contractor shall immediately discontinue all operations. The Owner may then proceed with the Work in any lawful manner that it may elect until Work is finally completed.
- 27.05 The exclusive right is reserved to the Owner to take possession of any machinery, implements, tools or materials of any description that shall be found upon the Work, to account for said equipment and materials, and to use same to complete the Project. When the Work is finally completed, the total cost of same will be computed. If the total cost is less than the Contract Price, the difference will not be paid to the Contractor or its surety.
- 27.06 In case of termination, all expenses incident to ascertaining and collecting losses under the Bond, including legal services, shall be assessed against the Bond.
- 27.07 If the Work should be stopped under any order of any court or public authority for period of sixty (60) calendar days, through no act or fault of the Contractor or anyone employed by it, or if the Owner shall fail to pay the Contractor within a reasonable time any sum certified by the Owner, then the Contractor may, upon ten (10) calendar days written notice to the Owner, stop Work or terminate this Contract and recover from the Owner payment for all Work properly and professionally executed in a workmanlike manner. This loss specifically includes actual cost of materials and equipment, together with all wages inclusive of all federal, state, and local tax obligations. This loss specifically includes reimbursement of all insurances on a pro-rata basis from the date of termination to date of policy period. This loss excludes and specifically does not include recovery by the Contractor for lost profit, indirect & direct expenses, overhead, and the like.

28.00 PAYMENTS TO THE CONTRACTOR

- 28.01 Monthly certificates for partial payment, in a form approved by the Owner, shall be transmitted to the Owner upon receipt from the Contractor and acceptance by the Owner. In accordance with LSA-R.S. 38:2248(A), when the Contract Price is less than five hundred thousand dollars, these certificates shall be equal to ninety percent (90%) of both the Work performed and materials stored at the site; and when the Contract Price is five hundred thousand dollars or more, these certificates shall be equal to ninety-five percent (95%) of both the Work performed and materials stored at the site. Partial payment certificates shall include only Work, materials and equipment that are included in official Work Order and which meet the requirements of plans, Specifications and Contract Documents. These monthly estimates shall show the amount of the original estimate for each item, the amount due on each item, the gross total, the retained percentage, the amount previously paid and the net amount of payment due.
- 28.02 After final completion and acceptance by the Owner of the entire Work, and when the Contract Price is less than five hundred thousand dollars, the Owner shall issue to the Contractor Certificate of Payment in sum sufficient to increase total payments to ninety percent (90%) of the Contract Price. After final completion and acceptance by the Owner of the entire Work, and when the Contract Price is five hundred thousand dollars or more, the Owner shall issue to the Contractor Certificate of Payment in sum sufficient to increase total payments to ninety-five percent (95%) of the Contract Price.
- 28.03 When the Contract Price is less than five hundred thousand dollars, the final payment certificate of the remaining ten percent (10%) of the Contract Price, minus any deduction for deficient or Defective Work or other applicable deductions, will be issued by the Owner forty-five (45) days after filing acceptance in the Mortgage Office of the Parish and a Clear Liens and Privilege Certificate has been secured. When the Contract Price is five hundred thousand dollars or more, the final payment certificate of the remaining five percent (5%) of the Contract Price, minus any deduction for deficient or Defective Work or other applicable deductions, will be issued by the Owner forty-five (45) days after filing acceptance in the Mortgage Office of the Parish and a Clear Liens and Privilege Certificate has been secured. Before issuance of the final payment certificate, the Contractor shall deposit with the Owner a certificate from the Clerk of Court and Ex-Officio Recorder of

Mortgages from the Parish in which the Work is performed to the effect that no liens have been registered against Contract Work.

- 28.04 When, in the opinion of the Contractor, the Work provided for and contemplated by the Contract Documents has been substantially completed, the Contractor shall notify the Owner in writing that the Work is substantially complete and request a final inspection. The Owner shall proceed to perform such final inspection accompanied by the Contractor. Any and all Work found by this inspection to be Defective or otherwise not in accordance with the plans and Specifications shall be corrected to the entire satisfaction of the Owner and at the sole expense of the Contractor. If the Contract is found to be incomplete in any of its details, the Contractor shall at once remedy such defects, and payments shall be withheld and formal acceptance delayed until such Work has been satisfactorily completed.
- 28.05 If payment is requested on the basis of materials and equipment not incorporated in the Work, but delivered and suitably stored and protected from damage and theft at the site, the Request for Payment shall also be accompanied by such data, satisfactory to the Owner, as will establish Owner's title to the material and equipment and protect its interest therein, including applicable insurance.
- 28.06 Each subsequent Request for Payment shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied to discharge in full all of Contractor's obligations reflected in prior Request for Payment.
- 28.07 Each subsequent request for payment shall include an affidavit by Contractor that Contractor, all subcontractors, agents, material suppliers and all other persons supplying material to the project upon which State of Louisiana and/or St. Tammany sales taxes are lawfully due have paid these taxes and that all supplies and materials purchased for this project and for which Contractor has been paid have had all lawfully due State and/or St. Tammany sales taxes paid.
- 28.08 The Bid Proposal, unless otherwise modified in writing, and the Contract constitute the complete Project. The Contract Prices constitute the total compensation payable to Contractor and the cost of all of the Work and materials, taxes, permits and incidentals must be included into the Bid submitted by the Contractor and included into those items listed on the Proposal.
- 28.09 Any additional supporting data required by the Owner in order to substantiate Contractor's request for payment shall be furnished by Contractor at no cost to the Owner.
- 28.10 Owner may withhold from payment to Contractor as may be necessary to protect itself from loss on account of:
- (1) Defective and/or inferior work;
 - (2) Damage to the property of Owner or others caused by Contractor;
 - (3) Failure by Contractor to make payments properly to sub-contractors or to pay for labor, materials or equipment used on this project;
 - (4) Failure by Contractor to pay taxes due on materials used on this project;
 - (5) Damage by Contractor to another Contractor;
 - (6) Insolvency;
 - (7) Bankruptcy, voluntary or involuntary;
 - (8) Revocation of corporate status;
 - (9) Failure to follow corporate formalities;
 - (10) Unprofessional activities;
 - (11) Unworkmanlike performance;
 - (12) Fraud and/or misrepresentation of any kind.

29.00 ACCEPTANCE AND FINAL PAYMENT(S)

- 29.01 Upon receipt of written notice from Contractor that the work is substantially complete and usable by Owner or the Public in suitable manner, the Owner and the Contractor shall jointly inspect the work.
- 29.02 If the Owner by inspection determines that the work is not substantially complete in a suitable manner for use by the Owner or the Public, then the Owner shall so notify the Contractor in writing stating such reason. All reasons need not be disclosed unless actually

known. The Owner is afforded an opportunity to amend said notices as are reasonably possible.

- 29.03 If the Owner by its inspection determines that the work is substantially complete, it shall prepare a list of all items not satisfactorily completed and shall notify the Contractor and Owner in writing that the work is substantially complete and subject to satisfactory resolution of those items on the list (punch list). Punch lists may be amended from time to time by Owner in the event that additional deficiencies are discovered. In accordance with LSA-R.S. 38:2248(B), any punch list generated during a construction project shall include the cost estimates for the particular items of work the design professional has developed based on the mobilization, labor, material, and equipment costs of correcting each punch list item. The design professional shall retain his working papers used to determine the punch list items cost estimates should the matter be disputed later. The contract agency shall not withhold from payment more than the value of the punch list. Punch list items completed shall be paid upon the expiration of the forty-five (45) day lien period. The provisions of this Section shall not be subject to waiver.
- 29.04 Upon determination of substantial completeness with the punch list, the Contract Time is interrupted and the Contractor is given a reasonable time not to exceed thirty (30) consecutive calendar days to effect final completion by correcting or completing all of those items listed on the punch list. If the items on the punch list are not completed in a satisfactory manner within the thirty day period, then the Contract Time will begin to run again and will include for purposes of determining liquidated damages the thirty day period the grace period being withdrawn.
- 29.05 Upon receipt by Owner of written determination that all work embraced by the contract has been completed in a satisfactory manner, the Owner shall provide a written acceptance to Contractor who shall record Owner's written acceptance with the recorder of Mortgages, St. Tammany Parish. The Contractor shall properly prepare, submit and pay for all costs associated with said Acceptance. The Contractor is also responsible for preparation, re-submission and payment of any and all updated certificates.
- 29.06 Retainage monies, minus those funds deducted in accordance to the requirements of this agreement including but not limited to Paragraph 28.10, shall be due Contractor not earlier than forty-six (46) calendar days after recordation of certificate of Owner's acceptance provided the following:
- (1) Contractor shall prepare, secure, pay for and submit clear lien and privilege certificate, signed and sealed by Clerk of Court or Recorder of Mortgages, Parish of St. Tammany and dated at least forty-six (46) days after recordation of certificate of acceptance;
 - (2) Ensure that the official representative of the Owner has accepted as per LSA-R.S. 38:2241.1, *et seq.* and that all following sub-sections have been properly satisfied as per law;
 - (3) Ensure that all signatures are affixed and that there exists the requisite authority for all signatures;
 - (4) Ensure accurate and proper legal descriptions;
 - (5) Properly identify all parties and/or signatories;
 - (6) Properly identify all mailing addresses;
 - (7) Correctly set for the amount of the contract, together with all change orders;
 - (8) Set out a brief description of the work performed;
 - (9) Reference to any previously recorded contract, lien or judgment inscription that may affect the property;
 - (10) Certification that substantial completion has occurred, together with any applicable date(s);

- (11) Certification that no party is in default and/or that the project has been abandoned.

29.07 After securing the clear lien and privilege certificate the Contractor shall prepare its final application for payment and submit to Owner. The Owner shall approve application for payment, or state its objections in writing and forward to Contractor for resolution.

30.00 NOTICE AND SERVICE THEREOF

30.01 Any Notice to Contractor from the Owner relative to any part of this Contract shall be in writing and shall be considered delivered and the service thereof completed when said notice is posted; by certified mail, return receipt requested to the said Contractor at its last given address, or delivered in person to said Contractor or its authorized representative on the Work.

31.00 INTENTION OF THESE GENERAL CONDITIONS

31.01 These General Conditions shall be applicable to all contracts entered into by and between the Owner and Contractors, except as may be altered or amended with the consent of the Owner, and/or provided for in the Special Conditions of each contract. Contractor shall be presumed to have full knowledge of these General Conditions which shall be applicable to all contracts containing these General Conditions, whether Contractor has obtained a copy thereof or not.

32.00 SEVERABILITY

32.01 If any one or more or part of any of the provisions contained herein and/or in the Specifications and Contract for the Work shall for any reason be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement or attachment, but it shall be construed as if such invalid, illegal, or unenforceable provision or part of a provision had never been contained herein.

32.02 CHANGING THESE CONDITIONS: Owner reserves the right to change or modify these General Conditions as it deems best, or as required by law. The General Conditions may also be modified for a particular project by the use of Special Conditions prior to the issuance of the Advertisement for Bid. However, once an advertisement for bid is made for any specific project, any changes to the General Conditions as they affect that specific project must be made in writing and issued via an addendum in accordance with State Law.

33.00 LAW OF THE STATE OF LOUISIANA

33.01 The Contract Documents shall be governed by the Law of the State of Louisiana.

33.02 The Contractor agrees to pay reasonable attorney's fees and other reasonable attendant costs, in the event that it becomes necessary for the Owner to employ an attorney in order to enforce compliance with or any remedy relating to any covenants, obligations, or conditions imposed upon the Contractor by this Agreement. Attorney fees shall be based upon the prevailing hourly rate of attorney rates in the private sector. In no case shall the hourly rate be less than \$175.00 per hour. All attorney fees collected shall be paid the operating budget of the Office of the Parish President.

33.03 The jurisdiction and venue provisions shall apply to all contractors, sureties, and subcontractors. The 22nd Judicial District for the Parish of St. Tammany shall be the court of exclusive jurisdiction and venue for any dispute arising from these General Conditions and/or any contract executed in conjunction with these General Conditions. All parties specifically waive any rights they have or may have for removal of any disputes to Federal Court, or transfers to different State District Court.

33.04 Contractor warrants that it has and/or had received a copy of these General Conditions at all times material hereto; Contractor further agrees that it has read and fully and completely

understands each and every condition herein.

33.05 The property description will be more fully set out by an attached exhibit.

33.06 The Contractor warrants that it has the requisite authority to sign and enter this agreement.

33.07 It is specifically understood and agreed that in the event Contractor seeks contribution from the Parish or pursues its legal remedies for any alleged breach of this agreement by the Parish, then the following list of damages SHALL NOT BE RECOVERABLE BY CONTRACTOR. This list includes, but is not limited to:

1. indirect costs and/or expenses;
2. direct costs and/or expenses;
3. time-related costs and/or expenses;
4. award of extra days;
5. costs of salaries or other compensation of Contractor's personnel at Contractor's principal office and branch offices;
6. expenses of Contractor's principal, branch and/or field offices;
7. any part of Contractor's capital expenses, including any interest on Contractor's capital employed for the work;
8. any other charges related to change orders;
9. overhead and general expenses of any kind or the cost of any item not specifically and expressly included in Cost of Work.

33.08 DEFAULT AND WAIVERS

It is understood that time is of the essence. It is specifically understood between the parties that Contractor waives any and all notice to be placed in default by the Owner. This subsection shall supersede and prime any other subsection herein above that is in conflict. The Owner specifically reserves its right and specifically does not waive the requirement to be placed in default by the Contractor as per law.

33.09 St. Tammany Parish Government contracts to be awarded are dependent on the available funding and/or approval by members designated and/or acknowledged by St. Tammany Parish Government. At any time St. Tammany Parish Government reserves the right to cancel the award of a contract if either or both of these factors is deficient.

33.10 It is the Parish's policy to provide a method to protest exclusion from a competition or from the award of a contract, or to challenge an alleged solicitation irregularity. It is always better to seek a resolution within the Parish system before resorting to outside agencies and/or litigation to resolve differences. All protests must be made in writing, and shall be concise and logically presented to facilitate review by the Parish. The written protest shall include:

1. The protester's name, address, and fax and telephone numbers and the solicitation, bid, or contract number;
2. A detailed statement of its legal and factual grounds, including a description of the resulting prejudice to the protester;
3. Copies of relevant documents;
4. All information establishing that the protester is an interested party and that the protest is timely; and
5. A request for a ruling by the agency; and a statement of the form of relief requested.

The protest shall be addressed to Director of Procurement, St. Tammany Parish Government, P.O. Box 628, Covington, LA 70434.

The protest review shall be conducted by the Parish Procurement Department.

Only protests from interested parties will be allowed. Protests based on alleged solicitation improprieties that are apparent before bid opening, or the time set for receipt of initial

proposals must be filed with and received by the Procurement Department BEFORE those deadlines.

Any other protest shall be filed no later than ten (10) calendar days after the basis of the protest is known, or should have been known (whichever is earlier).

The Parish will use its best efforts to resolve the protest within thirty (30) days of the date that it is received by the Parish. The written response will be sent to the protestor via mail and, fax, if a fax number has been provided by the protestor. The protester can request additional methods of notification.

CORPORATE RESOLUTION

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF INCORPORATED.

AT THE MEETING OF DIRECTORS OF _____,
INCORPORATED, DULY NOTICED AND HELD ON _____,
A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT
WAS:

RESOLVED THAT _____, BE AND IS HEREBY
APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-
FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON
BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS
AND TRANSACTIONS WITH THE PARISH OF ST. TAMMANY OR ANY OF ITS
AGENCIES, DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT
LIMITED TO, THE EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS,
BONDS, SURETIES, CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE
ORDERS AND NOTICES ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID
OR CONTRACT, THIS CORPORATION HEREBY RATIFYING, APPROVING,
CONFIRMING, AND ACCEPTING EACH AND EVERY SUCH ACT PERFORMED BY
SAID AGENT AND ATTORNEY-IN-FACT.

I HEREBY CERTIFY THE FOREGOING TO BE
A TRUE AND CORRECT COPY OF AN
EXCERPT OF THE MINUTES OF THE ABOVE
DATED MEETING OF THE BOARD OF
DIRECTORS OF SAID CORPORATION, AND
THE SAME HAS NOT BEEN REVOKED OR
RESCINDED.

SECRETARY-TREASURER

DATE

Certificate of Insurance Instructions

The below information is intended to guide Contractors on what information is needed to be listed on the Certificate of Insurance. All Insurance limit requirements can be found in Section 06.

- **Certificate Holder** – STPG must be listed as the certificate holder, and it must include our address of: P.O. Box 628, Covington, LA 70434
 - Reason: the certificate holder is where cancellations of coverage, or updated certificates are mailed. If a vendor terminates a policy, we will be notified.
- **Additional Insured** – We must be named as an additional insured so that if there is a lawsuit against the vendor for a project, their coverage will cover STPG as well if we are named in the lawsuit.
 - We must be named in the Description of Operations box – reason: there could be other additional insureds, and we want to have no doubt that we are one of the additional insureds.
 - We must be named as additional insured on the following coverages: General liability, Auto Liability, Umbrella/Excess Liability, Environmental/Pollution Liability.
 - Professional Liability policies do not allow for an additional insured by most carriers.
- **Project Name & Contract #** - We need this listed in the Description of Operations, again so that if there is a lawsuit, we have proof that coverage was active for that project.
- **Waiver of Subrogation** – This can either be listed in the Description of Operations or checked off in the appropriate columns.

From the Insurance Requirement form:

Waiver of Subrogation: The Provider's insurers will have no right of recovery or subrogation against the Parish of St. Tammany, it being the intention of the parties that all insurance policy(ies) so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance.

- **Owners Protective Liability (OPL) or (OCP)** – Certificate of Insurance for OCP names St. Tammany Parish Government as the Insured and the Certificate Holder.
- Sample of Certificate of Insurance (COI) can be found on page 2.
- Please refer to this section in the package labeled “Insurance Requirements” for limits required for this project

Any questions regarding insurance requirements please contact the Risk Department at 985-898-5226 or email riskman@stpgov.org



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:		FAX (A/C, No):	
	PHONE (A/C, No, Ext):			
INSURED	E-MAIL ADDRESS:			
	INSURER(S) AFFORDING COVERAGE			NAIC #
	INSURER A :			
	INSURER B :			
	INSURER C :			
	INSURER D :			
INSURER E :				
INSURER F :				

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY						EACH OCCURRENCE \$
	<input type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$
	<input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR						MED EXP (Any one person) \$
							PERSONAL & ADV INJURY \$
							GENERAL AGGREGATE \$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG \$
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						\$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident) \$
	<input type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS						BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS						PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> SCHEDULED AUTOS						\$
	<input type="checkbox"/> NON-OWNED AUTOS						
	UMBRELLA LIAB						EACH OCCURRENCE \$
	<input type="checkbox"/> EXCESS LIAB						AGGREGATE \$
	<input type="checkbox"/> OCCUR						\$
	<input type="checkbox"/> CLAIMS-MADE						
	DED <input type="checkbox"/> RETENTION \$						
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER <input type="checkbox"/>
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y / N <input type="checkbox"/>	N / A <input type="checkbox"/>				E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project Name:

Contract #:

(Name St. Tammany Parish Government as an additional insured).

CERTIFICATE HOLDER**CANCELLATION**

St. Tammany Parish Government
P.O. Box 628
Covington, LA 70434

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Bond No.: _____

**CONTRACT AGREEMENT
BETWEEN PARISH AND CONTRACTOR**

BY: ST. TAMMANY PARISH GOVERNMENT

**UNITED STATES OF
AMERICA**

WITH:

**STATE OF LOUISIANA
ST. TAMMANY PARISH**

This agreement is entered into this _____ day of _____,
20____, by and between: «txtREQCompanyName», hereinafter called the "Contractor", whose
business address is «txtREQAddress», «txtREQCity», «txtREQState» «txtREQZip» and the St.
Tammany Parish Government, hereinafter called the "Parish", whose business address is P.O.
Box 628, Covington, LA 70434 (collectively, the "Parties") for «txtPROJECTNAME» project.
Witnessed that the Contractor and the Parish, in consideration of premises and the mutual
covenants, consideration and agreement herein contained, agree as follows:

1. SCOPE OF SERVICES

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

«txtScopeSummary»

2. CONSTRUCTION DOCUMENTS

It is recognized by the Parties herein that said Construction Documents, including by way of example and not of limitation, the plans and Specifications, General Conditions, Supplementary General Conditions, any addenda thereto, the drawings (if any), and the bid, quote or other procurement documents impose duties and obligations upon the Parties herein, and said Parties thereby agree that they shall be bound by said duties and obligations. For these purposes, all of the provisions contained in the aforementioned Construction Documents are incorporated herein by reference with the same force and effect as though said Construction Documents were herein set out in full. Copies of the aforementioned Construction Documents are in the possession of both the Contractor and the Parish for reference.

3. TIME FOR COMPLETION

The work shall be commenced on a date to be specified in a written order of the Parish and shall be completed within «intCompletionTime» calendar days from and after said date.

4. COMPENSATION TO BE PAID TO THE CONTRACTOR

The Parish will pay and the Contractor will accept in full consideration for the performance of the Contract the sum of «curREQGrandTotal» dollars.

5. PERFORMANCE AND PAYMENT BOND

To these presents personally came and intervened _____,
(Name of Attorney in Fact)
herein acting for _____, a corporation organized
(Surety)
and existing under the laws of the State of _____, and duly authorized to transact business in the State of Louisiana, as surety, who declared that having taken cognizance of this Contract and of the Construction Documents mentioned herein, he hereby in his capacity as its Attorney in Fact obligates his company, as surety for the said Contractor, unto the said Parish, up to the sum of «curREQGrandTotal». The condition of this performance and payment bond

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

Contractor and Parish specifically agree to and recognize (1) the statutory employer relationship existing between the Parish and any employees performing work under this Contract as employees of the Contractor or employees of the "Sub-Contractor", and (2) that the work performed by the employees of the Contractor and the employees of the "Sub-Contractor" is part of the Parish's business, occupation or trade and is essential to the ability of the Parish to generate their products or services, all of which is in accordance with LSA-R.S. 23:1061, and as may be amended.

6. LIABILITY AND INDEMNIFICATION

A. Duty to Defend

Upon notice of any claim, demand, suit, or cause of action against the Parish, alleged to arise out of or be related to this Contract, Contractor shall investigate, handle, respond to, provide defense for, and defend at its sole expense, even if the claim, demand, suit, or cause of action is groundless, false, or fraudulent. The Parish may, but is not required to, consult with or assist the Contractor, but this assistance shall not affect the Contractor's obligations, duties, and responsibilities under this section. Contractor shall obtain the Parish's written consent before entering into any settlement or dismissal.

B. Contractor Liability

Contractor shall be liable without limitation to the Parish for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its owners, agents, employees, partners or subcontractors.

C. Force Majeure

It is understood and agreed that neither party can foresee the exigencies beyond the control of each party which arise by reason of an Act of God or force majeure; therefore, neither party shall be liable for any delay or failure in performance beyond its control resulting from an Act of God or force majeure. The Parish shall determine whether a delay or failure results from an Act of God or force majeure based on its review of all facts and circumstances. The parties shall use reasonable efforts, including but not limited to, use of continuation of operations plans (COOP), business continuity plans, and disaster recovery plans, to eliminate or minimize the effect of such events upon the performance of their respective duties under this Contract.

D. Indemnification

Contractor shall fully indemnify and hold harmless the Parish, without limitation, for any and all injury, death, damage, loss, destruction, damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities of every name and description, which may occur or in any way arise out of any act or omission of Contractor, its

owners, agents, employees, partners or subcontractors. The Contractor shall not indemnify for the portion of any loss or damage arising from the Parish's act or failure to act.

E. Intellectual Property Indemnification

Contractor shall fully indemnify and hold harmless the Parish, without limitation, from and against damages, costs, fines, penalties, judgments, forfeitures, assessments, expenses (including attorney fees), obligations, and other liabilities in any action for infringement of any intellectual property right, including but not limited to, trademark, trade-secret, copyright, and patent rights.

When a dispute or claim arises relative to a real or anticipated infringement, the Contractor, at its sole expense, shall submit information and documentation, including formal patent attorney opinions, as required by the Parish.

If the use of the product, material, service, or any component thereof is enjoined for any reason or if the Contractor believes that it may be enjoined, Contractor, while ensuring appropriate migration and implementation, data integrity, and

minimal delays of performance, shall at its sole expense and in the following order of precedence: (i) obtain for the Parish the right to continue using such product, material, service, or component thereof; (ii) modify the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; (iii) replace the product, material, service, or component thereof so that it becomes a non-infringing product, material, or service of at least equal quality and performance; or, (iv) provide the Parish monetary compensation for all payments made under the Contract related to the infringing product, material, service, or component, plus for all costs incurred to procure and implement a non-infringing product, material, or service of at least equal quality and performance. Until this obligation has been satisfied, the Contractor remains in default.

The Contractor shall not be obligated to indemnify that portion of a claim or dispute based upon the Parish's unauthorized: i) modification or alteration of the product, material or service; ii) use of the product, material or service in combination with other products not furnished by Contractor; or, iii) use of the

product, material or service in other than the specified operating conditions and environment.

7. MODIFICATION OF CONTRACT TERMS

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

8. TERMINATION, CANCELLATION, AND SUSPENSION

A. Termination

The term of this Contract shall be binding upon the Parties hereto until the work has been completed by the Provider and accepted by the Parish, and all payments required to be made to the Provider have been made. But, this Contract may be terminated upon thirty (30) days written notice under any or all of the following conditions:

- 1) By mutual agreement and consent of the Parties hereto;
- 2) By the Parish as a consequence of the failure of the Provider to comply with the terms, progress, or quality of the work in a satisfactory manner, proper allowances being made for circumstances beyond the control of the Provider;
- 3) By either party upon failure of the other party to fulfill its obligations as set forth in this Contract;
- 4) By the Parish with less than thirty (30) days' notice due to budgetary reductions and changes in funding priorities by the Parish;
- 5) In the event of the abandonment of the project by the Parish.

Upon termination, the Provider shall be paid for actual work performed prior to the Notice of Termination, either based upon the established hourly rate for services actually performed, or on a pro-rata share of the basic fee based upon the phase or percentage of work actually completed, depending on the type of compensation previously established under this Contract.

Upon Termination, the Provider shall deliver to the Parish all original documents, notes, drawings, tracings, computer files, and other files pertaining to this Contract or the Work performed, except for the Provider's personal and administrative files.

B. Cancellation

The continuation of this Contract is contingent upon the appropriation of funds to fulfill the requirements of the Contract by the Parish. If the Parish fails to appropriate sufficient monies to provide for the continuation of this or any other Contract, or if such appropriation is reduced by the veto of Parish President by any means provided in the appropriations Ordinance to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the Contract, the Contract shall terminate on the date of the beginning of the first fiscal year for which funds are not appropriated. It is understood and agreed that paragraph (9)(C) below may preempt this paragraph, all at the exclusive and unilateral option of the Parish.

C. Suspension

Should the Parish desire to suspend the work, but not definitely terminate the Contract, the Parish shall supply the Provider with thirty (30) days' notice. The Parish will also

supply Provider thirty (30) days' notice that the work is to be reinstated and resumed in full force. Provider shall receive no additional compensation during the suspension period. The Parties may revisit the terms of this Contract during the suspension period. The suspension shall not exceed six (6) months, unless mutually agreed upon between the Parties.

- D.** Failure to complete or deliver within the time specified or to provide the services as specified in the bid or response will constitute a default and may cause cancellation of the contract. Where the Parish has determined the contractor to be in default. The Parish reserves the right to purchase any or all products or services covered by the contract on the open market and to charge the contractor with the cost in excess of the contract price. Until such assessed charges have been paid, no subsequent bid or response from the defaulting contractor will be considered.
- E.** In the event of a default and/or breach of this agreement and this matter is forwarded to legal counsel, then the prevailing party may be entitled to collect a reasonable attorney fees and all costs associated therewith whether or not litigation is initiated. Attorney fees shall be based upon the current, reasonable prevailing rate for counsel in the private

sector. The Parties agree to be responsible for such attorney fees, together for all with legal interest from date of agreement breach, plus all costs of collection.

- F.** Termination or cancellation of this agreement will not affect any rights or duties arising under any term or condition herein.
- G.** As to the filing of voluntary or involuntary bankruptcy by Provider, Provider agrees that if any execution or legal process is levied upon its interest in this Contract, or if any liens or privileges are filed against its interest, or if a petition in bankruptcy is filed against it, or if it is adjudicated bankrupt in involuntary proceedings, or if it should breach this Contract in any material respect, the Parish shall have the right, at its unilateral option, to immediately cancel and terminate this Contract. In the event that Provider is placed in any chapter of bankruptcy, voluntarily or involuntarily, or otherwise triggers any provision of the preceding sentence herein, it is understood and agreed that all materials, goods and/or services provided shall be and remain the property of the Parish. All rights of Provider as to goods, wares, products, services, materials and the like supplied to Parish shall be deemed forfeited.

9. RECORDATION OF CONTRACT

Contractor authorizes Parish to deduct from any payment due herein costs and service fees for recordation of this Contract in full or an excerpt hereof, or any revisions or modifications thereof as required by law.

10. AUTHORITY TO ENTER CONTRACT

The undersigned representative of Contractor warrants and personally guarantees that he/she has the requisite and necessary authority to enter and sign this Contract on behalf of the corporate entity, partnership, etc. The undersigned Parties warrant and represent that they each have the respective authority and permission to enter this Contract. In the event that Contractor is a member of a corporation, partnership, L.L.C., L.L.P., or any other juridical entity, the Parish requires, as an additional provision, that Contractor supply a certified copy of a corporate resolution authorizing the undersigned to enter and sign this Contract. Another option to fulfill this additional provision he/she can supply Louisiana Secretary of State Business filings confirming that he/she is a managing member of a

Bond No.: _____

corporation, partnership, L.L.C., L.L.P., or any other juridical entity which
authorizes the undersigned to enter and sign this Contract.

In Witness thereof, the Parties hereto on the day and year first above written have
executed this Contract in **One (1)** counterparts, each of which shall, without proof or
accountancy for the other counterparts, be deemed an original thereof.

WITNESSES:

CONTRACTOR:

Signature

Signature

Print Name

Print Name

Signature

Title

Print Name

Date

Bond No.: _____

WITNESSES:

**ST. TAMMANY PARISH
GOVERNMENT:**

Signature

Print Name

Signature

Print Name

Michael B. Cooper
Parish President

Date

APPROVED BY:

Assistant District Attorney- Civil
Division

(Surety)

Signature

Date

Print Name

SECTION 12

MSH Architects LLC Project No. 2252.1

Safe Haven Cardinal Cove Cabin Renovations Phase 1

SECTION 01 2300 ALTERNATES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of Alternates.
- B. Procedures for pricing Alternates.

1.02 RELATED REQUIREMENTS

- A. Document 00 5200 - 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 - ONE:
 - 1. Base Bid: Asphalt Shingles/ Specification Section 07 3113 / Drawing Detail sheet A087-P1
 - 2. Alternate: Metal Roof Panels/ Specification Section 07 4112/ Drawing Detail Sheet A088-P1

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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**SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS**

PART 1 GENERAL**1.01 SECTION INCLUDES**

- A. General administrative requirements.
- B. Preconstruction meeting.
- C. Site mobilization meeting.
- D. Progress meetings.
- E. Progress photographs.
- F. Requests for Interpretation (RFI) procedures.
- G. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Section 01 6000 - Product Requirements: General product requirements.

1.03 GENERAL ADMINISTRATIVE REQUIREMENTS

- A. Comply with requirements of Section 01 7000 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.
- B. Make the following types of submittals to Architect via the Owner (see General Conditions):
 - 1. Requests for Interpretation (RFI).
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Design data.
 - 6. Manufacturer's instructions and field reports.
 - 7. Applications for payment and change order requests.
 - 8. Progress schedules.
 - 9. Coordination drawings.
 - 10. Correction Punch List and Final Correction Punch List for Substantial Completion.
 - 11. Closeout submittals.

PART 2 PRODUCTS - NOT USED**PART 3 EXECUTION****3.01 PRECONSTRUCTION MEETING**

- A. Architect will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Owner.
 - 2. Architect.
 - 3. Contractor.
- C. Agenda:
 - 1. Distribution of Contract Documents.
 - 2. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
 - 3. Submission of initial Submittal schedule.
 - 4. Designation of personnel representing the parties to Contract, _____ and Architect.
 - 5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 6. Scheduling.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.02 SITE MOBILIZATION MEETING

- A. Architect will schedule meeting at the Project site prior to Contractor occupancy.
- B. Attendance Required:
 - 1. Contractor.
 - 2. Owner.
 - 3. Architect.
 - 4. Contractor's superintendent.
 - 5. Major subcontractors.
- C. Agenda:
 - 1. Use of premises by Owner and Contractor.
 - 2. Owner's requirements.
 - 3. Construction facilities and controls provided by Owner.
 - 4. Temporary utilities provided by Owner.
 - 5. Security and housekeeping procedures.
 - 6. Schedules.
 - 7. Application for payment procedures.
 - 8. Procedures for testing.
 - 9. Procedures for maintaining record documents.
 - 10. Requirements for start-up of equipment.
 - 11. Inspection and acceptance of equipment put into service during construction period.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.03 PROGRESS MEETINGS

- A. Architect will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- B. Attendance Required:
 - 1. Contractor.
 - 2. Owner.
 - 3. Architect.
 - 4. Contractor's superintendent.
 - 5. Major subcontractors.
- C. Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of work progress.
 - 3. Field observations, problems, and decisions.
 - 4. Identification of problems that impede, or will impede, planned progress.
 - 5. Review of submittals schedule and status of submittals.
 - 6. Review of RFIs log and status of responses.
 - 7. Review of off-site fabrication and delivery schedules.
 - 8. Maintenance of progress schedule.
 - 9. Corrective measures to regain projected schedules.
 - 10. Planned progress during succeeding work period.
 - 11. Coordination of projected progress.
 - 12. Maintenance of quality and work standards.
 - 13. Effect of proposed changes on progress schedule and coordination.
 - 14. Other business relating to work.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.04 PROGRESS PHOTOGRAPHS

- A. Submit photographs with each application for payment, taken not more than 3 days prior to submission of application for payment.
- B. Photography Type: Digital; electronic files.
- C. Provide photographs of site and construction throughout progress of work produced by an experienced photographer, acceptable to Architect.
- D. Views:
 - 1. Provide non-aerial photographs from four cardinal views at each specified time, until date of Substantial Completion.
 - 2. Consult with Architect for instructions on views required.
 - 3. Provide factual presentation.
 - 4. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.
- E. Digital Photographs: 24 bit color, minimum resolution of 1024 by 768, in JPG format; provide files unaltered by photo editing software.
 - 1. Delivery Medium: Via email.
 - 2. File Naming: Include project identification, date and time of view, and view identification.
 - 3. PDF File: Assemble all photos into printable pages in PDF format, with 2 to 3 photos per page, each photo labeled with file name; one PDF file per submittal.

3.05 REQUESTS FOR INTERPRETATION (RFI)

- A. Definition: A request seeking one of the following:
 - 1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.
 - 2. A resolution to an issue which has arisen due to field conditions and affects design intent.
- B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.
- C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
 - 1. Prepare a separate RFI for each specific item.
 - a. Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.
 - b. Do not forward requests which solely require internal coordination between subcontractors.
 - 2. Prepare in a format and with content acceptable to Owner.
 - 3. Combine RFI and its attachments into a single electronic file. PDF format is preferred.
- D. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
 - 1. Include in each request Contractor's signature attesting to good faith effort to determine from Contract Documents information requiring interpretation.
 - 2. Unacceptable Uses for RFIs: Do not use RFIs to request the following:
 - a. Approval of submittals (use procedures specified elsewhere in this section).
 - b. Approval of substitutions (see Section - 01 6000 - Product Requirements)
 - c. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).
 - d. Different methods of performing work than those indicated in the Contract Drawings and Specifications (comply with provisions of the Conditions of the Contract).

3. Improper RFIs: Requests not prepared in compliance with requirements of this section, and/or missing key information required to render an actionable response. They will be returned without a response.
 4. Frivolous RFIs: Requests regarding information that is clearly indicated on, or reasonably inferable from, Contract Documents, with no additional input required to clarify the question. They will be returned without a response, with an explanatory notation.
 - a. The Owner reserves the right to assess the Contractor for the costs (on time-and-materials basis) incurred by the Architect, and any of its consultants, due to processing of such RFIs.
- E. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
1. Official Project name and number, and any additional required identifiers established in Contract Documents.
 2. Owner's, Architect's, and Contractor's names.
 3. Discrete and consecutive RFI number, and descriptive subject/title.
 4. Issue date, and requested reply date.
 5. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).
 6. Annotations: Field dimensions and/or description of conditions which have engendered the request.
 7. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.
- F. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
- G. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.
1. Indicate current status of every RFI. Update log promptly and on a regular basis.
 2. Note dates of when each request is made, and when a response is received.
 3. Highlight items requiring priority or expedited response.
 4. Highlight items for which a timely response has not been received to date.
 5. Identify and include improper or frivolous RFIs.
- H. Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.
1. Response period may be shortened or lengthened for specific items, subject to mutual agreement, and recorded in a timely manner in progress meeting minutes.
- I. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.
1. Response may include a request for additional information, in which case the original RFI will be deemed as having been answered, and an amended one is to be issued forthwith. Identify the amended RFI with an R suffix to the original number.
 2. Do not extend applicability of a response to specific item to encompass other similar conditions, unless specifically so noted in the response.
 3. Upon receipt of a response, promptly review and distribute it to all affected parties, and update the RFI Log.
 4. Notify Architect within seven calendar days if an additional or corrected response is required by submitting an amended version of the original RFI, identified as specified

above.

3.06 SUBMITTAL SCHEDULE

- A. Submit to Architect for review a schedule for submittals in tabular format.
 - 1. Submit at the same time as the preliminary schedule specified in Section - 01 3216 - Construction Progress Schedule.
 - 2. Coordinate with Contractor's construction schedule and schedule of values.
 - 3. Format schedule to allow tracking of status of submittals throughout duration of construction.
 - 4. Arrange information to include scheduled date for initial submittal, specification number and title, submittal category (for review or for information), description of item of work covered, and role and name of subcontractor.
 - 5. Account for time required for preparation, review, manufacturing, fabrication and delivery when establishing submittal delivery and review deadline dates.
 - a. For assemblies, equipment, systems comprised of multiple components and/or requiring detailed coordination with other work, allow for additional time to make corrections or revisions to initial submittals, and time for their review.

3.07 SUBMITTALS-GENERAL

- A. Contractor shall prepare a comprehensive schedule of all submittals required in Project Manual.
 - 1. Schedule shall be transmitted to Architect for Review
 - 2. Contractor shall keep this schedule updated during the course of the project
 - 3. Contractor's failure to include a required submittal and Architect's failure to notice any discrepancies does not alleviate Contractor from supplying all required submittals.

3.08 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 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 7800 - Closeout Submittals.

3.09 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's knowledge as contract administrator or for Owner.

3.10 SUBMITTAL PROCEDURES

- A. See General Conditions
 - 1. Submittals not requested will not be recognized or processed.
- B. Transmit each submittal with a copy of approved submittal form in Section 01 3000.1.

END OF SECTION

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**SECTION 01 3216
CONSTRUCTION PROGRESS SCHEDULE**

PART 1 GENERAL**1.01 SECTION INCLUDES**

- A. Preliminary schedule.
- B. Construction progress schedule, bar chart type.

1.02 RELATED SECTIONS

- A. Section 01 1000 - Summary: Work sequence.

1.03 REFERENCE STANDARDS

- A. AGC (CPSM) - Construction Planning and Scheduling Manual; 2004.

1.04 SUBMITTALS

- A. Within 10 days after date of Agreement, submit preliminary schedule.
- B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- C. Within 10 days after joint review, submit complete schedule.
- D. Submit updated schedule with each Application for Payment.
- E. Submit the number of opaque reproductions that Contractor requires, plus one copies that will be retained by Architect.

1.05 QUALITY ASSURANCE

- A. Scheduler: Contractor's personnel or specialist Consultant specializing in CPM scheduling with one years minimum experience in scheduling construction work of a complexity comparable to this Project, and having use of computer facilities capable of delivering a detailed graphic printout within 48 hours of request.

1.06 SCHEDULE FORMAT

- A. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.
- B. Sheet Size: Multiples of 8-1/2 x 11 inches.

PART 2 PRODUCTS - NOT USED**PART 3 EXECUTION****3.01 PRELIMINARY SCHEDULE**

- A. Prepare preliminary schedule in the form of a horizontal bar chart.

3.02 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by specification section number.
- C. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- D. Provide legend for symbols and abbreviations used.

3.03 BAR CHARTS

- A. Include a separate bar for each major portion of Work or operation.
- B. Identify the first work day of each week.

3.04 REVIEW AND EVALUATION OF SCHEDULE

- A. Participate in joint review and evaluation of schedule with Architect at each submittal.
- B. Evaluate project status to determine work behind schedule and work ahead of schedule.

- C. After review, revise as necessary as result of review, and resubmit within 10 days.

3.05 UPDATING SCHEDULE

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity.
- C. Annotate diagrams to graphically depict current status of Work.
- D. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- E. Indicate changes required to maintain Date of Substantial Completion.
- F. Submit reports required to support recommended changes.

3.06 DISTRIBUTION OF SCHEDULE

- A. Distribute copies of updated schedules to Contractor's project site file, to subcontractors, suppliers, Architect, Owner, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.

END OF SECTION

SECTION 01 4000 QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submittals.
- B. Control of installation.
- C. Mock-ups.
- D. Manufacturers' field services.
- E. Defect Assessment.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittal procedures.
- B. Section 01 4216 - Definitions.
- C. Section 01 6000 - Product Requirements: Requirements for material and product quality.

1.03 REFERENCE STANDARDS

- A. ASTM C1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2008 (Reapproved 2014).
- B. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection and/or Testing; 2014a.
- C. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing; 2013.
- D. IAS AC89 - Accreditation Criteria for Testing Laboratories; 2021.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Design Data: Submit for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.
- C. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
 - 1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- D. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- E. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for Owner.
 - 1. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.

1.05 REFERENCES AND STANDARDS

- A. For products and 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. Comply with reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.

- 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 Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

PART 2 PRODUCTS - NOT USED**PART 3 EXECUTION****3.01 CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 MOCK-UPS

- A. Before installing portions of the Work where mock-ups are required, construct mock-ups in location and size indicated for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work. The purpose of mock-up is to demonstrate the proposed range of aesthetic effects and workmanship.
- B. Accepted mock-ups establish the standard of quality the Architect will use to judge the Work.
- C. Tests shall be performed under provisions identified in this section and identified in the respective product specification sections.
- D. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- E. Accepted mock-ups shall be a comparison standard for the remaining Work.
- F. Where mock-up has been accepted by Architect and is specified in product specification sections to be removed, protect mock-up throughout construction, remove mock-up and clear area when directed to do so by Architect.

3.03 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.04 DEFECT ASSESSMENT

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

END OF SECTION

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**SECTION 01 4100
REGULATORY REQUIREMENTS**

PART 1 GENERAL**1.01 SUMMARY OF REFERENCE STANDARDS**

- A. Regulatory requirements applicable to this project are the following:
- B. 28 CFR 35 - Nondiscrimination on the Basis of Disability in State and Local Government Services; Final Rule; Department of Justice; current edition.
- C. 28 CFR 36 - Nondiscrimination by Public Accommodations and in Commercial Facilities; Final Rule; Department of Justice; current edition.
- D. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines; current edition.
- E. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.
- F. 29 CFR 1910 - Occupational Safety and Health Standards; Current Edition.
- G. Zoning Code: St Tammany Parish.
- H. NFPA 101 - Life Safety Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- I. Building Code: Louisiana State Uniform Construction Code (LSUCC) - Latest Adopted Version.
- J. Plumbing Code: incorporated as part of the LSUCC.
- K. Mechanical Code: incorporated as part of the LSUCC.
- L. Fuel Gas Code: incorporated as part of the LSUCC.
- M. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.02 RELATED REQUIREMENTS

- A. Section 01 4000 - Quality Requirements.

1.03 QUALITY ASSURANCE

- A. Contractor's Designer Qualifications: Refer to Section - 01 4000 - Quality Requirements.

PART 2 PRODUCTS - NOT USED**PART 3 EXECUTION - NOT USED**

END OF SECTION

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**SECTION 01 4216
DEFINITIONS****PART 1 GENERAL****1.01 SUMMARY**

- A. This section supplements the definitions contained in the General Conditions.
- B. Other definitions are included in individual specification sections.

1.02 DEFINITIONS

- A. Furnish: To supply, deliver, unload, and inspect for damage.
- B. Install: To unpack, assemble, erect, apply, place, finish, cure, protect, clean, start up, and make ready for use.
- C. Product: Material, machinery, components, equipment, fixtures, and systems forming the work result. Not materials or equipment used for preparation, fabrication, conveying, or erection and not incorporated into the work result. Products may be new, never before used, or re-used materials or equipment.
- D. Project Manual: The book-sized volume that includes the procurement requirements (if any), the contracting requirements, and the specifications.
- E. Provide: To furnish and install.
- F. Supply: Same as Furnish.

PART 2 PRODUCTS - NOT USED**PART 3 EXECUTION - NOT USED****END OF SECTION**

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**SECTION 01 5000
TEMPORARY FACILITIES AND CONTROLS**

PART 1 GENERAL**1.01 SECTION INCLUDES**

- A. Temporary telecommunications services.
- B. Temporary sanitary facilities.
- C. Temporary Controls: Barriers, enclosures, and fencing.
- D. Security requirements.
- E. Vehicular access and parking.
- F. 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. 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. Architect will pay for own telecommunications services.

1.04 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Use of existing facilities is not permitted.
- C. Maintain daily in clean and sanitary condition.

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 and for public access to existing building.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.06 FENCING

- A. Construction: Contractor's option.

1.07 SECURITY

- A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with Owner's security program.

1.08 VEHICULAR ACCESS AND PARKING

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and Owner.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.

- E. Existing parking areas designated by Owner may be used for construction during summer holiday hours.

1.09 WASTE REMOVAL

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

1.10 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
- B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition.
- E. Restore new permanent facilities used during construction to specified condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 6000
PRODUCT REQUIREMENTS**

PART 1 GENERAL**1.01 SECTION INCLUDES**

- A. General product requirements.
- B. Re-use of existing products.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations.
- F. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 REFERENCE STANDARDS

- A. 16 CFR 260.13 - Guides for the Use of Environmental Marketing Claims; Federal Trade Commission; Recycled Content; Current Edition.
- B. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.03 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 EXISTING PRODUCTS**

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by Contract Documents.
- B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by Contract Documents.
- B. Use of products having any of the following characteristics is not permitted:
 - 1. Made using or containing CFC's or HCFC's.
 - 2. Made of wood from newly cut old growth timber.
 - 3. Containing lead, cadmium, or asbestos.
- C. Provide interchangeable components of the same manufacture for components being replaced.

2.03 PRODUCT OPTIONS

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

- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

2.04 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION LIMITATIONS

- A. See General Conditions

3.02 TRANSPORTATION AND HANDLING

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

3.03 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- 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. Provide off-site storage and protection when site does not permit on-site storage or protection.
- G. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- H. Comply with manufacturer's warranty conditions, if any.
- I. Do not store products directly on the ground.
- J. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- K. Prevent contact with material that may cause corrosion, discoloration, or staining.

- L. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- M. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

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**SECTION 01 7000
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.
- G. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- B. Section 01 3000 - Administrative Requirements: Submittals procedures, Electronic document submittal service.
- C. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
- D. Section 01 5000 - Temporary Facilities and Controls: Temporary exterior enclosures.

1.03 REFERENCE STANDARDS

- A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

1.04 SUBMITTALS

- A. See Section 01 3000 - 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. Use of explosives is not permitted.
- B. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- C. 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. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000 - 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 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, 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 before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. 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.
- C. 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.

3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
 - b. Provide temporary connections as required to maintain existing systems in service.
4. Verify that abandoned services serve only abandoned facilities.
5. Remove abandoned pipe, ducts, conduits, and equipment; 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.
- D. 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.
- E. 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.
- F. 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.
- G. 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.
- H. Clean existing systems and equipment.
- I. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- J. Do not begin new construction in alterations areas before demolition is complete.
- K. 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-complying work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.

- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work water tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. 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. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Prohibit traffic from landscaped areas.
- H. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

3.09 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.10 FINAL CLEANING

- A. Use cleaning materials that are nonhazardous.
- B. 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.
- C. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- E. Clean filters of operating equipment.

- F. Clean debris from roofs, gutters, downspouts, scuppers, and overflow drains.
- G. Clean site; sweep paved areas, rake clean landscaped surfaces.
- H. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.11 CLOSEOUT PROCEDURES

- A. See General Conditions

3.12 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION

**SECTION 02 4100
DEMOLITION****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Selective demolition of building elements for alteration purposes.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: Limitations on Contractor's use of site and premises.
- B. Section 01 5000 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- C. Section 01 7000 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.

1.03 DEFINITIONS

- A. Demolition: Dismantle, raze, destroy or wreck any building or structure or any part thereof.
- B. Remove: Detach or dismantle items from existing construction and dispose of them off site, unless items are indicated to be salvaged or reinstalled.
- C. Existing to Remain: Designation for existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.

1.04 REFERENCE STANDARDS

- A. 29 CFR 1926 - Safety and Health Regulations for Construction; Current Edition.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Site Plan: Indicate:
 - 1. Vegetation to be protected.
 - 2. Areas for temporary construction and field offices.
 - 3. Areas for temporary and permanent placement of removed materials.
- C. Demolition Plan: Submit demolition plan as required by OSHA and local AHJs.
 - 1. Indicate extent of demolition, removal sequencing, bracing and shoring, and location and construction of barricades and fences.
 - 2. Summary of safety procedures.
 - 3. Demolition firm qualifications.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

PART 2 PRODUCTS -- NOT USED**PART 3 EXECUTION****3.01 DEMOLITION**

- A. See drawings for items and systems to remove

3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - 2. Comply with applicable requirements of NFPA 241.
 - 3. Use of explosives is not permitted.

4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 5. Provide, erect, and maintain temporary barriers and security devices.
 6. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
 7. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 8. Do not close or obstruct roadways or sidewalks without permits from authority having jurisdiction.
 9. 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.
 10. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon, or limit access to their property.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Do not begin removal until vegetation to be relocated has been removed and vegetation to remain has been protected from damage.
- D. Protect existing structures and other elements to remain in place and not removed.
1. Provide bracing and shoring.
 2. Prevent movement or settlement of adjacent structures.
 3. Stop work immediately if adjacent structures appear to be in danger.
- E. Minimize production of dust due to demolition operations. Do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- F. Hazardous Materials:
1. See owner provided Abatement Protocol documents as part of this project. Bidders are responsible for contracting and coordinating this work as part of the overall demolition work.
- G. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface.

3.03 EXISTING UTILITIES

- A. Coordinate work with utility companies. Notify utilities before starting work, comply with their requirements, and obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.
- H. Prepare building demolition areas by disconnecting and capping utilities outside the demolition zone. Identify and mark, in same manner as other utilities to remain, utilities to be reconnected.

3.04 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Existing construction and utilities indicated on drawings are based on casual field observation and existing record documents only.
1. Verify construction and utility arrangements are as indicated.

2. Report discrepancies to Architect before disturbing existing installation.
 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Maintain weatherproof exterior building enclosure, except for interruptions required for replacement or modifications; prevent water and humidity damage.
- C. Remove existing work as indicated and required to accomplish new work.
1. Remove items indicated on drawings.
- D. Services including, but not limited to, HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications: Remove existing systems and equipment as indicated.
1. Verify that abandoned services serve only abandoned facilities before removal.
 2. Remove all 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 as required.
 2. Perform cutting to accomplish removal work neatly and as specified for cutting new work.
 3. Repair adjacent construction and finishes damaged during removal work.
 4. Patch to match new work.

3.05 DEBRIS AND WASTE REMOVAL

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

END OF SECTION

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**SECTION 07 2500
WEATHER BARRIERS****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Air Barriers: Materials that form a system to stop passage of air through exterior walls, joints between exterior walls and roof, and joints around frames of openings in exterior walls.

1.02 RELATED REQUIREMENTS

- A. Section 07 9200 - Joint Sealants: Sealing building expansion joints.

1.03 DEFINITIONS

- A. Weather Barrier: Assemblies that form either water-resistive barriers, air barriers, or vapor retarders.
- B. Air Barrier: Air tight barrier made of material that is relatively air impermeable but water vapor permeable, both to the degree specified, with sealed seams and with sealed joints to adjacent surfaces. Note: For the purposes of this specification, vapor impermeable air barriers are classified as vapor retarders.
- C.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on material characteristics.
- C. Shop Drawings: Provide drawings of special joint conditions.
- D. Manufacturer's Installation Instructions: Indicate preparation.
- E. Warranty Documentation for Installation of Building Rainscreen Assembly: Submit installer warranty and ensure that forms have been completed in Owner's name and registered with installer.

1.05 QUALITY ASSURANCE

- A. Air Barrier Association of America (ABAA) Quality Assurance Program (QAP); www.airbarrier.org/#sle:
 - 1. Installer Qualification: Use accredited contractor, certified installers, evaluated materials, and third-party field quality control audit.
 - 2. Manufacturer Qualification: Use evaluated materials from a single manufacturer regularly engaged in air barrier material manufacture, and use secondary materials approved in writing by primary material manufacturer.
- B. Single Source: Obtain self-adhered water-resistive vapor permeable air barrier membrane components and accessories from a single-source membrane system manufacturer to ensure total system compatibility and integrity.
- C. Manufacturer Qualifications:
 - 1. Provide manufacturer's experienced in-house technical and field observation personal qualified to provide technical support.

1.06 MOCK-UP

- A. Install air barrier materials in mock-up specified in Section 04 2613.

1.07 PRE-INSTALLATION CONFERENCE

- A. Provide a pre-installation conference [two] week prior to commencing work of this section
- B. Ensure all contractors responsible for creating a continuous plane of water and air tightness are present.

1.08 FIELD CONDITIONS

- A. Maintain temperature and humidity recommended by the materials manufacturers before, during and after installation.

1.09 WARRANTY

- A. Provide manufacturer's standard material warranty in which manufacturer agrees to provide replacement material for the fully self-adhered water-resistive vapor permeable air barrier sheets installed in accordance with manufacturer's instructions that fail due to material defects within [20] Twenty years from the date of Substantial Completion.

PART 2 PRODUCTS**2.01 WEATHER BARRIER ASSEMBLIES**

- A. Air Barrier:
 - 1. On outside surface of sheathing of exterior walls use air barrier sheet, self-adhesive type.

2.02 AIR BARRIER MATERIALS (WATER VAPOR PERMEABLE AND WATER-RESISTIVE)

- A. Air Barrier Sheet, Self-Adhered:
 - 1. Provide a fully self-adhered water-resistive vapor permeable air barrier membrane components and accessories obtained from a single-source manufacture to ensure total system compatibility and integrity.
 - 2. Air Leakage: ≤ 0.00002 cfm/ft² @ 1.57 psf (≤ 0.0001 L/s m² @ 75 Pa) when tested in accordance with ASTM E2178 and < 0.01 cfm/ft² @ 1.57 psf (< 0.01 L/s m² @ 75 Pa) when tested in accordance with ASTM E2357. Meets Air Barrier Association of America (ABAA) requirements for "Adhesive Backed Commercial Building Wraps".
 - 3. Water Vapor Permeance tested to ASTM E96 water method, procedure B: minimum of 50 perms (2861 ng/Pa•s•m²).
 - 4. Water Vapor Permeance tested to ASTM E398: minimum of 52.57 perms (3007 ng/Pa•s•m²).
 - 5. Water Resistance tested to AATCC 127, 550 mm hydrostatic head for 5 hours: No leakage
 - 6. Water Penetration Resistance Around Nails: Pass, when tested in accordance with ASTM D1970/D1970M (modified).
 - 7. Ultraviolet (UV) and Weathering Resistance: Approved in writing by manufacturer for up to 180 days of weather exposure.
 - 8. Surface Burning Characteristics: Flame spread index of 5 or less, smoke developed index of 15 or less (Class A), when tested in accordance with ASTM E84.
 - 9. Complies with NFPA 285 wall assembly requirements.
 - 10. Water Resistance: Comply with applicable water-resistive requirements of ICC-ES AC308.
 - 11. Breaking strength and Elongation to ASTM D5034: 88 lbf (391 N), machine direction; 83 lbf (369 N), cross-machine direction.
 - 12. Application Temperature: Ambient temperature must be above 20 °F (minus 6 °C).
 - 13. Water-Resistive Vapor Permeable Transition and Flashing Membrane
 - a. Provide self-adhered air barrier transition and flashing membrane for all window jambs, headers, door openings, inside and outside corners, and other transitions having the following properties:
 - 1) Same material and properties as Self-Adhered Water-Resistive Vapor Permeable Air Barrier Sheet, factory slit to flashing sizes.
 - 14. Vapor Permeable Water Resistive Flashing For Rough Openings
 - a. Window and door pre-cut Self-Adhered flashing includes a liquid-applied vapor permeable air barrier flashing material with vapor permeance and resistance to air leakage properties compatible with the primary air barrier membrane.
 - 1) Pass: CDPH/EHLB/Standard Method V1.2 (Sect. 01350) VOC test.
 - 15. Provide extendible roller tool designed to provide optimal leverage for roller-based self-adhered membrane. Provide roller incorporating heavy duty design die-cast second

handle for additional leverage, two handed operation to firmly secure the adhesive to the substrate. Provide unit that is compact and lightweight with a 7.5 inch (19 cm) wide design.

16. Manufacturers:

- a. Dorken Systems Inc: www.dorken.com/#sle.
- b. Henry Company: www.henry.com/#sle.
- c. VaproShield, LLC; WrapShield SA - Self-Adhered: www.vaproshield.com/#sle.
- 1) BASIS OF DESIGN
- d. W. R. Meadows, Inc: www.wrmeadows.com/#sle.
- e. Substitutions: See Section 01 6000 - Product Requirements.

2.03 ACCESSORIES

- A. Sealants, Tapes, Liquid Flashing component, and Accessories for Sealing Weather Barrier and Sealing Weather Barrier to Adjacent Substrates: As specified or as recommended by weather barrier manufacturer.
- B. Thinners and Cleaners: As recommended by material manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and conditions are ready to accept the work of this section.

3.02 PREPARATION

- A. Remove projections, protruding fasteners, and loose or foreign matter that might interfere with proper installation.
- B. Clean and prime substrate surfaces to receive adhesives in accordance with manufacturer's instructions.
- C. All surfaces must be dry, sound, clean, free of oil, grease, dirt, excess mortar or other contaminants detrimental to the adhesion of the water resistive air barrier membrane and flashings. Fill voids and gaps in substrate greater than 7/8 inch (22 mm) in width to provide an even surface. Strike masonry joints full-flush. Tool sheathing joints filled with sealant materials so that no sealant is spread onto the exterior surface of the sheathing. Remove any sealant products from sheathing surface prior to installation of air barrier membrane.

3.03 INSTALLATION

- A. Install materials in accordance with manufacturer's instructions.
- B. Air Barriers: Install continuous air tight barrier over surfaces indicated, with sealed seams and with sealed joints to adjacent surfaces.
- C. Self-Adhered Sheets:
 1. Prepare substrate in manner recommended by sheet manufacturer; fill and tape joints in substrate and between dissimilar materials.
 2. Complete detail work at; wall openings, building transitions and penetrations prior to field applications allowing for shingle laps with release film temporarily left in place as needed.
 3. Lap sheets shingle-fashion to shed water and seal laps air tight.
 4. Once sheets are in place, press firmly into substrate with resilient hand roller; ensure that laps are firmly adhered with no gaps or fishmouths.
 - a. Roll installed membrane with a two handed roller to ensure positive contact and adhesion with substrate immediately.
 5. Use same material, or other material approved by sheet manufacturer for the purpose, to seal to adjacent construction and as flashing.
 6. Install fully self-adhered vapor permeable air barrier sheet over the outside face of exterior sheathing board or substrate, measure and pre-cut into manageable sized sheets to suit the application conditions.
 7. At wide joints, provide extra flexible membrane allowing joint movement.

D. BUILDING TRANSITION CONDITIONS

1. Tie-in to structural beams, columns, floor slabs and intermittent floors, parapet curbs, foundation walls, roofing systems and at the interface of dissimilar materials with self-adhering air barrier transition and flashing membrane.
2. Align and position fully self-adhered air barrier transition and flashing membrane, remove protective film and press firmly into place. Provide minimum 3 inch (76 mm) lap on to substrates.
3. Ensure minimum 3 inch (76 mm) overlap at side and end laps of membrane and 6 inch (152.4 mm) at inside and outside corners, if joints occur at corner locations.
4. Roll membrane and lap seams with roller to ensure positive contact and adhesion, immediately.

E. Openings and Penetrations in Exterior Weather Barriers:

1. Install flashing over sills, covering entire sill frame member, extending at least 5 inches onto weather barrier and at least 6 inches up jambs; mechanically fasten stretched edges.
2. At openings to be filled with frames having nailing flanges, seal head and jamb flanges using a continuous bead of sealant compressed by flange and cover flanges with sealing tape at least 4 inches wide; do not seal sill flange.
3. At openings to be filled with non-flanged frames, seal weather barrier to each side of opening framing, using flashing at least 9 inches wide, covering entire depth of framing.
4. At head of openings, install flashing under weather barrier extending at least 2 inches beyond face of jambs; seal weather barrier to flashing.
5. At interior face of openings, seal gap between window/door frame and rough framing, using joint sealant over backer rod.
6. Service and Other Penetrations: Form flashing around penetrating item and seal to weather barrier surface.
 - a. Mechanical pipe, electrical conduit and/or duct work must be secured solid into position prior to installation of fully self-adhered vapor permeable air barrier membrane.
 - b. Electrical services penetrating the wall assembly and fully self-adhered vapor permeable air barrier membrane must be placed in appropriate conduit and secured solid into position.
 - c. Install manufactured flanged penetration sleeves as recommended by sleeve manufacturer.
 - d. For pipe penetrations, refer to manufacturer's standard details.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for additional requirements.
- B. Make notification when sections of work are complete to allow review prior to covering fully self-adhered water-resistive vapor permeable air barrier system.
- C. Obtain approval of installation procedures by the weather barrier manufacturer based on a mock-up installed in place, prior to proceeding with remainder of installation.

3.05 PROTECTION

- A. Do not leave materials exposed to weather longer than recommended by manufacturer.

END OF SECTION

**SECTION 07 3113
ASPHALT SHINGLES****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Asphalt shingle roofing.
- B. Flexible sheet membranes for underlayment.
- C. Metal flashing.

1.02 RELATED REQUIREMENTS

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

1.03 REFERENCE STANDARDS

- A. ASTM D226/D226M - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing; 2017 (Reapproved 2023).
- B. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection; 2021.
- C. ASTM D3462/D3462M - Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules; 2023.
- D. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement, Asbestos-Free; 2007 (Reapproved 2018).
- E. ASTM D4869/D4869M - Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing; 2016a (Reapproved 2021).
- F. ASTM D7158/D7158M - Standard Test Method for Wind Resistance of Asphalt Shingles (Uplift Force/Uplift Resistance Method); 2020.
- G. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2023.
- H. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings; 2020a.
- I. ASTM F1667/F1667M - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples; 2021a.
- J. ICC-ES AC188 - Acceptance Criteria for Roof Underlayments; 2023.
- K. NRCA (RM) - The NRCA Roofing Manual; 2025.
- L. UL (DIR) - Online Certifications Directory; Current Edition.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide data indicating material characteristics, performance criteria, and limitations.
- C. Samples: Submit two samples of each shingle color indicating color range and finish texture/pattern ; for color selection.
- D. Manufacturer's Installation Instructions: Indicate installation criteria and procedures.
- E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- F. Manufacturer's qualification statement.
- G. Installer's qualification statement.
- H. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store materials with labels intact in manufacturer's unopened packaging until ready for installation.
- B. Store materials under dry and waterproof cover, well ventilated, and elevated above grade on a flat surface.
- C. Protect materials from harmful environmental elements, construction dust, direct sunlight, and other potentially detrimental conditions.
- D. When storing roofing materials on roofing system ensure that no damage occurs to supporting members and other materials.

1.06 FIELD CONDITIONS

- A. Do not install shingles, eave protection membrane or underlayment when surface, ambient air, or wind chill temperatures are below 45 degrees F.

1.07 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Provide lifetime manufacturer's warranty for coverage against black streaks caused by algae.
- C. Provide 5-year manufacturer's warranty for wind damage.
- D. Extended Correction Period: Correct defective work within 2-year period commencing on Date of Substantial Completion.

PART 2 PRODUCTS**2.01 MANUFACTURERS**

- A. Algae Resistant Asphalt Shingles:
 - 1. Atlas Roofing Corporation: www.atlasroofing.com/#sle.
 - 2. Certainteed Roofing: www.certainteed.com/#sle.
 - 3. GAF: www.gaf.com/#sle.
 - 4. Owens Corning Corp: www.owenscorning.com/#sle.
 - 5. Substitutions: See Section 01 6000 - Product Requirements.

2.02 ASPHALT SHINGLES

- A. Asphalt Shingles: Asphalt-coated glass felt, mineral granule surfaced, complying with ASTM D3462/D3462M.
 - 1. Fire Resistance: Class A, complying with ASTM E108.
 - 2. Wind Resistance (Uplift): Class G, when tested in accordance with ASTM D7158/D7158M.
 - 3. Fire or Wind Resistance Criteria: Provide UL (DIR) listed and labeled products.
 - 4. Warranted Wind Speed: Not greater than 150 mph.
 - 5. Algae resistant.
 - 6. Self-sealing type.
 - 7. Style: Laminated overlay.
 - 8. Color: As selected by Architect.

2.03 SHEET MATERIALS

- A. Underlayment: Synthetic non-asphaltic sheet, intended by manufacturer for mechanically fastened roofing underlayment without sealed seams.
 - 1. TO BE USED AS SLIP SHEET ABOVE SELF ADHERING UNDERLAYMENT ONLY
 - 2. Type: Woven polypropylene with anti-slip polyolefin coating on both sides.
 - 3. Minimum Requirements: Comply with requirements of ICC-ES AC188 for non-self-adhesive sheet.
 - 4. Self Sealability: Passing nail sealability test specified in ASTM D1970/D1970M.
 - 5. Flammability: Minimum of Class A, when tested in accordance with ASTM E108.

6. Ultraviolet (UV) Resistance and Weatherability: Approved in writing by manufacturer for exposure to weather for minimum of six months.
7. Low Temperature Flexibility: Passing test specified in ASTM D1970/D1970M.
8. Fasteners: As recommended by manufacturer or building code qualification report or approval.
9. Products:
 - a. Certainteed Roofing; DiamondDeck Underlayment: www.certainteed.com/#sle.
 - b. System Components Corporation, Inc; ProTex: www.systemcomponents.net/#sle.
 - c. System Components Corporation, Inc; FelTex: www.systemcomponents.net/#sle.
 - d. Substitutions: See Section 01 6000 - Product Requirements.
- B. Underlayment: Self-adhering rubber-modified asphalt sheet complying with ASTM D1970/D1970M; 20 mil total thickness; with strippable release film and slip resistant and UV-stable facing on top surface.
 1. Minimum Requirements: Comply with ICC-ES AC188.
 2. Self Sealability: Passing nail sealability test specified in ASTM D1970/D1970M.
 3. Low Temperature Flexibility: Passing test specified in ASTM D1970/D1970M.
 4. Water Vapor Permeance: 30 perms, when tested in accordance with ASTM E96/E96M, Procedure A (desiccant method).
 5. Performance: Meet or exceed requirements for ASTM D226/D226M, Type II asphalt-saturated organic felt.
 6. Liquid Water Transmission: Passes ASTM D4869/D4869M.
 7. Functional Temperature Range: From minus 70 degrees F to 212 degrees F.
 8. Products:
 - a. BASIS OF DESIGN: VaproShield, SlopeShield Plus SA
 - b. Substitutions: See Section 01 6000 - Product Requirements.

2.04 METAL FLASHING

- A. Metal Flashing: Aluminized Steel/ Galvalume; see Section 07 6200.

2.05 ACCESSORIES

- A. Roofing Nails: Standard round wire shingle type, stainless steel, minimum 3/8-inch head diameter, 12-gauge, 0.109-inch nail shank diameter, 1-1/2 inches long and complying with ASTM F1667/F1667M.
- B. Asphalt Roof Cement: ASTM D4586/D4586M, asbestos-free.
- C. Bituminous Paint: Acid and alkali resistant type; black color.
- D. Lap Cement: Fibrated cutback asphalt type, recommended for use in application of underlayment, free of toxic solvents.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions prior to starting this work.
- B. Verify that roof deck is of sufficient thickness to accept fasteners.
- C. Verify that roof penetrations and plumbing stacks are in place and flashed to deck surface.
- D. Verify roof openings are correctly framed.
- E. Verify deck surfaces are dry, free of ridges, warps, or voids.

3.02 PREPARATION

- A. Seal roof deck joints wider than 1/16 inch as recommended by shingle manufacturer.
- B. Broom clean deck surfaces before installing underlayment or eave protection.
- C. Protect surrounding areas and adjacent surfaces from damage during execution of this work.

- D. Install eave edge flashings tight with fascia boards, weather lap joints 4 inches and seal with roof cement, and secure flange with nails spaced 3 inches on center staggered.

3.03 INSTALLATION

- A. Underlayment:
 - 1. Roof Slopes Greater Than 4:12: Install underlayment perpendicular to slope of roof, with ends and edges weather lapped minimum 4 inches; stagger end laps of each consecutive layer, and weather lap minimum 4 inches over eave protection.
 - 2. Weather lap and seal watertight with plastic cement any items projecting through or mounted on roof.
- B. Metal Flashing:
 - 1. Install flashings in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.
 - 2. Weather lap joints minimum 2 inches and seal weather tight with plastic cement.
 - 3. Secure in place with nails at 3 inches on center staggered, and conceal fastenings.
 - 4. Items Projecting Through or Mounted on Roofing: Flash and seal weather tight with plastic cement.
- C. Shingles:
 - 1. Install shingles in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.
 - a. Fasten individual shingles using two nails per shingle, or as required by manufacturer and local building code, whichever is greater.
 - b. Fasten strip shingles using four nails per strip, or as required by manufacturer and local building code, whichever is greater.
 - 2. Place shingles in straight coursing pattern with 5-inch weather exposure to produce double thickness over full roof area, and provide double course of shingles at eaves.
 - 3. Project first course of shingles 3/4 inch beyond fascia boards.
 - 4. Extend shingles 1/2 inch beyond face of gable edge fascia boards.
 - 5. Extend shingles on one slope across valley and fasten; trim shingles from other slope 2 inches from valley center line to achieve closed cut valley, concealing valley protection.
 - 6. Cap hips with individual shingles, maintaining 5-inch weather exposure, and place to avoid exposed nails.
 - 7. After installation, place one daub of plastic cement 1-inch diameter under each individual shingle tab exposed to weather to prevent lifting.
 - 8. Coordinate installation of roof mounted components or work projecting through roof with weathertight placement of counterflashings.
 - 9. Complete installation to provide weathertight service.

3.04 CLEANING

- A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.
- B. Clean exposed work upon completion of installation; remove grease and oil films, excess joint sealer, handling marks, and debris from installation, leaving work clean and unmarked, free from dents, creases, waves, scratch marks, or other damage to finish.

3.05 PROTECTION

- A. Do not permit traffic over finished roof surface; protect roofing until completion of project.
- B. Touch-up, repair, or replace damaged asphalt shingles or accessories before Date of Substantial Completion.

END OF SECTION

**SECTION 07 4113
METAL ROOF PANELS**

PART 1 GENERAL**1.01 SECTION INCLUDES**

- A. Metal roof panel system of preformed steel panels. AS PART OF ALTERNATE 1

1.02 REFERENCE STANDARDS

- A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
- B. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.
- C. ASTM A792/A792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process; 2023.
- D. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection; 2021.
- E. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2023.
- F. ASTM E1592 - Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference; 2005 (Reapproved 2017).
- G. ASTM E1646 - Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference; 1995 (Reapproved 2018).
- H. ASTM E1680 - Standard Test Method for Rate of Air Leakage through Exterior Metal Roof Panel Systems; 2016 (Reapproved 2022).
- I. ICC-ES AC188 - Acceptance Criteria for Roof Underlayments; 2023.
- J. UL 580 - Standard for Tests for Uplift Resistance of Roof Assemblies; Current Edition, Including All Revisions.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Storage and handling requirements and recommendations.
 2. Installation methods.
 3. Specimen warranty.
- C. Shop Drawings: Include layouts of roof panels, details of edge and penetration conditions, spacing and type of connections, flashings, underlayments, and special conditions.
1. Show work to be field-fabricated or field-assembled.
- D. Selection Samples: For each roofing system specified, submit color chips representing manufacturer's full range of available colors and patterns.
- E. Manufacturer's qualification statement.
- F. Installer's qualification statement.
- G. Test Reports: Indicate compliance of metal roofing system to specified requirements.
- H. Warranty: Submit specified manufacturer's warranty and ensure that forms have been completed in Owner's name and are registered with manufacturer.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Provide strippable plastic protection on prefinished roofing panels for removal after installation.

- B. Store roofing panels on project site as recommended by manufacturer to minimize damage to panels prior to installation.

1.05 FIELD CONDITIONS

- A. Do not install metal roof panels, underlayment when surface, ambient air, or wind chill temperatures are below 45 degrees F.

1.06 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Architectural Metal Roof Panel Manufacturers:
 - 1. Berridge Manufacturing Company; Cee-Lock Panel: www.berridge.com/#sle.
 - 2. Englert, Inc; A1300: www.englertinc.com/#sle.
 - 3. MBCI, a Cornerstone Building Brands Company; 5V Crimp Panel: www.mbc.com/#sle.
 - 4. Petersen Aluminum Corporation; PAC T-250 Panel: www.pac-clad.com/#sle.
 - 5. Ibos Roofing; Covington, Louisiana.
 - 6. Substitutions: See Section 01 6000 - Product Requirements.

2.02 PERFORMANCE REQUIREMENTS

- A. Metal Roof Panels: Provide complete roofing assemblies, including roof panels, clips, fasteners, connectors, and miscellaneous accessories, tested for compliance with the following minimum standards:
 - 1. Structural Design Criteria: Provide panel assemblies designed to safely support design loads at support spacing indicated, with deflection not to exceed L/180 of span length(L) when tested in accordance with ASTM E1592.
 - a. Dead Loads: Weight of roofing system.
 - b. Live Loads: As required by ASCE 7.
 - 2. Overall: Complete weathertight system tested and approved in accordance with ASTM E1592.
 - 3. Wind Uplift: Class 90 wind uplift resistance of UL 580.
 - 4. Air Infiltration: Maximum 0.06 cfm/sq ft at air pressure differential of 6.24 lbf/sq ft, when tested according to ASTM E1680.
 - 5. Water Penetration: No water penetration when tested in accordance with procedures and recommended test pressures of ASTM E1646; perform test immediately following air infiltration test.
 - 6. Thermal Movement: Design system to accommodate without deformation anticipated thermal movement over ambient temperature range of 100 degrees F.

2.03 METAL ROOF PANELS

- A. Metal Roof Panels: Provide complete engineered system complying with specified requirements and capable of remaining weathertight while withstanding anticipated movement of substrate and thermally induced movement of roofing system.
- B. Metal Panels: Factory-formed panels with factory-applied finish.
 - 1. Steel Panels:
 - a. Aluminum-zinc alloy-coated steel complying with ASTM A792/A792M; minimum AZ50 coating.
 - b. Steel Thickness: Minimum 24 gauge, 0.024 inch.
 - 2. Profile: Standing seam, with minimum 1-1/2-inch seam height; concealed fastener system for field seaming with special tool.
 - 3. Texture: Smooth, with intermediate ribs for added stiffness.
 - 4. Length: Full length of roof slope, without lapped horizontal joints.
 - 5. Width: Maximum panel coverage of 16 inches.

2.04 ATTACHMENT SYSTEM

- A. Concealed System: Provide manufacturer's standard stainless steel or nylon-coated aluminum concealed anchor clips designed for specific roofing system and engineered to meet performance requirements, including anticipated thermal movement.

2.05 FABRICATION

- A. Panels: Provide factory or field fabricated panels with applied finish and accessory items, using manufacturer's standard processes as required to achieve specified appearance and performance requirements.

2.06 FINISHES

- A. Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent PVDF resin, and at least 80 percent of coil coated metal surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch; color and gloss as selected by Architect from manufacturer's standard line.

2.07 ACCESSORIES

- A. Miscellaneous Sheet Metal Items: Provide flashings, trim, moldings, closure strips, and preformed crickets of the same material, thickness, and finish as used for the roofing panels. Items completely concealed after installation may optionally be made of stainless steel.
- B. Rib and Ridge Closures: Provide prefabricated, close-fitting components of steel with corrosion resistant finish.
- C. Sealants:
 - 1. Exposed Sealant: Elastomeric; silicone, polyurethane, or silyl-terminated polyether/polyurethane.
 - 2. Concealed Sealant: Non-curing butyl sealant or tape sealant.
- D. Underlayment as slip sheet: Synthetic non-asphaltic sheet, intended by manufacturer for mechanically fastened roofing underlayment without sealed seams.
 - 1. Type: Woven polypropylene with anti-slip polyolefin coating on both sides.
 - 2. Minimum Requirements: Comply with ICC-ES AC188 for non-self-adhesive sheet.
 - 3. Self Sealability: Nail sealability in accordance with ASTM D1970/D1970M.
 - 4. Low Temperature Flexibility: Comply with ASTM D1970/D1970M.
 - 5. Fasteners: As specified by manufacturer and building code qualification report or approval.
- E. Underlayment: Self-adhering polymer modified sheet; 20 mil total thickness; with strippable siliconized release film on bottom side and slip resistant and UV-stable facing on top side.
 - 1. Self Sealability: Nail sealability in accordance with ASTM D1970/D1970M.
 - 2. Water Vapor Permeance: 30 perm, maximum, when tested in accordance with ASTM E96/E96M, Desiccant Method A.
 - 3. Functional Temperature Range: From minus 40 degrees F to 250 degrees F.
 - 4. Products:
 - a. Certaineed Roofing; DryRoof SA - Self-Adhered: www.certaineed.com/#sle.
 - b. Elevate; CLAD-GARD R Metal Underlayment: www.holcimelevate.com/#sle.
 - c. VaproShield, LLC; SlopeShield Plus Self-Adhered: www.vaproshield.com/#sle.
 - d. Substitutions: See Section 01 6000 - Product Requirements.

PART 3 EXECUTION**3.01 EXAMINATION**

- A. Do not begin installation of preformed metal roof panels until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Coordinate roofing work with provisions for roof drainage, flashing, trim, penetrations, and other adjoining work to ensure that completed roof will be free of leaks.
- B. Remove protective film from surface of roof panels immediately prior to installation; strip film carefully to avoid damage to prefinished surfaces.
- C. Separate dissimilar metals by applying a bituminous coating, self-adhering rubberized asphalt sheet, or other permanent method approved by metal roof panel manufacturer.
- D. Protect surrounding areas and adjacent surfaces from damage during execution of this work.
- E. At locations where metal will be in contact with wood or other absorbent material subject to wetting, seal joints with sealing compound and apply one coat of heavy-bodied bituminous paint.

3.03 INSTALLATION

- A. Overall: Install roofing system in accordance with approved shop drawings and metal roof panel manufacturer's instructions and recommendations, as applicable to specific project conditions; securely anchor components of roofing system in place allowing for thermal and structural movement.
 - 1. Install roofing system with concealed clips and fasteners, except as otherwise recommended by manufacturer for specific circumstances.
 - 2. Minimize field cutting of panels. Where field cutting is required, use methods that will not distort panel profiles. Use of torches for field cutting is prohibited.
- B. Accessories: Install necessary components that are required for complete roofing assembly, including flashings, gutters, downspouts, trim, moldings, closure strips, preformed crickets, caps, equipment curbs, rib closures, ridge closures, and similar roof accessory items.
- C. Roof Panels: Install metal roof panels in accordance with manufacturer's installation instructions, minimizing transverse joints except at junction with penetrations.
 - 1. Form weathertight standing seams incorporating concealed clips, using an automatic mechanical seaming device approved by panel manufacturer.
 - 2. Install sealant or sealant tape at end laps and side joints as recommended by metal roof panel manufacturer.

3.04 CLEANING

- A. Clean exposed sheet metal work at completion of installation. Remove grease and oil films, excess joint sealer, handling marks, and debris from installation, leaving the work clean and unmarked, free from dents, creases, waves, scratch marks, or other damage to the finish.

3.05 PROTECTION

- A. Do not permit storage of materials or roof traffic on installed roof panels. Provide temporary walkways or planks as necessary to avoid damage to completed work. Protect roofing until completion of project.
- B. Touch-up, repair, or replace damaged roof panels or accessories before Date of Substantial Completion.

END OF SECTION

**SECTION 07 4646
FIBER-CEMENT SIDING**

PART 1 GENERAL**1.01 SECTION INCLUDES**

- A. Fiber-cement siding.

1.02 RELATED REQUIREMENTS

- A. Section 07 2500 - Weather Barriers: Water-resistive barrier under siding.
- B. Section 09 9113 - Exterior Painting: Field painting.

1.03 REFERENCE STANDARDS

- A. ASTM C1186 - Standard Specification for Flat Fiber-Cement Sheets; 2022, with Editorial Revision (2023).

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturer's data sheets on each product to be used, including:
 - 1. Manufacturer's requirements for related materials to be installed by others.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements and recommendations.
 - 4. Installation methods, including nail patterns.
- C. Manufacturer's qualification statement.
- D. Installer's qualification statement.
- E. Warranty: Submit copy of manufacturer's warranty, made out in Owner's name, showing that it has been registered with manufacturer.
- F. Warranty Documentation for Installation of Building Rainscreen Assembly: Submit installer warranty and ensure that forms have been completed in Owner's name and registered with installer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. See Section 01 7419 - Construction Waste Management and Disposal for packaging waste requirements.
- B. Deliver and store materials in manufacturer's unopened packaging, with labels intact, until ready for installation.
- C. Store materials under dry and waterproof cover, well ventilated, and elevated above grade on a flat surface.
- D. Protect materials from harmful environmental elements, construction dust, and other potentially detrimental conditions.

1.06 FIELD CONDITIONS

- A. Do not install panels when air temperature or relative humidity are outside manufacturer's limits.

1.07 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Extended Correction Period: Correct defective work within 2-year period commencing on Date of Substantial Completion.
- C. Manufacturer Warranty: Provide manufacturer warranty for years as indicated under Fiber-Cement Siding article sub-headings for "Warranty". Complete forms in Owner's name and register with manufacturer.

- D. Installation Warranty for Building Rainscreen Assembly: Installer of exterior rainscreen assembly (including air/vapor barrier and attachments, framing, and exterior panels) to provide 10-year warranty that includes coverage for defective materials and/or workmanship. This warranty will also clearly include materials, labor, necessary activity to access these areas, and removal of any materials to effect repairs and restore to watertight conditions.
www.edacontractors.com/#sle

PART 2 PRODUCTS

2.01 FIBER-CEMENT SIDING

- A. Board and Batten Panel Siding: Vertically oriented panels made of cement and cellulose fiber formed under high pressure with integral surface texture, complying with ASTM C1186, Type A, Grade II; with machined edges, for nail attachment.
1. Texture: Smooth.
 2. Length (Height): 96 inches, nominal.
 3. Width: 16 inches.
 4. Thickness: 5/16 inch, nominal.
 5. Finish: Factory applied primer.
 6. Warranty: 50 year limited; transferable.
 7. Products:
 - a. Allura, a division of Plycem USA, Inc: www.allurausa.com/#sle.
 - b. James Hardie Building Products, Inc: www.jameshardie.com/#sle.
 - c. Nichiha USA, Inc: www.nichiha.com/#sle.
 - d. Substitutions: See Section 01 6000 - Product Requirements.
- B. Soffit Panels: Panels made of cement and cellulose fiber formed under high pressure with integral surface texture, complying with ASTM C1186, Type A, Grade II; with machined edges, for nail attachment.
1. Texture: Smooth. For porch ceilings.
 2. Building soffits shall be Smooth perforated material
 3. Length: 96 inches, nominal.
 4. Width: 48 inches.
 5. Thickness: 5/16 inch, nominal.
 6. Finish: Factory applied primer.
 7. Manufacturer: Same as siding.

2.02 ACCESSORIES

- A. Furring Strips, Plastic: Mold resistant, nonabsorptive entangled polymer that promotes drainage and cross ventilation.
1. Width: 4 inches.
 2. Thickness: 3/8 inch, nominal.
 3. Length: 25 feet.
 4. Products:
 - a. Basis of Design: Keene Building Products; Easy-Fur - Rollable Furring Strip: www.keenebuilding.com/#sle.
 - b. Substitutions: See Section 01 6000 - Product Requirements.
- B. Trim: Same material and texture as siding.
- C. Fasteners: Galvanized or corrosion resistant; length as required to penetrate, 1-1/4 inches, minimum.
- D. Sealant: Elastomeric, polyurethane or silyl-terminated polyether/polyurethane, and capable of being painted.

PART 3 EXECUTION**3.01 EXAMINATION**

- A. Examine substrate, clean and repair as required to eliminate conditions that would be detrimental to proper installation.
- B. Verify that water-resistant barrier has been installed over substrate completely and correctly; see Section 07 2500.
- C. Do not begin until unacceptable conditions have been corrected.
- D. If substrate preparation is responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Protect surrounding areas and adjacent surfaces during execution of this work.
- B. Install Sheet Metal Flashing:
 - 1. Above door and window trim and casings.
 - 2. Above horizontal trim in field of siding.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions and recommendations.
 - 1. Read warranty and comply with terms necessary to maintain warranty coverage.
 - 2. Install in accordance with conditions stated in model code evaluation report applicable to location of project.
 - 3. Use trim details as indicated on drawings.
 - 4. Touch up field cut edges before installing.
 - 5. Pre-drill nail holes if necessary to prevent breakage.
- B. Over Wood and Wood-Composite Sheathing: Fasten siding through sheathing into studs.
- C. Allow space for thermal movement between both ends of siding panels that butt against trim; seal joint between panel and trim with specified sealant.
- D. Joints in Vertical Siding: Install Z-flashing in horizontal joints between successive courses of vertical siding.
- E. Do not install siding less than 6 inches from ground surface, or closer than 1 inch to roofs, patios, porches, and other surfaces where water may collect.
- F. After installation, seal joints except lap joints of lap siding; seal around penetrations, and paint exposed cut edges.
- G. Finish Painting: See Section 09 9113.

3.04 CLEANING

- A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.
- B. Clean faced panels in accordance with manufacturer's maintenance instructions, using cleaning materials and methods acceptable to manufacturer.

3.05 PROTECTION

- A. Protect installed products until Date of Substantial Completion.
- B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

END OF SECTION

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**SECTION 07 6200
SHEET METAL FLASHING AND TRIM**

PART 1 GENERAL**1.01 SECTION INCLUDES**

- A. Fabricated sheet metal items, including flashings, counterflashings, and exterior penetrations.
- B. Sealants for joints within sheet metal fabrications.

1.02 REFERENCE STANDARDS

- A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
- B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.
- D. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement, Asbestos-Free; 2007 (Reapproved 2018).
- E. CDA A4050 - Copper in Architecture - Handbook; current edition.
- F. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene one week before starting work of this section.

1.04 SUBMITTALS

- A. See Section 01 3000 - 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, 4 by 4 inches 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.

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****2.02 SHEET MATERIALS**

- A. Pre-Finished Galvanized or Galvalume Steel: ASTM A653/A653M, with G90/Z275 zinc coating; minimum 24-gauge, 0.0239-inch thick base metal, shop pre-coated with PVDF coating.
 - 1. Polyvinylidene Fluoride (PVDF) Coating: Superior performing organic powder coating, AAMA 2605; multiple coat, thermally cured fluoropolymer finish system.
 - 2. Color: As selected by Architect 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 edge. Return and brake edges.

2.04 EXTERIOR PENETRATION FLASHING PANELS

- A. Flashing Panels for Exterior Wall Penetrations: Premanufactured components and accessories as required to preserve integrity of building envelope; suitable for conduits and facade materials to be installed.

2.05 ACCESSORIES

- A. Fasteners: Galvanized steel, with soft neoprene washers.
- B. Primer Type: Zinc chromate.
- C. Concealed Sealants: Non-curing butyl sealant.
- D. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material.
- E. Asphalt Roof Cement: ASTM D4586/D4586M, Type I, asbestos-free.

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. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil, 0.015 inch.

3.03 INSTALLATION

- A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted..
- B. Apply plastic cement compound between metal flashings and felt flashings.
- C. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- D. Seal metal joints watertight.

END OF SECTION

**SECTION 07 9200
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 01 6116 - Volatile Organic Compound (VOC) Content Restrictions: Additional requirements for sealants and primers.

1.03 REFERENCE STANDARDS

- A. ASTM C661 - Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer; 2015 (Reapproved 2022).
- B. ASTM C834 - Standard Specification for Latex Sealants; 2017 (Reapproved 2023).
- C. ASTM C919 - Standard Practice for Use of Sealants in Acoustical Applications; 2022.
- D. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.
- E. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2016 (Reapproved 2023).
- F. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2022.
- G. ASTM C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants; 2023.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturer's technical datasheets for each product to be used; include 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. Sample product warranty.
 - 6. Certification by manufacturer indicating that product complies with specification requirements.
- 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 and submit at least two physical samples for verification of color of each required sealant.
- F. Manufacturer's qualification statement.
- G. Installer's qualification statement.
- H. Executed warranty.

1.05 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

- B. Manufacturer Warranty: Provide 2-year manufacturer warranty for installed sealants and accessories that fail to achieve a watertight seal, exhibit loss of adhesion or cohesion, or do not cure. Complete forms in Owner's name and register with manufacturer.
- C. Extended Correction Period: Correct defective work within 2-year period commencing on Date of Substantial Completion.

PART 2 PRODUCTS

2.01 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:
 - a. Wall expansion and control joints.
 - b. Joints between door, window, and other frames and adjacent construction.
 - c. Joints between different exposed materials.
 - d. Openings below ledge angles in masonry.
 - e. Other joints indicated below.
 - 2. Interior Joints: Do not seal interior joints unless specifically indicated to be sealed. Interior joints to be sealed include, but are not limited to, the following items.
 - a. Joints between door, window, and other frames and adjacent construction.
 - b. In sound-rated wall and ceiling assemblies, gaps at electrical outlets, wiring devices, piping, and other openings; between wall/ceiling and other construction; and other flanking sound paths.
 - c. Other joints indicated below.
 - 3. 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 nonsag nonstaining silicone sealant, unless otherwise indicated.
- C. Interior Joints: Use nonsag polyurethane sealant, unless otherwise indicated.
 - 1. In Sound-Rated Assemblies: Acrylic emulsion latex sealant.
- D. Sound-Rated Assemblies: Walls and ceilings identified as STC-rated, sound-rated, or acoustical.

2.02 JOINT SEALANTS - GENERAL

- A. Sealants and Primers: Provide products with acceptable levels of volatile organic compound (VOC) content; see Section 01 6116.

2.03 NONSAG JOINT SEALANTS

- A. Nonstaining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
 - 1. Movement Capability: Plus and minus 50 percent, minimum.
 - 2. Nonstaining to Porous Stone: Nonstaining 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 from manufacturer's standard range.
 - 5. Products:
 - a. Adfast USA Inc; Adseal LM 4600 Series: www.adfastcorp.com/#sle.
 - b. Dow; DOWSIL 795 Silicone Building Sealant: www.dow.com/#sle.

- c. Pecora Corporation; Pecora 864 NST (Non-Staining Technology): www.pecora.com/#sle.
 - d. Sika Corporation; Sikasil 728NS: www.usa.sika.com/#sle.
 - e. Tremco Commercial Sealants & Waterproofing; Tremsil 600: www.tremcosealants.com/#sle.
 - f. Substitutions: See Section 01 6000 - Product Requirements.
- B. Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component; not expected to withstand continuous water immersion or traffic.
- 1. Movement Capability: Plus and minus 50 percent, minimum.
 - 2. Hardness Range: 20 to 35, Shore A, when tested in accordance with ASTM C661.
 - 3. Color: To be selected by Architect from manufacturer's standard range.
 - 4. Service Temperature Range: Minus 40 to 180 degrees F.
 - 5. Products:
 - a. Master Builders Solutions; MasterSeal NP1: www.master-builders-solutions.com/en-us/#sle.
 - b. Pecora Corporation; DynaTrol II: www.pecora.com/#sle.
 - c. Sherwin-Williams Company; Stampede-1/-TX Polyurethane Sealant: www.sherwin-williams.com/#sle.
 - d. Sika Corporation; Sikaflex-15 LM: www.usa.sika.com/#sle.
 - e. Tremco Commercial Sealants & Waterproofing; Dymeric 240 FC: www.tremcosealants.com/#sle.
 - f. W. R. Meadows, Inc; POURTHANE NS: www.wrmeadows.com/#sle.
 - g. Substitutions: See Section 01 6000 - Product Requirements.
- C. Acrylic Emulsion Latex: Water-based; ASTM C834, single component, nonstaining, nonbleeding, nonsagging; not intended for exterior use.

2.04 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.
- 1. Type for Joints Not Subject to Pedestrian or Vehicular Traffic: ASTM C1330; Type O - Open Cell Polyurethane.
 - 2. Open Cell: 40 to 50 percent larger in diameter than joint width.
- 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, nonstaining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.
- D. Joint Cleaner: Noncorrosive and nonstaining type, type recommended by sealant manufacturer; compatible with joint forming materials.
- E. Primers: Type recommended by sealant manufacturer to suit application; nonstaining.

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. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Provide joint sealant installations complying with ASTM C1193.
- C. Install acoustical sealant application work in accordance with ASTM C919.
- D. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.
- E. Install bond breaker backing tape where backer rod cannot be used.
- F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- G. 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.
- H. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

3.04 POST-OCCUPANCY

- A. Post-Occupancy Inspection: Perform visual inspection of entire length of project sealant joints at a time that joints have opened to their greatest width, i.e., at low temperature in thermal cycle. Report failures immediately and repair them.

END OF SECTION

**SECTION 08 1113
HOLLOW METAL DOORS AND FRAMES**

PART 1 GENERAL**1.01 SECTION INCLUDES**

- A. Non-fire-rated hollow metal doors and frames.
- B. Thermally insulated hollow metal doors with frames.

1.02 RELATED REQUIREMENTS

- A. Section 08 7100 - Door Hardware.

1.03 REFERENCE STANDARDS

- A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.
- B. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors; 2024.
- C. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames (SDI-100); 2023.
- D. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 2020.
- E. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- F. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable; 2023, with Editorial Revision.
- G. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2023.
- H. BHMA A156.115 - Hardware Preparation in Steel Doors and Frames; 2016.
- I. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.
- J. NAAMM HMMA 830 - Hardware Selection for Hollow Metal Doors and Frames; 2002.
- K. NAAMM HMMA 831 - Hardware Locations for Hollow Metal Doors and Frames; 2024.
- L. NAAMM HMMA 840 - Guide Specifications for Receipt, Storage and Installation of Hollow Metal Doors and Frames; 2024.
- M. NAAMM HMMA 861 - Guide Specifications for Commercial Hollow Metal Doors and Frames; 2014.
- N. SDI 117 - Manufacturing Tolerances for Standard Steel Doors and Frames; 2023.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes; and one copy of referenced standards/guidelines.
- C. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and any indicated finish requirements.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Comply with NAAMM HMMA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
- B. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion and adverse effects on factory applied painted finish.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Hollow Metal Doors and Frames:
 - 1. Ceco Door, an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 2. Curries, an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 3. Fleming Door Products, an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 4. Premier Steel Doors and Frames: www.trustpremier.com/#sle.
 - 5. Republic Doors, an Allegion brand: www.republicdoor.com/#sle.
 - 6. Steelcraft, an Allegion brand: www.allegion.com/#sle.
 - 7. Substitutions: See Section 01 6000 - Product Requirements.

2.02 PERFORMANCE REQUIREMENTS

- A. Requirements for Hollow Metal Doors and Frames:
 - 1. Steel Sheet: Comply with one or more of the following requirements; galvanized steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel (CS) Type B, for each.
 - 2. Accessibility: Comply with ICC A117.1 and ADA Standards.
 - 3. Exterior Door Top Closures: Flush end closure channel, with top and door faces aligned.
 - 4. Door Edge Profile: Manufacturers standard for application indicated.
 - 5. Typical Door Face Sheets: Flush.
 - 6. Hardware Preparations, Selections and Locations: Comply with NAAMM HMMA 830 and NAAMM HMMA 831 or BHMA A156.115 and ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
 - 7. Zinc Coating for Typical Interior and/or Exterior Locations: Provide metal components zinc-coated (galvanized) and/or zinc-iron alloy-coated (galvanized) by the hot-dip process in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness, unless noted otherwise for specific hollow metal doors and frames.
 - a. Based on NAAMM HMMA Custom Guidelines: Provide at least A25/ZF75 (galvanized) for interior applications, and at least A60/ZF180 (galvanized) or G60/Z180 (galvanized) for corrosive locations.
- B. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

2.03 HOLLOW METAL DOORS

- A. Door Finish: Factory primed and field finished.
- B. Exterior Doors: Thermally insulated.
 - 1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
 - a. Level 2 - Heavy-duty.
 - b. Physical Performance Level B, 500,000 cycles; in accordance with ANSI/SDI A250.4.
 - c. Model 1 - Full Flush.
 - d. Door Face Metal Thickness: 16 gauge, 0.053 inch, minimum.
 - e. Zinc Coating: A60/ZF180 galvanized coating; ASTM A653/A653M.
 - 2. Door Core Material: Manufacturers standard core material/construction and in compliance with requirements.
 - 3. Door Thickness: 1-3/4 inches, nominal.
 - 4. Weatherstripping: Refer to Section 08 7100.

2.04 HOLLOW METAL FRAMES

- A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.
- B. Frame Finish: Factory primed and field finished.
- C. Exterior Door Frames: Full profile/continuously welded type.
 - 1. Galvanizing: Components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A653/A653M, with A60/ZF180 coating.
 - 2. Frame Metal Thickness: 16 gauge, 0.053 inch, minimum.
 - 3. Weatherstripping: Separate, see Section 08 7100.

2.05 FINISHES

- A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

PART 3 EXECUTION**3.01 EXAMINATION**

- A. Verify existing conditions before starting work.
- B. Verify that opening sizes and tolerances are acceptable.
- C. Verify that finished walls are in plane to ensure proper door alignment.

3.02 INSTALLATION

- A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.
- B. Coordinate frame anchor placement with wall construction.
- C. Install door hardware as specified in Section 08 7100.

3.03 TOLERANCES

- A. Clearances Between Door and Frame: Comply with related requirements of specified frame standards or custom guidelines indicated in accordance with SDI 117 or NAAMM HMMA 861.
- B. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

3.04 ADJUSTING

- A. Adjust for smooth and balanced door movement.

END OF SECTION

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**SECTION 08 7100
DOOR HARDWARE****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Hardware for hollow metal doors.
- B. Thresholds.
- C. Weatherstripping and gasketing.

1.02 REFERENCE STANDARDS

- A. BHMA A156.1 - Standard for Butts and Hinges; 2021.
- B. BHMA A156.2 - Bored and Preambled Locks and Latches; 2022.
- C. BHMA A156.18 - Standard for Materials and Finishes; 2020.
- D. BHMA A156.21 - Thresholds; 2019.
- E. BHMA A156.22 - Standard for Gasketing; 2021.
- F. DHI (H&S) - Sequence and Format for the Hardware Schedule; 2019.
- G. DHI (LOCS) - Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames; 2004.
- H. NFPA 101 - Life Safety Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.
- B. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.
- C. Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
 - 1. Prepared by or under supervision of Architectural Hardware Consultant (AHC).
 - 2. Comply with DHI (H&S) using door numbers and hardware set numbers as indicated in construction documents.
 - 3. List groups and suffixes in proper sequence.
 - 4. Provide complete description for each door listed.
 - 5. Provide manufacturer name, product names, and catalog numbers; include functions, types, styles, sizes and finishes of each item.
- D. Project Record Documents: Record actual locations of concealed equipment, services, and conduit.
- E. Maintenance Materials and Tools: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 6000 - Product Requirements, for additional provisions.
 - 2. Lock Cylinders: Ten for each master keyed group.
 - 3. Tools: One set of each special wrench or tool applicable for each different or special hardware component, whether supplied by hardware component manufacturer or not.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Package hardware items individually; label and identify each package with door opening code to match door hardware schedule.

1.06 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Manufacturer's Warranty: Provide warranty against defects in material and workmanship for period indicated. Complete forms in Owner's name and register with manufacturer.
 - 1. Locksets and Cylinders: Three years, minimum.
 - 2. Other Hardware: Two years, minimum.

PART 2 PRODUCTS**2.01 DESIGN AND PERFORMANCE CRITERIA**

- A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.
- B. Provide individual items of single type, of same model, and by same manufacturer.
- C. Provide door hardware products that comply with the following requirements:
 - 1. Applicable provisions of federal, state, and local codes.
 - 2. Applicable provisions of NFPA 101.
- D. Lock Function: Provide lock and latch function numbers and descriptions of manufacturer's series. See Door Hardware Schedule.
- E. Fasteners:
 - 1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.
 - a. Aluminum fasteners are not permitted.
 - b. Provide phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.

2.02 HINGES

- A. Manufacturers:
 - 1. McKinney; an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 2. Hager Companies: www.hagerco.com/#sle.
 - 3. Pamex, Inc; Hinges: www.pamexinc.com/#sle.
 - 4. BEST, dormakaba Group: www.bestaccess.com/#sle.
 - 5. Substitutions: See Section 01 6000 - Product Requirements.
- B. Hinges: Comply with BHMA A156.1, Grade 1.
 - 1. Provide hinges on every swinging door.
 - 2. Provide following quantity of butt hinges for each door:
 - a. Doors up to 60 inches High: Two hinges.
 - b. Doors From 60 inches High up to 90 inches High: Three hinges.

2.03 CYLINDRICAL LOCKS

- A. Manufacturers:
 - 1. Corbin Russwin, Sargent, or Yale; an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 2. BEST, dormakaba Group; 8K Series: www.bestaccess.com/#sle.
 - 3. Hager Companies: www.hagerco.com/#sle.
 - 4. Schlage, an Allegion brand: www.allegion.com/us/#sle.
 - 5. Substitutions: See Section 01 6000 - Product Requirements.
- B. Cylindrical Locks (Bored): Comply with BHMA A156.2, Grade 1, 4000 Series.
 - 1. Bored Hole: 2-1/8 inch diameter.
 - 2. Latchbolt Throw: 1/2 inch, minimum.

3. Backset: 2-3/4 inch unless otherwise indicated.
4. Strikes: Provide manufacturer's standard strike for each latchset or lockset with strike box and curved lip extending to protect frame in compliance with indicated requirements.
 - a. Finish: To match lock or latch.
5. Provide a lock for each door, unless otherwise indicated that lock is not required.
6. Trim: Provide lever handle or pull trim on outside of each lock, unless otherwise indicated.

2.04 THRESHOLDS

- A. Manufacturers:
 1. Pemko; an Assa Abloy Group company: www.assaabloydss.com/#sle.
 2. Hager Companies: www.hagerco.com/#sle.
 3. National Guard Products, Inc: www.ngpinc.com/#sle.
 4. Zero International, Inc: www.zerointernational.com/#sle.
 5. Substitutions: See Section 01 6000 - Product Requirements.
- B. Thresholds: Comply with BHMA A156.21.
 1. Provide threshold at each exterior door, unless otherwise indicated.
 2. Type: Rabbeted with door stop.
 3. Material: Aluminum.
 4. Threshold Surface: Fluted horizontal grooves across full width.
 5. Field cut threshold to profile of frame and width of door sill for tight fit.
 6. Provide non-corroding fasteners at exterior locations.

2.05 WEATHERSTRIPPING AND GASKETING

- A. Manufacturers:
 1. Pemko; an Assa Abloy Group company: www.assaabloydss.com/#sle.
 2. Hager Companies: www.hagerco.com/#sle.
 3. National Guard Products, Inc: www.ngpinc.com/#sle.
 4. Zero International, Inc: www.zerointernational.com/#sle.
 5. Substitutions: See Section 01 6000 - Product Requirements.
- B. Weatherstripping and Gasketing: Comply with BHMA A156.22.
 1. Head and Jamb Type: Adjustable.
 2. Door Sweep Type: Encased in retainer.
 3. Material: Aluminum, with neoprene weatherstripping.
 4. Provide weatherstripping on each exterior door at head, jambs, and meeting stiles of door pairs, unless otherwise indicated.
 5. Provide door bottom sweep on each exterior door, unless otherwise indicated.

2.06 FINISHES

- A. Finishes: Provide door hardware of same finish, unless otherwise indicated.
 1. Primary Finish: 625; bright chromium plated over nickel, with brass or bronze base material (former US equivalent US26); BHMA A156.18.
 2. Secondary Finish: 626; satin chromium plated over nickel, with brass or bronze base material (former US equivalent US26D); BHMA A156.18.
 - a. Use secondary finish in kitchens, bathrooms, and other spaces containing chrome or stainless steel finished appliances, fittings, and equipment; provide primary finish on one side of door and secondary finish on other side if necessary.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.

3.02 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.

- B. Use templates provided by hardware item manufacturer.
- C. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item. As indicated in following list; unless noted otherwise in Door Hardware Schedule or on drawings.
 - 1. For Steel Doors and Frames: Install in compliance with DHI (LOCS) recommendations.
- D. Set exterior door thresholds with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal; anchor thresholds with stainless steel countersunk screws.

3.03 ADJUSTING

- A. Adjust work under provisions of Section 01 7000 - Execution and Closeout Requirements.
- B. Adjust hardware for smooth operation.
- C. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

3.04 CLEANING

- A. Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.
- B. Clean adjacent surfaces soiled by hardware installation.

3.05 PROTECTION

- A. Protect finished Work under provisions of Section 01 7000 - Execution and Closeout Requirements.
- B. Do not permit adjacent work to damage hardware or finish.

END OF SECTION

SPECIFICATIONS FOR ASBESTOS ABATEMENT & MICROBIAL REMEDIATION

FOR

SAFE HAVEN CARDINAL COVE CABIN RENOVATIONS PHASE 1

Project Designed by;

Lee Ritter, C.I.E.C, C.E.O.P., F.S.R.T., A.S.D, Journeyman Water Restoration



**2014 West Pinhook Road
Suite 200
Lafayette, LA 70508**



April 17, 2025

RCE PROJECT NO.: 255025



INDEX TO SPECIFICATIONS

SAFE HAVEN CARDINAL COVE RENOVATIONS PHASE 1 ENVIROMENTAL DESIGN

SAFE HAVEN CAMPUS, 23929 CARDINAL COVE, MANDEVILLE LA

SECTION

<u>No.</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
------------	--------------------	-------------

DIVISION A - CONDITIONS OF THE CONTRACT

NOT APPLICABLE

DIVISION 1 - GENERAL REQUIREMENTS

02 82 10	SUMMARY OF WORK - ASBESTOS.....	02 82 10-1 thru 10
02 82 12	COORDINATION - ASBESTOS.....	02 82 12-1 thru 12
02 82 21	REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS.....	02 82 21-1 thru 14
02 82 23	CODES, REGULATIONS AND STANDARDS - ASBESTOS	02 82 23-1 thru 6
02 82 24	SUBMITTALS CHECKLIST – ASBESTOS ABATEMENT.....	02 82 24-1 thru 4
02 82 25	SUBMITTALS - ASBESTOS ABATEMENT	02 82 25-1 thru 8
02 82 30	AIR MONITORING - ASBESTOS ABATEMENT.....	02 82 30-1 thru 7
02 82 40	TEMPORARY FACILITIES-ASBESTOS.....	02 82 40-1 thru 10
02 82 60	TEMPORARY PRESSURE DIFFERENTIAL AIR CIRCULATIONS SYSTEM – ASBESTOS.....	02 82 60-1 thru 9
02 82 61	TEMPORARY ENCLOSURES - ASBESTOS	02 82 61-1 thru 10
02 82 73	WORKER PROTECTION - ASBESTOS ABATEMENT	02 82 73-1 thru 6
02 82 74	CERTIFICATE WORKER PROTECTION – ASBESTOS ABATEMENT	02 82 74-1
02 82 75	RESPIRATORY PROTECTION - ASBESTOS.....	02 82 75-1 thru 10
02 82 76	RESPIRATORY PROTECTION INITIAL ASSESSMENT	02 82 76-1 thru 2
02 82 77	DECONTAMINATION UNITS - ASBESTOS.....	02 82 77-1 thru 12
02 82 78	MATERIALS AND EQUIPMENT- ASBESTOS	02 82 78-1 thru 6
02 82 79	SUBSTITUTIONS - ASBESTOS ABATEMENT	02 82 79-1 thru 4
02 82 80	PROJECT/CONTRACTOR CLOSEOUT- ASBESTOS ABATEMENT	02 82 80-1 thru 4
02 82 81	PROJECT DECONTAMINATION - ASBESTOS ABATEMENT	02 82 81-1 thru 10
02 82 82	CERTIFICATE VISUAL INSPECTION – ASBESTOS ABATEMENT	02 82 82-1
02 82 83	CLEANING AND DECONTAMINATION PROCEDURES ASBESTOS	
	ABATEMENT	02 82 83- 1 thru 4
02 82 84	WORK AREA CLEARANCE - ASBESTOS ABATEMENT	02 82 84 -1 thru 6

DIVISION 2 THROUGH DIVISION 16

02 83 30	REMOVAL OF ASBESTOS-CONTAINING MATERIALS	02 83 30-1 thru 4
02 83 32	DISPOSAL OF REGULATED ASBESTOS-CONTAINING MATERIAL	02 83 32-1 thru 4
02 83 33	RESILIENT FLOORING REMOVAL AGGRESSIVE ASBESTOS ABATEMENT	02 83 33-1 thru 9

DIVISION 3 - GENERAL REQUIREMENTS

02 85 00	RELATED DOCUMENTS.....	02 85 00-1
02 85 00	SUMMARY	02 85 00-1 thru 2
02 85 00	GOVERNING REQUIREMENTS	02 85 00-2
02 85 00	BACKGROUND INFORMATION.....	02 85 00-3
02 85 00	PERSONNEL REQUIREMENTS.....	02 85 00-3 thru 4
02 85 00	SUBMITTALS.....	02 85 00-4 thru 6
02 85 00	RECORDS KEEPING	02 85 00-6
02 85 00	REFERENCE STANDARDS	02 85 00-7

DIVISION 4 - PRODUCTS

02 85 00	PERSONAL PROTECTIVE EQUIPMENT	02 85 00-8
02 85 00	APPROVED MATERIALS.....	02 85 00-8 thru 9
02 85 00	REMEDIATION.....	02 85 00-9

DIVISION 5 - EXECUTION

02 85 00	PREPERATION.....	02 85 00-9
02 85 00	EQUIPMENT.....	02 85 00-9 thru 11
02 85 00	CONTAINMENT	02 85 00-11 thru 13
02 85 00	PROCEDURES.....	02 85 00-13 thru 15
02 85 00	STRUCTURE COMPONENT REMEDIATION PROCEDURES	02 85 00-15 thru20
02 85 00	POST REMEDIATION ASSESSMENT AND CLEARANCE CRITERIA	02 85 00-20 thru22

DRAWINGS

DWG	CARDINAL COVE ABATEMENT, LEAD REMVOAL AND PROTOCOL	DWG- 1 thru 11
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SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Project consists of asbestos removal and related activities at the facility as indicated on plans.
 - 1. Project Location: As Indicated on Plans
 - 2. Owner: Safe Haven
- B. Contract Documents, dated for February 14, 2025 were prepared for the Project by Ritter Consulting Engineers Ltd., 2014 W. Pinhook Rd. Suite 200, Lafayette, LA 70508.
- C. The Work consists of asbestos removal and selected demolition work from the areas designated on the drawings. The erecting of barriers and the removal and disposal of building material coated with asbestos as indicated in the drawings.
 - 1. The Work, as indicated on the plans, may include any or all of the following:
 - a. The removal of asbestos-containing floor tile and associated mastic in areas indicated on the drawings.
 - b. The removal of asbestos-containing drywall and mud as indicated on the drawings.
 - c. The chemical stripping of asbestos building components as indicated on the drawings.
 - d. The removal of partition walls in order to access asbestos-containing floor tile and associated mastic.
 - e. The containment, transport and disposal of all waste in full accordance with all pertinent local, State and federal regulations.
 - f. A Schedule of Values shall be provided per work area (each floor and exterior work).
 - g. A Schedule of Work shall be submitted prior to the start of work to allow the Owner to review to gain portion access as needed.

SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

- D. The Work will be done under a single prime contract.

1.3 WORK SEQUENCE

- A. The Work will be conducted as indicated on the drawings. Abatement of asbestos will be performed concurrently or in sequence so that all abatement work is completed within the time specified.

1.4 ASBESTOS-CONTAINING MATERIALS

- A. The Work of this contract involves activities that will disturb asbestos-containing materials (ACM) or presumed asbestos-containing materials (PACM). The location of ACM known to be present at the worksite is set forth in the drawings. If any other ACM or PACM is found, notify the owner, other employers and employees the about the location and quantity of the ACM or PACM within 24 hours of the discovery.

1.5 ASBESTOS HEALTH RISK

- A. The disturbance or dislocation of ACM may cause asbestos fibers to be released into the building's atmosphere, thereby creating a potential health risk to workers and building occupants. Apprise all workers, supervisory personnel, subcontractors and consultants who will be at the job site of the seriousness of the risk and of proper work procedures which must be followed.
- B. Where in the performance of the work, workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified ACM, take appropriate continuous measures as necessary to protect all building occupants from the risk of exposure to airborne asbestos. Such measures shall include the procedures and methods described herein, and compliance with regulations of applicable federal, state and local agencies.

C POTENTIAL LEAD HAZARD:

The disturbance or dislocation of lead-based painted materials may cause lead dust to be released into the building's atmosphere, thereby creating a potential health hazard to workers and building occupants. Apprise all workers, supervisory personnel, subcontractors and consultants who will be at the job site of the seriousness of the hazard and of proper work procedures which must be followed.

Where in the performance of the work, workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified lead-based paint, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard

SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

of exposure to lead dust. Such measures shall include the procedures and methods described herein, and compliance with regulations and guidelines of applicable Federal, state and local agencies.

1.6 CONTRACTOR USE OF PREMISES

- A. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated. The Owner will not have access to work area. An office area shall be provided with basic office amenities to include minimum of one desk, chair and 2 2 plug-110 outlets.
 - 1. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- B. Use of the Existing Building: Maintain the existing building in a weather tight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.
 - 1. Smoking: Smoking or open fires will not be permitted within the building enclosure or on the premises.
 - 2. Toilet Rooms: Use of existing toilets within the building, by the Contractor's personnel, will not be permitted.

1.7 AIR MONITORING BY THE OWNER

- A. The Owner will contract for air monitoring. Air monitoring will be conducted outside of the work area during the work, and for clearance sampling at the end of the project
 - 1. Outside of the Work Area: The Owner's air monitoring contractor will sample air outside of the work area to detect faults in the work area isolation such as:
 - a. Contamination of the building outside of the work area with airborne asbestos fibers.
 - b. Failure of filtration or rupture in the differential pressure system.
 - c. Contamination of air outside the building envelop with airborne asbestos fibers.

SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

- B. Work area clearance: Clearance air sampling by the air monitoring contractor at the completion of asbestos abatement work is described in Section 02 82 81 Project Decontamination.
- C. Air monitoring required by OSHA is work of the Contractor and is not covered in this section.
- D. The following air monitoring firms are approved and acceptable. Use one of these approved firms:
 - 1. BBL Environmental P. 337-793-6253
 - 2. Breathe Safe P. 225-772-5103
 - 3. Partners Environmental P. 337-250-7556
 - 4. RPM Environmental P. 225-571-7062

1.8 SCHEDULE OF AIR SAMPLES BY AIR MONITORING CONTRACTOR

- A. Sample cassettes: Samples will be collected on 25 mm. cassettes as follows:
 - 1. PCM: 0.8 micrometer mixed cellulose ester.
 - 2. TEM: 0.45 micrometer mixed cellulose ester or 0.40 micrometer polycarbonate, with 5.0 micron mixed cellulose ester backing filter.
- B. Number and Volume of Samples: The number and volume of air samples given in the schedules is approximate. The exact number and volume of samples collected by the Contractor may vary depending upon job conditions and the analytical method used.
- C. Sample Volume and Sensitivity:
 - 1. PCM: The sample volumes collected by the Contractor's air monitoring firm will be determined by the following formula:

$$Volume = \frac{\left(\frac{Number\ of\ Fibers}{Area\ of\ 100\ fields} \right) \times Total\ Filter\ Area}{\left(\frac{Limit\ Value}{4} \right)}$$

SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

Where:

Number of fibers = 5 fibers/100 fields, based on a limit of detection (LOD) of 7 fibers/mm² on the filter
 Area of 100 fields = 0.785mm²
 Total Filter Area = 385mm²
 Limit Value = as specified in the schedules of samples below

- a. For purposes of this specification, the sample volume calculated above will be considered to be of sufficient size so that there is a 95 percent level of confidence that the value measured by each individual sample at the limit of detection (LOD) is less than or equal to the limit values specified below.
 - b. For purposes of this specification, the Limit of Detection (LOD) is defined as 7 fibers/mm² on the filter or 5 fibers/100 fields.
 - c. For purposes of this specification overloaded samples will be considered as exceeding the applicable limit value.
2. TEM: Analytical Sensitivity of 0.05 structures/cc as set forth in the AHERA regulation.

B. Base Line:

1. Before Start of Work: The Air Monitoring Contractor will secure air samples to establish a base line.
2. PCM Samples: (guidelines for Air Monitoring Contractor)

Location Sampled	Number of Samples	Limit Value (Fibers/cc)	Approx. Volume (Liters)	Rate (Liters/Minute)
Outside Each Work Area	5	0.01	<1,000>	1-10
Outside Building	5	0.01	<1,000>	1-10

3. TEM Samples: (guidelines for Air Monitoring Contractor)

Location Sampled	Number of Samples	Analytical Sensitivity (Struct./cc.)	Approx. Volume (Liters)	Rate (Liters/Minute)
Outside Each Work Area	1	0.005	1,300	1-10
Outside Building	1	0.005	1,300	1-10

SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

4. Base Line (PCM): a level expressed in fibers per cubic centimeter which is 25 percent greater than the largest of the following:
 - a. Average of the PCM samples collected outside each Work Area
 - b. Average of the PCM samples collected outside the building
 - c. 0.01 fibers per cubic centimeter
5. Samples collected for TEM analysis will be held without analysis. These samples will be analyzed under the conditions and terms set forth in "Fibers Counted" and "Affect On Contract Sum".

C. Daily

1. From start of work of Section 02 82 61 Temporary Enclosures through the work of Section 02 82 81 Project Decontamination, the Air Monitoring Contractor must take samples outside of each work area.
2. Sample volume and sensitivity: If samples are overloaded at the sample volume required for a limit value equal to the Stop Action Levels or Immediate Stop Action Levels given later in this section, the level is considered to have been exceeded.
3. PCM Samples (guidelines for Air Monitoring Contractor):

Location Sampled	Number of Samples	Limit Value (Fibers/cc)	Approx. Volume (Liters)	Rate (LPM)
Outside Each Work Area at Critical Barrier	1	0.01	<1,000>	1-10
Clean Room	1	0.01	<1,000	1-10
Equipment Decon	1	0.01	<1,000>	1-10
Outside Building	1	0.01	<1,000>	1-10
Output of Pressure Differential System	1	0.01	<1,000>	1-10

4. Additional samples may be taken at the General Contractor's discretion. If airborne fiber counts exceed allowed limits additional samples may be taken as necessary to monitor fiber levels.

SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

5. Additional air samples shall be taken for the determination of lead dust concentrations and PEL in each work area containment and adjacent to the entrance of the work area containment.

1.9 ANALYTICAL METHODS USED BY THE AIR MONITORING CONTRACTOR

- A. The following methods will be used by the Air Monitoring Contractor in analyzing filters used to collect air samples. Sampling rates may be varied from printed standards to allow for high volume sampling.
 1. Phase Contrast Microscopy (PCM) will be performed using the NIOSH 7400 method.
 2. Transmission Electron Microscopy (TEM) will be performed using the analysis method set forth in the AHERA regulation 40 CFR Part 763 Appendix A.
 3. Atomic Absorption Spectroscopy or Inductively Coupled Plasma Emission Spectroscopy will be used for the analysis of Surface Lead dust wipe samples, Air samples.

1.10 LABORATORY TESTING BY AIR MONITORING CONTRACTOR

- A. The services of a testing laboratory must be employed by the Air Monitoring Contractor to collect air samples and to perform laboratory analyses of the air samples. A microscope and technician will be set up at the job site, or samples will be sent overnight on a daily basis, so that verbal reports on air samples can be obtained within 24 hours. The Owner and Designer will have access to all air monitoring tests and results.
- B. The Owner and Designer will have access to all air monitoring tests and results upon request no later than 30 days from the completion of work.

1.11 FIBERS AND STRUCTURES

- A. Fibers Counted: The following procedure will be used to resolve any disputes regarding fiber types when a project has been stopped due to excessive airborne fiber counts.
 1. Large Fibers: "Airborne Fibers" referred to above include all fibers regardless of composition as counted by phase contrast microscopy (PCM), unless additional analysis by transmission or scanning electron microscopy demonstrates to the satisfaction of the Designer that non-asbestos fibers are being counted. "Airborne Fibers" counted in samples analyzed by transmission electron microscopy shall be asbestos fibers,

SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

greater than 5 microns in length. For purposes of stop action levels, subsequent to analysis by electron microscopy, the number of "Airborne Fibers" shall be determined by multiplying the number of fibers, regardless of composition, counted by PCM by the proportion of fibers that are asbestos as determined by TEM (a number equal to, asbestos fibers counted, divided by all fibers counted in the electron microscopy analysis).

2. Small Structures: "Airborne Fibers" referred to above include asbestos structures (fibers, bundles, clusters or matrices) of any diameter and any length greater than 0.5 microns.

1.12 ADDITIONAL TESTING

- A. The Owner may conduct air monitoring and laboratory testing. If he elects to do this the cost of such air monitoring and laboratory testing shall be at no additional cost to the General Contractor.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 STOP ACTION LEVELS

- A. Outside Work Area: If any air sample taken outside of the Work Area exceeds the base line established in Part 1 of this section, immediately and automatically stop all work except corrective action. The Designer will evaluate the situation and advise the General Contractor in writing of the appropriate response.
 1. If the high reading was the result of a failure of Work Area isolation measures initiate the following actions:
 - a. Immediately erect new critical barriers as set forth in Section 02 82 61 Temporary Enclosures to isolate the affected area from the balance of the building. Erect Critical Barriers at the next existing structural isolation of the involved space (e.g. wall, ceiling, floor).
 - b. Decontaminate the affected area in accordance with Section 02 82 83 Cleaning & Decontamination Procedures.
 - c. Require that respiratory protection as set forth in Section 02 82 75 Respiratory Protection be worn in affected area until area is cleared for re-occupancy in accordance with Section 02 82 81 Project Decontamination.
 - d. Leave Critical Barriers in place until completion of work and insure that the operation of the pressure differential system in the Work Area results in a flow of air from the balance of the building into the affected area.

SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

- e. If the exit from the clean room of the personnel decontamination unit enters the affected area, establish a decontamination facility consisting of a Shower Room and Changing Room as set forth in Section 02 82 77 Decontamination Units at entry point to affected area.
 - f. After Certification of Visual Inspection in the Work Area remove critical barriers separating the work area from the affected area. Final air samples will be taken within the entire area as set forth in Section 02 82 81 Project Decontamination.
- 2. If the high reading was the result of other causes, initiate corrective action as determined by the Designer.
- B. Effect on Contract Sum: Complete corrective work with no change in the Contract Sum if high airborne fiber counts were caused by the General Contractor's activities. The General Contract Sum and schedule will be adjusted for additional work caused by high airborne fiber counts beyond the Contractor's control.

3.2 STOP WORK

- A. If the Owner or the Project Designer presents a written stop work order, immediately and automatically conform to that stop work order, while maintaining temporary enclosures and pressure differential. Do not recommence abatement work until authorized in writing by Owner or Project Designer.
- B. Immediately initiate the following actions: After being presented with a stop work order immediately:
 - 1. Cease all asbestos removal activities, or any other activities that disturbs ACM.
 - 2. Repair any fallen, ripped or otherwise failed work area isolation measures.
 - 3. Maintain in operation all work area isolation measures including those required by Sections 02 82 61 Temporary Enclosures, 02 82 60 Temporary Pressure Differential & Air Circulation System, and 02 82 77 Decontamination Units.
 - 4. Maintain all worker protections including those required by Sections 02 82 73 Worker Protection - Asbestos Abatement, and 02 82 75 Respiratory Protection.
 - 5. Fog the air in the work area with a mist of amended water to reduce airborne fiber levels.

SECTION 02 82 10 - SUMMARY OF THE WORK - ASBESTOS ABATEMENT

- C. Do not recommence work until authorized in writing by the Owner or Designer.

END OF SECTION 02 82 10

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and supervisory requirements necessary for coordinating construction operations including, but not necessarily limited to, the following:
 - 1. General project coordination procedures.
 - 2. Conservation.
 - 3. Contingency Plan.
 - 4. Project Directory.
 - 5. Notifications.
 - 6. Pre-Construction Inspection.
 - 7. Administrative and supervisory personnel.
 - 8. Pre-Construction Conference.
 - 9. Progress Meetings.
 - 10. Coordination meetings.
 - 11. Record Keeping.
 - 12. Special Reports.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. “Section 02 82 25 - Submittals - Asbestos Abatement” for administrative procedures regarding submittals.

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

2. “Section 02 82 78 - Materials and Equipment - Asbestos Abatement” for coordinating general installation.
3. “Section 02 82 80 – Project/Contractor Closeout - Asbestos Abatement” for coordinating contract closeout.

1.3 COORDINATION

- A. Owner Occupancy: Coordinate construction operations and scheduling with partial occupancy requirements of the Owner and the Owner’s use of utilities.
- B. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly completion of each part of the Work. Coordinate construction operations included under different Sections that depend on each other for proper installation, connection, and operation.
 1. Schedule construction operations in the sequence required to obtain the best results where execution of one part of the Work depends on execution of other components, before or after its own execution.
 2. Coordinate installation of different components to assure maximum accessibility for required maintenance, service, and repair.
 3. Make provisions to accommodate items scheduled for later installation.
- C. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
 1. Prepare similar memoranda for the Owner and separate contractors where coordination of their work is required.
- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 1. Preparation of schedules.
 2. Installation and removal of temporary facilities.
 3. Delivery and processing of submittals.
 4. Progress meetings.

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

5. Project closeout activities.
- E. Conservation: Coordinate construction operations to assure that operations are carried out with consideration given to conservation of energy, water, and materials.
 1. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work.

1.4 PLAN OF ACTION

- A. Prepare a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination areas, the sequencing of asbestos work, the interface of trades involved in the performance of work, methods to be used to assure the safety of building occupants and visitors to the site, disposal plan including location of approved disposal site, and a detailed description of the methods to be employed to control pollution. Expand upon the use of portable HEPA ventilation system, closing out of the building's HVAC system, method of removal to prohibit visible emissions, and packaging of removed asbestos debris.
 1. Submit the Plan of Action to the Designer for information only, prior to the start of work.

1.5 CONTINGENCY PLAN

- A. Contingency Plan: Prepare a contingency plan for emergencies or any other event that may require breaching of work area containment or modification or abridgement of decontamination or work area isolation procedures. Include in this plan procedures for performing electrical and mechanical repairs inside containment after abatement work has begun. Include in plan specific procedures for decontamination or work area isolation. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency. Items to be addressed in the plan include, but are not limited to the following:
 1. Fire
 2. Accident
 3. Life threatening injury
 4. Non life threatening injury
 5. Rescue

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

6. Power Failure
7. Pressure differential system failure
8. Breach of containment
9. Electrical faults or shock
10. Excessive heat / cold (if/when such limits are specified)
11. Supplied air system failure
12. Water leaks
13. Waste spills
14. Unauthorized entry into work area
15. Elevated air samples outside of containment
16. Repairs inside containment
17. Toxic releases

1.6 PROJECT DIRECTORY

- A. Develop a directory of all entities involved in the project. Include the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site. Identify individuals, their duties and responsibilities. List business name, contact person, normal business and emergency telephone, pager and fax numbers and addresses of:
 1. Owner, Designer, and Project Administrator.
 2. Contractor's General Superintendent, supervisory personnel and Contractor's home office.
 3. Emergency services including but not limited to fire, ambulance, doctor, hospital, police, power company, telephone company.
 4. Local, state, and federal agencies with jurisdiction over the project.
- B. Post: Post copies of the Project Directory in the project meeting room, the temporary field office, each temporary telephone, and at entrance to clean room of Personnel Decontamination Unit

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

1.7 NOTIFICATIONS

- A. Notify other entities at the job site of the nature of the asbestos abatement activities, location of asbestos-containing materials (ACM), requirements relative to asbestos set forth in these specifications and applicable regulations. Advance notification will be made to:
 - 1. Owners of the building/facility;
 - 2. Employees who will perform asbestos abatement work or related activities, or who will be in the work area during the course of the work of this contract.
 - 3. Employers of employees who work and/or will be working in adjacent areas during the course of the work of this contract.
- B. Notify emergency service agencies including fire, ambulance, police or other agency that may service the abatement work site in case of an emergency. Notification is to include methods of entering work area, emergency entry and exit locations, modifications to fire notification or firefighting equipment, and other information needed by agencies providing emergency services.
- C. Notifications of Emergency: Any individual at the job site may notify emergency service agencies if necessary without effect on this Contract or the Contract Sum.

1.8 PRE-CONSTRUCTION INSPECTION

- A. Inspect areas in which work will be performed, prior to commencement of work. Prepare a listing of damage to structure, surfaces, equipment or of surrounding properties which could be misconstrued as damage resulting from the work. Photograph or videotape existing conditions as necessary to document conditions. Submit to Designer for record purposes prior to starting work.

1.9 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. Project Supervisor: Provide a full-time Project Supervisor at the work site who is experienced in administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, project scheduling, management, etc. This person is the Contractor's Representative, and will function as the "competent person" at the work site responsible for compliance with all applicable federal, state and local regulations, particularly those relating to ACM.
- B. Training: The General Superintendent must have a current certification from a state approved trainer for a course that meets the requirements of the EPA Model

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

Accreditation Plan for asbestos abatement contractor/supervisor (40 CFR part 763, Subpart E, Appendix C).

- C. Experience: The General Superintendent must have demonstrable experience in the successful management of asbestos abatement projects that are similar to the work of this contract.
 - 1. The General Superintendent must have a minimum of 2 years experience in the on-site management of asbestos abatement projects.
- D. Competent Person: The General Superintendent is to be a Competent Person as required by OSHA in 29 CFR 1926.
- E. Accreditation: The General Superintendent, Supervisors and Forepersons are to be accredited as an Asbestos Abatement Supervisor in accordance with the AHERA regulation 40 CFR Part 763, Subpart E, Appendix C.

1.10 PRE-CONSTRUCTION CONFERENCE

- A. An initial progress meeting, recognized as "Pre-Construction Conference" will be convened by the Designer prior to start of any work. The preconstruction conference will be scheduled before start of construction, at a time convenient to the Owner and the Designer. Meet at the project site, or as otherwise directed, with General Superintendent, Owner, Designer, Project Administrator, and other entities concerned with the asbestos abatement work.
- B. Attendees: Authorized representatives of the Owner, Designer, and their consultants will be in attendance. An authorized representative of the Contractor and its superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
 - 1. Seventy-two (72) hours advance notice will be provided to all participants prior to convening Pre-Construction Conference.
- C. Agenda: This is an organizational meeting, to review responsibilities and personnel assignments, to locate regulated areas and temporary facilities including power, light, water, etc. Items of significance that could affect progress will be discussed, including the following:
 - 1. Tentative construction schedule.
 - 2. Critical work sequencing.

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

3. Designation of responsible personnel.
4. Procedures for processing field decisions and Change Orders.
5. Procedures for processing Applications for Payment.
6. Distribution of Contract Documents.
7. Submittal of Shop Drawings, Product Data, and Samples.
8. Preparation of record documents.
9. Use of the premises.
10. Parking availability.
11. Office, work, and storage areas.
12. Equipment deliveries and priorities.
13. Safety procedures.
14. First aid.
15. Security.
16. Housekeeping.
17. Working hours.

1.11 PROGRESS MEETINGS

- A. General: In addition to specific coordination and pre-installation meetings for each element of work, and other regular project meetings held for other purposes, the Designer will hold general progress meetings as required. These meeting will be scheduled, where possible, at time of preparation of payment request.
- B. Attendees: Representatives of the Owner and Designer will attend these meetings. In addition to representatives of the Contractor, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the work. Require each entity then involved in planning, coordination or performance of work to be properly represented at each meeting.

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

- C. Agenda: Be prepared to discuss the following items at the progress meetings. Review other items of significance that could affect progress.
- D. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to insure that current and subsequent activities will be completed within the Contract Time.
- E. Review the present and future needs of each entity present, including the following:
 - 1. Interface requirements.
 - 2. Time.
 - 3. Sequences.
 - 4. Status of submittals.
 - 5. Deliveries.
 - 6. Access.
 - 7. Site utilization.
 - 8. Temporary facilities and services.
 - 9. Hours of work.
 - 10. Hazards and risks.
 - 11. Housekeeping.
 - 12. Quality and work standards.
 - 13. Change Orders.
 - 14. Documentation of information for payment requests.

1.12 RECORD KEEPING

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

- A. Daily Log: Maintain a Daily Log (in an area accessible to the Owner, Designer and Project Administrator) as a bound, sequential, hand-written record carefully prepared daily that documents but is not limited to the following items:
 - 1. Meetings; purpose, attendees, brief discussion
 - 2. Special or unusual events, i.e. barrier breeching, equipment failures, accidents
- B. Documentation of Contractor's completion of the following:
 - 1. Inspection of work area preparation prior to start of removal and daily thereafter.
 - 2. Removal of any sheet plastic barriers
 - 3. Contractor's inspections prior to spray back, lock back, encapsulation, enclosure or any other operation that will conceal the condition of ACM or the substrate from which such materials have been removed.
 - 4. Removal of waste materials from work area
 - 5. Decontamination of equipment (list items)
 - 6. Contractor's final inspection/final air test analysis.
- C. Entry/Exit Log: Maintain within the Decontamination Unit a daily log documenting the dates and time of but not limited to, the following items:
 - 1. Visitations; authorized and unauthorized with the following information:
 - a. Name
 - b. Organization
 - c. Entry time
 - d. Exit Time
 - e. Respiratory protection
 - 2. Personnel, by name, entering and leaving the work area with the following information:
 - a. Printed Name
 - b. Identification Number
 - c. Entry Time
 - d. Exit Time
 - e. Respiratory Protection

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

- D. Air Monitoring Results: Post personnel and area air monitoring results in Decontamination Unit within 24 hours of sample collection. Post the respiratory protection requirements for the work in progress.
- E. Records in Decontamination Unit: Maintain the following documentation in the Decontamination Unit, in a location accessible to workers.
 - 1. Documentation of inspections by OSHA, EPA or local authority
 - 2. Respiratory Protection Program.
- F. Other records: Maintain other documentation in a location that is accessible to the Owner, Designer, and Project Administrator including:
 - 1. Waste Manifests and shipping records.
 - 2. Landfill receipts.
 - 3. Accident reports.

1.13 SPECIAL REPORTS

- A. General: Except as otherwise indicated, submit special reports directly to Owner within one day of occurrence requiring special report, with copy to Designer and others affected by occurrence.
- B. Reporting Unusual Events: When an event of unusual and significant nature occurs at site (examples: failure of pressure differential system, rupture of temporary enclosures), prepare and submit report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. When such events are known or predictable in advance, advise Owner in advance at earliest possible date.
- C. Reporting Accidents: Prepare and submit reports of significant accidents, at site and anywhere else work is in progress. Record and document data and actions; comply with industry standards. For this purpose, a significant accident is defined to include events where personal injury is sustained, property loss of substance is sustained, or where the event posed a significant threat of loss or personal injury, or where work was stopped for over 4 hours during a scheduled shift.
- D. Report Discovered Conditions: When an unusual condition of the building is discovered during the work (e.g. leaks, termites, corrosion) prepare and submit a special report indication condition discovered.

1.14 SUBMITTALS

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

- A. Before the Start of Work: Submit the following to the Designer in the same manner as product data. Do not begin work until these submittals are returned with designer's action stamp indicating that all submittals have been "received-not reviewed".
 - 1. Contingency Plans.
 - 2. Project Directory.
 - 3. Notifications: copy of notification sent to other entities at the work site, and to emergency service agencies.
 - 4. Pre-Construction Inspection: Report on inspection carried out as required by this section. Include copies of all photographs, video tapes, etc.
 - 5. Accreditation: Submit evidence in the form of training course certificates for the General Superintendent, Supervisors, and Forepersons as asbestos abatement supervisors in accordance with AHERA requirements. Submit evidence in the form of training course certificates that each worker is trained as an asbestos abatement worker in accordance with AHERA requirements.
 - 6. Resume: Submit resume of General Superintendent
 - 7. Schedule of Values
 - 8. OSHA Lead Awareness Training
 - 9. Asbestos Transporter License Number
 - 10. General Contractors License
 - 11. Asbestos Contractor License for State of Louisiana
- B. Submit daily: Provide two (2) copies for information purposes of all documents indicated in the following sub-sections to Project Administrator by end of the next working day after the day they are received by Contractor.
 - 1. Section on Record Keeping.
 - 2. Section on Special Reports.
- C. Project Close-out: Submit two (2) copies for information purposes of all documents indicated in the following sections at final closeout of project as a project close-out submittal.

**SECTION 02 82 12 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT
(Formerly Section 01094)**

1. Section on Record Keeping.
2. Section on Special Reports.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 02 82 12

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DEFINITIONS

- A. General: Basic contract definitions are included in the Conditions of the Contract.
 - 1. "Indicated": The term "indicated" refers to graphic representations, notes, or schedules on the Drawings, or other paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the reader locate the reference. Location is not limited.
 - 2. "Directed": Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed by the Designer, requested by the Designer, and similar phrases.
 - 3. "Approved": The term "approved," when used in conjunction with the Designer's action on the Contractor's submittals, applications, and requests, is limited to the Designer's duties and responsibilities as stated in the Conditions of the Contract.
 - 4. "Regulations": The term "regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
 - 5. "Furnish": The term "furnish" means supply and deliver to the Project Site, ready for unloading, unpacking, assembly, installation, and similar operations.
 - 6. "Install": The term "install" describes operations at the Project Site including the actual unloading, unpacking, assembly, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
 - 7. "Provide": The term "provide" means to furnish and install, complete and ready for the intended use.
 - 8. "Installer": An installer is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in the operations they are engaged to perform.

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

- a. The term "experienced," when used with the term "installer," means having a minimum of five previous projects similar in size and scope to this Project, being familiar with the special requirements indicated, and having complied with requirements of authorities having jurisdiction.
 - b. Trades: Using terms such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to trades persons of the corresponding generic name.
- 9. "Project Site" is the space available to the Contractor for performing construction activities, either exclusively or in conjunction, with others performing other work as part of the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.
- 10. "Testing Agencies": A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.
- 11. "Designer": This is the entity described as the "Architect" in AIA Document A201 "General Conditions of the Contract for Construction," or is the entity described as "Engineer" in Engineers Joint Contract Document Committee (EJCDC) Document 1910-8 "Standard General Conditions of the Construction Contract." All references to Architect or Engineer in the Contract Documents in all cases refer to the Designer. The Designer will represent the Owner during construction and until final payment is due. The Designer will advise and consult with the Owner. The Owner's instructions to the Contractor will be forwarded through the Designer.
- 12. "Project Administrator": This is the entity described as the "Project Representative" in AIA Document A201 "General Conditions of the Contract for Construction," or is the entity described as "Engineer" in Engineers Joint Contract Document Committee (EJCDC) Document 1910-8 "Standard General Conditions of the Construction Contract." The Project Administrator is a full time representative of the Owner at the job site with authority to stop the work upon written or verbal order if requirements of the Contract Documents are not met, or if in the sole judgment of the Project Administrator, Designer, or Owner, the interests of the Owner, safety of any person or the Owner's property are jeopardized by the work.
- 13. "Stop Work Order": is a written order to cease asbestos removal, encapsulation or enclosure activities. The Contractor must maintain work area enclosure, pressure differential isolation and ventilation of the work area, and decontamination units during the period that a Stop Work Order is in effect.

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

14. "General Superintendent": This is the Contractor's Representative at the work site. This person must be a Competent Person as defined by OSHA in 29 CFR 1926.
15. "Owners Rep": This is a person hired to oversee the work of the Contractor. This can include the Air Monitoring firm or others hired/employed by the Owner.

B. Definitions Relative to Asbestos Abatement:

1. "Adequately Wet" means to sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from the asbestos-containing material (ACM), then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wetted.
2. "Asbestos": The asbestiform varieties of chrysolite (serpentine), amosite (cummingtonite-grunerite), crocidolite (riebeckite), tremolite, anthophyllite, actinolite, and any of these minerals that has been chemically treated and/or altered. For purposes of the contract documents materials described in the contract documents as asbestos are to be considered as asbestos.
3. "Asbestos-Containing Material (ACM)": Any material containing more than 1 percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, Section 1, Polarized Light Microscopy.
4. "Asbestos-Containing Waste Material": any waste that contains asbestos. This term includes filters or other materials contaminated with asbestos. This term also includes regulated asbestos-containing material waste and materials contaminated with asbestos including disposable equipment and clothing.
5. "Asbestos debris": pieces of ACM that can be identified by color, texture, or composition, or dust, if the dust is determined by an accredited inspector to be ACM.
6. "Asbestos Designer": a person who determines how asbestos abatement work should be conducted and who prepares for purposes of an abatement project, plans, designs, procedures, work scope or other substantive direction or criteria.
7. "Certified Industrial Hygienist (C.I.H.)": one certified in the practice of industrial hygiene by the American Board of Industrial Hygiene.
8. "Competent person" : an individual who meets the requirements of OSHA as a "competent person" for the specific activity involved in the work. The "competent person" must meet the requirements of 29 CFR 1926.32(f), and 29 CFR 1926.1101.

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

9. "Filter": A media component used to remove solid or liquid particles from air and water.
10. "Friable Asbestos": any asbestos-containing material that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
11. "Grinding" : to reduce to powder or small fragments and includes manual or mechanical chipping or drilling.
12. "HEPA Filter": A High Efficiency Particulate Air (HEPA) filter capable of trapping and retaining 99.97 percent of all mono-dispersed particles of 0.3 microns in diameter.
13. "HEPA Filter Vacuum Collection Equipment (or vacuum cleaner)": High efficiency particulate air filtered vacuum collection equipment with a HEPA filter.
14. "Intact" : that the ACM has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix.
15. "Leak-tight" : that solids or liquids cannot escape or spill out. It also means dust-tight.
16. "Negative Pressure Enclosure (NPE) ": A pressure differential and ventilation system where the work area is maintained at a negative pressure relative to air pressure outside the work area.
17. "Nonfriable Material" : any material that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure and has not been rendered friable.
18. "Personal Monitoring": Sampling of the asbestos fiber concentrations within the breathing zone of an employee.
19. "Surfacing material" : material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes).
20. "Thermal system insulation (TSI)" : insulation applied to pipes, fittings, boilers, breeching, tanks, ducts or other components to prevent heat loss or gain.
21. "Time Weighted Average (TWA)": The average concentration of a contaminant in air during a specific time period as determined by the method prescribed in Appendix A of 29 CFR part 1926.1101.

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

21. "Visible Emissions": Any emissions containing particulate material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
22. "Working Day" : Monday through Friday and includes holidays that fall on any of the days Monday through Friday as indicated in the notification requirements.

1.3 SPECIFICATION FORMAT AND CONTENT EXPLANATION

- A. Specification Format: These Specifications are organized into Divisions and Sections based on CSRF's 16-Division format and MasterFormat's numbering system.
- B. Specification Content: This Specification uses certain conventions regarding the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:
 1. Abbreviated Language: Language used in Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be interpolated as the sense requires. Singular words will be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates.
 2. Streamlined Language: The Specifications generally use the imperative mood and streamlined language. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the Text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor or by others when so noted.

1.4 INDUSTRY STANDARDS

- A. Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with the standards in effect as of the date of the Contract Documents.
- C. Conflicting Requirements: Where compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer to the Designer before proceeding for a decision on requirements that are different but apparently equal, and where it is uncertain which requirement is the most stringent.

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum acceptable. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of the requirements. Refer uncertainties to the Designer for a decision before proceeding.
- D. Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 1. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source.
- E. Standards: which apply to asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:
 1. American National Standards Institute (ANSI)

OPERATIONS	HEADQUARTERS
25 West 43 rd Street	1819 L Street NW
Fourth Floor	Sixth Floor
New York, New York 10036	Washington, DC 20036
p.(212) 642-4900 f. (212) 398-0023	p. (202) 293-8020 f. (202) 293-9287
www.ansi.org	

 - a. Fundamentals Governing the Design and Operation of Local Exhaust Systems Publication Z9.2
 - b. Practices for Respiratory Protection Publication Z88.2
 2. American Society for Testing and Materials (ASTM)

100 Bar Harbor Drive
P.O. Box C700
West Conshohocken, PA 19428-2959
p. (610) 832-9500 f. (610) 832-9555
www.astm.org

 - a. Safety and Health Requirements Relating to Occupational Exposure to Asbestos E 849
 - b. ASTM Standard Practice for Encapsulants for Spray-or-Trowel-Applied Friable Asbestos-Containing Building Materials E1494
- F. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviations, as referenced in the Contract Documents, are defined to mean the associated names. Names and addresses are subject to change and are believed, but are not assured, to be accurate and up-to-date as of the date of the Contract Documents.

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

1. ACI American Concrete Institute
P.O. Box 9094 38800 Country Club Drive
Farmington Hills, MI 48333 Farmington Hills, MI 48331
p. (248) 848-3700 f. (248) 848-3701
www.concrete.org
2. ACIL American Council of Independent Laboratories
1629 K St., NW
Suite 400
Washington, DC 20006-1633
p. (202) 887-5872 f. (202) 887-0021
www.acil.org
3. ACPA American Concrete Pipe Association
1303 West Walnut Hill Lane
Suite 305
Irving, TX 75038-3008
p. (972) 506-7216 f. (972) 506-7682
www.concrete-pipe.org
4. ACGIH American Conference of Governmental Industrial Hygienists
1330 Kemper Meadow Dr.
Cincinnati, OH 45240
p. (513) 742-2020 Customers/members p. (513) 742-6163 administrative
f. (513) 742-3355
www.acgih.org
5. AIA The American Institute of Architects
1735 New York Ave., NW
Washington, DC 20006-5292
p. (202) 626-7300 f. (202) 626-7547
www.aia.org
6. AIHA American Industrial Hygiene Assoc.
2700 Prosperity Ave
Suite 250
Fairfax, VA 22031
p. (703) 849-8888 f. (703) 207-3561
www.aiha.org
7. ANSI American National Standards Institute
OPERATIONS HEADQUARTERS
25 West 43rd Street 1819 L Street NW
Fourth Floor Sixth Floor
New York, New York 10036 Washington, DC 20036
p.(212) 642-4900 f. (212) 398-0023 p. (202) 293-8020 f. (202) 293-9287
www.ansi.org

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

8. ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers
1791 Tullie Circle, NE
Atlanta, GA 30329
p. (404) 636-8400 f. (404) 321-5478
www.ashrae.org9. ASME American Society of Mechanical Engineers
9. HEADQUARTERS WASHINGTON CENTER
Three Park Avenue 1828 L. Street NW Suite 906
New York, NY 10016-5990 Washington, DC 20036-5104
p. (212) 591-7158 or (800) 843-2763 p. (202) 785-3756 f. (202) 429-9417
f. (212) 591-7739
www.asme.org
10. ASPE American Society of Plumbing Engineers
8614 Catalpa Avenue
Suite 1007
Chicago, IL 60656-1116
p. (773) 693-2773 f. (773) 695-9007
www.aspe.org
11. ASTM American Society for Testing and Materials
100 Bar Harbor Drive
P.O. Box C700
West Conshohocken, PA 19428-2959
p. (610) 832-9500 f. (610) 832-9555
www.astm.org
12. CGA Compressed Gas Assoc.
4221 Walney Road
Fifth Floor
Chantilly, VA 20151-2923
p. (703) 788-2700 f. (703) 961-1831
www.cganet.com
13. FM Factory Mutual Systems
CORPORATE
1301 Atwood Avenue
P.O. Box 7500
Johnston, RI 02919
p. (401) 275-3000 f. (401) 275-3029
www.fmglobal.com
14. GA Gypsum Association
810 First St., NE
Suite 510
Washington, DC 20002

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

p. (202) 289-5440 f. (202) 289-3707
www.gypsum.org

15. IEEE Institute of Electrical and Electronic Engineers
Three Park Avenue
17th Floor
New York, NY 10016-5997
p. (212) 419-7900 f. (212) 752-4929
www.ieee.org
16. NETA InterNational Electrical Testing Assoc.
3050 Old Centre Avenue
Suite 102
Portage, MI 49024
p. (269) 488-6382 f. (269) 488-6383
www.netaworld.org
17. IRI Industrial Risk Insurers
P.O. Box 5010
85 Woodland St.
Hartford, CT 06102-5010
(860) 520-7412
18. ISA Instrument Society of America
P.O. Box 12277
67 Alexander Dr.
Research Triangle Park, NC 27709
p. (919) 549-8411 f. (919) 549-8288
www.isa.org
19. ISO International Standards Organization
1 ch.de la Voie-Creuse
Case Postale 56
Ch-1211 Geneva 20, Switzerland
p. +41 22 749 0111
f. +41 22 733 3430
www.iso.org
20. NEC National Electrical Code (from NFPA)
One Batterymarch Park
P.O. Box 9101
Quincy, MA 02169-9101
p. (617) 770-3000 or (800) 344-3555 f. (617) 770-0700
www.nfpa.org
21. NECA National Electrical Contractors Assoc.
3 Bethesda Metro Center
Suite 1100
Bethesda, MD 20814

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

p. (301) 657-3110 f. (301) 215-4500

www.necanet.org

22. NEMA National Electrical Manufacturers Association
1300 North 17th Street
Suite 1752
Rosslyn, VA 22209
p. (703) 841-3200 f. (730) 841-5900
www.nema.org

23. NFPA National Fire Protection Association
One Batterymarch Park
P.O. Box 9101
Quincy, MA 02169-9101
p. (617) 770-3000 or (800) 344-3555 f. (617) 770-0700
www.nfpa.org

24. NRCA National Roofing Contractors Assoc.
10255 W. Higgins Rd.
Suite 600
Rosemont, IL 60018-5607
p. (847) 299-9070 f. (847) 299-1183
www.nrca.net

25. RFCI Resilient Floor Covering Institute
115 Broad Street
Suite 201
LaGrange, GA 30240
p. (706) 882-3833 f. (706) 882-3880
www.rfci.com

26. UL Underwriters Laboratories
333 Pfingsten Rd.
Northbrook, IL 60062
p. (847) 272-8800 f. (847) 272-8129
www.ul.com

27. White Lung Association
PO Box 1483
Baltimore, MD 21203
p. (410) 243-5864
www.whitelung.org

- G. Federal Government Agencies: Names and titles of federal government standard- or Specification-producing agencies are often abbreviated. The following acronyms or abbreviations referenced in the Contract Documents indicate names of standard- or Specification-producing agencies of the federal government. Names and addresses are subject to change and are believed, but are not assured, to be accurate and up-to-date as of the date of the Contract Documents.

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

1. CE Corps of Engineers
(U.S. Department of the Army) HEADQUARTERS
New Orleans District Public Affairs Office Public Affairs Office
7400 Leake Avenue 441G Street
P.O. Box 60267 (zip 70160) Washington, DC 20314
New Orleans, LA 70118
p. (202) 761-0010 f. (202) 761-1803 p. (504) 862-2201
www.usace.army.mil f. (504) 862-1724
2. CFR Code of Federal Regulations
(Available from the Government Printing Office)
U.S. Government Printing Office
732 North Capitol Street NW
Washington, DC 20401
p. (202) 512-0000 or (202) 512-1957 f. (202) 512-2104
www.gpoaccess.gov
(Material is usually first published in the "Federal Register")
3. CPSC Consumer Product Safety Commission
U.S. Consumer Product Safety Commission
4330 East West Hwy
Bethesda, MD 20814
p. (301) 504-7923 f. (301) 504-0124
www.cpsc.gov
4. CS Commercial Standard
U.S. Government Printing Office
732 North Capitol Street NW
Washington, DC 20401
p. (202) 512-0000 or (202) 512-1957 f. (202) 512-2104
www.gpoaccess.gov
5. DOC Department of Commerce
U.S. Department of Commerce
1401 Constitution Ave., NW
Washington, DC 20230
p. (202) 482-2000
www.commerce.gov
6. DOT Department of Transportation
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, DC 20590

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

- p. (202) 366-4000
www.dot.gov
7. EPA Environmental Protection Agency
HEADQUARTERS REGIONAL DISTRICT 6
Ariel Rios Building Fountain Place 12th Floor
1200 Pennsylvania Ave., NW 1445 Ross Ave.
Washington, DC 20460 Dallas, TX 75202-2733
p. (202) 272-0167 p. (214) 665-2200 or (800) 887-6063
(214) 665-7113
www.epa.gov www.epa.gov/region6
8. FS Federal Specification (from GSA)
HEADQUARTERS
U.S. General Services Administration
1800 F Street NW
Washington, DC 20405
www.gsa.gov
REGIONAL DISTRICT 6
Carol Sue Henry Larry P. Rexroat
Occupational Safety & Health Spec Supervisor Environmental Scientist
12A 12th Floor #425
819 Taylor St (7PMV) 819 Taylor St
Fort Worth, TX 76102 Fort Worth, TX 76102
p. (817) 978-4436 f. (817) 978-2577 p. (817) 978-7260 or (817) 822-6618
carol.henry@gsa.gov larry.rexroat@gsa.gov
9. GSA General Services Administration
U.S. General Services Administration
1800 F Street NW
Washington, DC 20405
p. (202) 708-5082
www.gsa.gov
10. MIL Military Standardization Documents
Defense Automated Printing Service U.S. Department of Defense
700 Robbins Ave 1400 Defense Pentagon
Building 4D Washington, DC 20301-1400
Philadelphia, PA 19111-5094 p. (703) 545-6700 or
Attn: DODSSP p. (703) 428-0711
(For all printed documents)
f. (215) 697-1462
www.defenselink.mil

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

11. NIST National Institute of Standards and Technology
100 Bureau Drive
Stop 1070
Gaithersburg, MD 20899-1070
p. (301) 975-6478
www.nist.gov
12. OSHA Occupational Safety and Health Administration
HEADQUARTERS REGIONAL DISTRICT 6
200 Constitution Ave., NW 525 Griffin St., Room 602
Washington, DC 20210 Dallas, TX 75202
p. (202) 219-6091 or (800) 321-6742 p.(972) 850-4145 f.(972) 850-4149
www.osha.gov
13. PS Product Standard of NIST
100 Bureau Drive
Stop 1070
Gaithersburg, MD 20899-1070
p. (301) 975-6478
www.nist.gov
14. USPS U.S. Postal Service
475 L'Enfant Plaza, SW
Washington, DC 20260-0010
p. (202) 268-2000
www.usps.com
15. LADEQ Louisiana Department of Environmental Quality
Galvez Building
602 N. Fifth Street
P.O. Box 4301 (zip 70821)
Baton Rouge, LA 70802
p. (225) 219-5337 or (225) 219-3953 f. (225) 219-3971
www.deq.louisiana.gov
- H. Trade Union Jurisdictions: The Contractor shall maintain, and require subcontractors to maintain, complete current information on jurisdictional matters, regulations and pending actions, as applicable to construction activities. The manner in which Contract Documents have been organized and subdivided is not intended to be indicative of trade union or jurisdictional agreements.
 1. Discuss new developments at project meetings at the earliest feasible dates. Record relevant information and actions agreed upon.

SECTION 02 82 21 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

2. Assign and subcontract construction activities, and employ tradesmen and laborers in a manner that will not unduly risk jurisdictional disputes that could result in conflicts, delays, claims and losses.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 02 82 21

SECTION 02 82 23 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This section sets forth governmental regulations which are included and incorporated herein by reference and made a part of the specification. This section also sets forth those notices and permits which are known to the Owner and which either must be applied for and received, or which must be given to governmental agencies before start of work.
 - 1. Requirements include adherence to work practices and procedures set forth in applicable codes, regulations and standards.
 - 2. Requirements include obtaining permits, licenses, inspections, releases and similar documentation, as well as payments, statements and similar requirements associated with codes, regulations, and standards.

1.3 CODES, REGULATIONS AND STANDARDS

- A. General Applicability of Codes, Regulations and Standards: Except to the extent that more explicit or more stringent requirements are written directly into the Contract Documents, all applicable codes and regulations have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the Contract Documents, or as if published copies are bound herewith.
- B. Contractor Responsibility: The Contractor shall assume full responsibility and liability for the compliance with all applicable Federal, State, and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations. The Contractor shall hold the Owner and Designer harmless for failure to comply with any applicable work, hauling, disposal, safety, health or other regulation on the part of the contractor, the contractor's employees, or subcontractors.

SECTION 02 82 23 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

- C. Federal Requirements: which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:
1. OSHA: U.S. Department of Labor, Occupational Safety and Health Administration, (OSHA), including but not limited to:
 - a. Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite;
Final Rules Title 29, Part 1910, Section 1001 of the Code of Federal Regulations
Final Rules Title 29, Part 1926, Section 1101 of the Code of Federal Regulations
 - b. Respiratory Protection
Title 29, Part 1910, Section 134 of the Code of Federal Regulations
Title 29, Part 1926, Section 103 of the Code of Federal Regulations
 - c. Personal Protective Equipment for General Industry
Title 29, Part 1910, Section 132 of the Code of Federal Regulations
Title 29, Part 1926, Sections 95 - 107 of the Code of Federal Regulations
 - d. Access to Employee Exposure and Medical Records
Title 29, Part 1926, Section 33 of the Code of Federal Regulations
 - e. Hazard Communication
Title 29, Part 1926, Section 59 of the Code of Federal Regulations
 - f. Specifications for Accident Prevention Signs and Tags
Title 29, Part 1910, Section 145 of the Code of Federal Regulations
 - g. Permit Required Confined Space
Title 29, Part 1910, Section 146 of the Code of Federal Regulations
 - h. Construction Industry
Title 29, Part 1910, Section 1001 of the Code of Federal Regulations
Title 29, Part 1926, Section 1101 of the Code of Federal Regulations
 - i. Construction Industry - General Duty Standards
Title 29, Part 1926, Sections 20 through 35 of the Code of Federal Regulations
 2. DOT: U. S. Department of Transportation, including but not limited to:
 - a. Hazardous Substances
Title 49, Part 171 and 172 of the Code of Federal Regulations

SECTION 02 82 23 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

- b. Hazardous Material Regulations
General Awareness and Training Requirements for Handlers,
Loaders and Drivers
Title 49, Parts 171-180 of the Code of Federal Regulations
 - c. Hazardous Material Regulations
Editorial and Technical Revisions
Title 49, Parts 171-180 of the Code of Federal Regulations
 - 3. EPA: U. S. Environmental Protection Agency (EPA), including but not
limited to:
 - a. Asbestos Hazard Emergency Response Act (AHERA) Regulation
Title 40, Part 763, Sub-part E of the Code of Federal Regulations
 - b. EPA Model Accreditation Plan - Asbestos Containing Materials
Final Rule & Notice
Title 40, Part 763, Sub-part E, Appendix C of the Code of Federal
Regulations
 - c. National Emission Standard for Hazardous Air Pollutants
(NESHAP)
National Emission Standard for Asbestos
Title 40, Part 61, Sub-part A, and Sub-part M (Revised Sub-part B)
of the Code of Federal Regulations
- D. State Requirements: which govern asbestos abatement work or hauling and
disposal of asbestos waste materials include but are not limited to the following:
 - 1. Louisiana Department of Environmental Quality
 - a. LAC 33:III. Chapter 51. Emission Standard for Asbestos
 - b. LAC 33:III. Chapter 27. Asbestos-Containing Materials in Schools
and State Buildings.
 - c. LAC 33:VII Solid Waste
 - d. LAC 33:V Hazardous Waste

Abide by all local requirements which govern asbestos abatement work or hauling
and disposal of asbestos waste materials.

1.4 NOTICES

A. LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)

- 1. Postmark or Deliver Written Notification as required by LAC 33:III.Chapter
51.Subchapter M.Asbestos to the LDEQ. Contact at least 10 working days
prior to beginning any work on asbestos-containing materials (ACM). Send
notification to the following address:

SECTION 02 82 23 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

- a. Louisiana Department of Environmental Quality
Air Quality Division
P.O. Box 4314
Baton Rouge, LA 70821
Phone: (225) 219-3488
Fax: (225) 219-3240
Email: deqairassess@LA.GOV
2. Notification: Include the following information in the notification sent to the LADEQ:
 - a. Indication whether the notification is the original or revised notification
 - b. Name, address, and telephone number of owner or operator.
 - c. Name, address, and telephone number of contractor.
 - d. Type of Operation (demolition or renovation).
 - e. Description of the facility or affected part of the facility being demolished or renovated, including the size (square feet [square meters], number of floors), age, present and prior use of the facility.
 - f. Estimate of the approximate amount of RACM to be removed from the facility in terms of linear meters [linear feet] of pipe, and surface area in square meters [square feet] of other facility components. Also estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before demolition.
 - g. For facilities in which the amount of friable asbestos materials less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) or 1 cubic meter (35 cubic feet) if the length and width could not be measured. On other facility components, explain techniques of estimation. The most current DEQ form and its requirements shall be followed as outlined and requested from DEQ.
 - h. Location and street address (including building number or name and floor or room number, if appropriate), city county, and state, of the facility being demolished or renovated.
 - i. Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period in Subsection F.1.d.i. of LAC 33:III.Chapter 51.Subchapter M.Asbestos.
 - j. Scheduled starting and completion dates of demolition or renovation.

SECTION 02 82 23 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

- k. Nature of planned demolition or renovation and method(s) to be used, including demolition or renovation techniques to be used and description of affected facility components.
- l. Procedures to be used to comply with the requirements of LAC 33:III.Chapter 51.Subchapter M.Asbestos.
- m. Name and location of the waste disposal site where the asbestos containing waste material will be deposited.
- n. A certification that at least one person trained and accredited as required by Subsection F.3.h of LAC 33:III.Chapter 51.Subchapter M.Asbestos will supervise the stripping and removal described by this notification.
- o. Description of procedures to be followed in the event that the unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.
- p. Name, address, and telephone number of the waste transporter.

B. OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION

- 1. Send a copy of evaluation and certification of alternative work procedures to the national office of OSHA, Office of Technical Support, Room N3653, 200 Constitution Avenue, NW, Washington, DC 20210 before work which involves the removal of more than 25 linear or 10 square feet (7.5 linear meters or 3 square meters) of thermal system insulation or surfacing material is begun using an alternative method.

C. STATE AND LOCAL AGENCIES:

- 1. Send written notification as required by state and local regulations prior to beginning any work on ACM.

1.5 PERMITS

- A. Permit: All asbestos containing waste is to be transported by an entity maintaining a current "Industrial waste hauler permit" specifically for ACM, as required for transporting of waste ACM to a disposal site.
- B. Contractor is responsible for obtaining any demolition, building, renovation or other permits, and for paying application fees, if any, where required by State or Local jurisdictions.

1.6 LICENSES

- A. Licenses: Maintain current licenses as required by applicable state or local jurisdictions for the removal, transporting, disposal or other regulated activity relative to the work of this contract.

SECTION 02 82 23 - REFERENCE STANDARDS AND DEFINITIONS - ASBESTOS ABATEMENT

1.7 POSTING AND FILING OF REGULATIONS

- A. Posting and Filing of Regulations: Post all notices required by applicable federal, state and local regulations. Maintain two (2) copies of applicable federal, state and local regulations and standard. Maintain one copy of each at job site. Keep on file in Contractor's office one copy of each.

1.8 SUBMITTALS

- A. Before Start of Work: Submit the following to the Designer for review. No work shall begin until these submittals are returned with Designer's action stamp indicating that the submittal is returned for unrestricted use or final-but-restricted use.
 - 1. Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the Work including:
 - a. State and Local Regulations: Submit copies of codes and regulations applicable to the work.
 - 2. Notices: Submit notices required by federal, state and local regulations together with proof of timely transmittal to agency requiring the notice.
 - 3. Permits: Submit copies of current valid permits required by state and local regulations.
 - 4. Licenses: Submit copies of all State and local licenses and permits necessary to carry out the work of this contract.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 02 82 23

SECTION 02 82 24- SUBMITTALS CHECKLIST- ASBESTOS ABATEMENT

SUBMITTAL CHECKLIST

The following is a listing of the submittals required by each section.

02 82 10 Summary of Work - Asbestos Abatement

Before Start of Work:
Plan of Action
Pre-construction Inspection
Schedule of Values
Inventory of Disposed Items
Schedule of Work

02 82 11 Application for Payment - Asbestos Abatement

Before Start of Work:
Schedule of Values
Periodically During Work:
Refer to section for specific requirements for Payment Requests

02 82 12 Project Coordination - Asbestos Abatement

Before Start of Work:
Contractors Construction Schedule
Contingency Plans
Telephone Numbers
Notifications sent to other entities at the work site.
Notifications sent to emergency service agencies.
Resume: of general superintendent.
Accreditation: Certificate of accreditation of general superintendent
Staff Names:
Periodically During Work:
Daily Logs
Event Reports
Accident Reports
Discovered Condition Reports

02 82 23 Codes, Regulations and Standards - Asbestos Abatement

Before Start of Work:
State Regulations
Licenses
Notifications, AAC-2 Form
Permits

SECTION 02 82 24- SUBMITTALS CHECKLIST- ASBESTOS ABATEMENT

02 82 40 Temporary Facilities - Asbestos Abatement

Before Start of Work:

Scaffolding

Hot water heater

Decontamination Unit Sub-panel

Ground Fault Circuit Interrupters (GFCI)

Fire Extinguishers: product data, location schedule

02 82 60 Temporary Pressure Differential & Air Circulation System

Before Start of Work:

Pressure Differential System Design

HEPA Filtered Fan Units: Product data

Monitoring Equipment: Product data

Periodically During Work:

Pressure Differential Monitoring Results

02 82 61 Temporary Enclosures

Before Start of Work:

Spray Cement: Product data.

Spray Cement: Manufacturer's installation instructions.

Spray Cement: Safety Data Sheet.

Sheet Plastic: Test reports on NFPA 701 test.

Signs: Samples

Caulking: Product Data

Caulking: Safety Data Sheet

02 82 73 Worker Protection - Asbestos Abatement

Before Start of Work:

AHERA Accreditation: for each worker.

State and Local License: for each worker.

Historic Airborne Fiber Data.

Certificate Worker Acknowledgment: for each worker.

Training Program: Training Certification

Report from Medical Examination: of each worker.

Notarized Certifications.

Periodically During Work:

Personnel Air Samples Analysis

Area Air Samples Analysis

SECTION 02 82 24- SUBMITTALS CHECKLIST- ASBESTOS ABATEMENT

02 82 75 Respiratory Protection

Before Start of Work:
Product Data.
NIOSH and MSHA Certifications.
Respiratory Protection Program: written manual.
Respiratory Protection Program: form at end of section.
Historic Airborne Fiber Data.

02 82 77 Decontamination Units

Before Start of Work:
Personnel Decontamination Unit: shop drawing.
Equipment Decontamination Unit: shop drawing.
Filters: product data.
Filters: shop drawing.
Lumber: product data on fire resistance treatment.
Sump Pump: product data.
Signs: samples.

02 82 80 Project/Contractor Closeout - Asbestos Abatement

Periodically During Work:
Refer to section

02 82 81 Project Decontamination

Periodically During Work:
Fire Test on Lock Back Encapsulants used.

02 83 30 Removal of Asbestos-Containing Materials

Before Start of Work:
Surfactant: product data.
Removal Encapsulant: product data.
NESHAP Certification: on surfactant or removal encapsulant.
Safety Data Sheet: for each surfactant and encapsulant

02 83 32 Disposal of Regulated Asbestos-Containing Material

Before Start of Work:
Waste Hauler State License
Waste Hauler Local License

SECTION 02 82 24- SUBMITTALS CHECKLIST- ASBESTOS ABATEMENT

Name and address of landfill.

Landfill contact person and telephone number.

Waste Manifest Form.

Disposal Bag: samples.

Label Samples.

Periodically During Work:

On a weekly basis: copies of manifests and disposal site receipts.

END OF SUBMITTAL CHECKLIST

END OF SECTION 02 82 24

SECTION 02 82 25 – SUBMITTALS – ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including the following:
 - 1. Submittal schedule.
 - 2. Daily construction reports.
 - 3. Shop Drawings.
 - 4. Product Data.
 - 5. Samples.
 - 6. Quality Assurance Submittals
- B. Administrative Submittals: Refer to other Division 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
 - 1. Permits
 - 2. Applications for payment
 - 3. Performance and payment bonds
 - 4. Insurance certificates
 - 5. List of Subcontractors
- C. RELATED SECTIONS
 - 1. The following Sections contain requirements that relate to this Section:

SECTION 02 82 25 – SUBMITTALS – ASBESTOS ABATEMENT

- a. Division 1 Section "Applications for Payment - Asbestos Abatement" specifies requirements for submittal of the Schedule of Values.
- b. Division 1 Section "Coordination" specifies requirements governing submittal and distribution of meeting and conference minutes.
- c. Division 1 Section "Project Closeout-Asbestos Abatement" specifies requirements for submittal of Project Record Documents and warranties at project closeout.

1.3 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. The Designer reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
- B. Processing: To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for resubmittals.
 - 1. Allow one week for initial review. Allow additional time if the Designer must delay processing to permit coordination with subsequent submittals.
 - 2. If an intermediate submittal is necessary, process the same as the initial submittal.
 - 3. Allow one week for reprocessing each submittal.
 - 4. No extension of Contract Time will be authorized because of failure to transmit submittals to the Designer sufficiently in advance of the Work to permit processing.

SECTION 02 82 25 – SUBMITTALS – ASBESTOS ABATEMENT

- C. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
 - 1. Provide a space approximately 4 by 5 inches (100 by 125 mm) on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
 - 2. Include the following information on the label for processing and recording action taken.
 - a. Project name.
 - b. Date.
 - c. Name and address of the Designer.
 - d. Name and address of the Contractor.
 - e. Name and address of the subcontractor.
 - f. Name and address of the supplier.
 - g. Name of the manufacturer.
 - h. Number and title of appropriate Specification Section.
 - i. Drawing number and detail references, as appropriate.
- D. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the Designer using a transmittal form. The Designer will not accept submittals received from sources other than the Contractor.
 - 1. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
- E. Transmittal Form: Use AIA Document G810.

1.4 SUBMITTAL SCHEDULE

- A. Listing: At the end of this section is a listing of the principal submittals required for the work. This listing is not necessarily complete, nor does the listing reflect the significance of each submittal requirement. The listing is included only for the convenience of users of the Contract Documents.
- B. Submittal Schedule: After development and acceptance of the Contractor's Construction Schedule, prepare a complete schedule of submittals. Submit the schedule within 10 days of the date required for submittal of the Contractor's Construction Schedule.

SECTION 02 82 25 – SUBMITTALS – ASBESTOS ABATEMENT

1. Coordinate Submittal Schedule with the list of subcontracts, Schedule of Values, and the list of products as well as the Contractor's Construction Schedule.
2. Prepare the schedule in chronological order. Provide the following information:
 - a. Scheduled date for the first submittal.
 - b. Related Section number.
 - c. Submittal category (Shop Drawings, Product Data, or Samples).
 - d. Name of the subcontractor.
 - e. Description of the part of the Work covered.
 - f. Scheduled date for resubmittal.
 - g. Scheduled date for the Designer's final release or approval.
- C. Distribution: Following response to the initial submittal, print and distribute copies to the Designer, Owner, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in the Project meeting room and field office.
 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- D. Schedule Updating: Revise the schedule after each meeting or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

1.5 SHOP DRAWINGS

- A. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
- B. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates and similar Drawings. Include the following information:
 1. Dimensions.
 2. Identification of products and materials included by sheet and detail number.

SECTION 02 82 25 – SUBMITTALS – ASBESTOS ABATEMENT

3. Compliance with specified standards.
 4. Notation of coordination requirements.
 5. Notation of dimensions established by field measurement.
- C. Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 36 by 48 inches (890 by 1220 mm).
- D. Initial Submittal: Submit two (2) blue- or black-line prints for the Designer's review. The Designer will return one print.
- E. Final Submittal: Submit three (3) blue- or black-line prints; submit five prints where required for maintenance manuals. The Designer will retain two (2) prints and return the remainder.
1. One of the prints returned shall be marked up and maintained as a "Record Document."
 2. Do not use Shop Drawings without an appropriate final stamp indicating action taken.

1.6 PRODUCT DATA

- A. Collect Product Data into a single submittal. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."
1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendations.
 - b. Compliance with recognized trade association standards.
 - c. 1w. Compliance with recognized testing agency standards.
 - d. Application of testing agency labels and seals.
 - e. Notation of dimensions verified by field measurement.
 - f. Notation of coordination requirements.

SECTION 02 82 25 – SUBMITTALS – ASBESTOS ABATEMENT

2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
- B. Preliminary Submittal: Submit a preliminary single-copy of Product Data where selection of options is required.
- C. Submittals: Submit three (3) copies of each required submittal. The Designer will retain two (2), and will return the one marked with action taken and corrections or modifications required.
 1. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
- D. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 1. Do not proceed with installation until a final submittal is in the installer's possession.
 2. Do not permit use of unmarked copies of Product Data in connection with construction.

1.7 QUALITY ASSURANCE SUBMITTALS

- A. Submit quality-control submittals, including design data, certifications, manufacturer's instructions, manufacturer's field reports, and other quality-control submittals as required under other Sections of the Specifications.
- B. Certifications: Where other Sections of the Specifications require certification that a product, material, or installation complies with specified requirements, submit a notarized certification from the manufacturer certifying compliance with specified requirements.
 1. Signature: Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the company.

1.8 MISCELLANEOUS SUBMITTALS

- A. Safety Data Sheets: Process Safety Data Sheets as “product data.” These are submitted for information purposes only, they will be returned with the action stamp, “Received - Not Reviewed.”

SECTION 02 82 25 – SUBMITTALS – ASBESTOS ABATEMENT

- B. Records of Actual Work: Furnish four (4) copies of records of actual work, one will be returned for inclusion in the record documents as specified in section "Project Closeout".
- C. Closeout Submittals: Refer to section "Project Closeout" and to individual sections of these specifications for specific submittal requirements of project closeout information.

1.9 DESIGNER'S ACTION

- A. Except for submittals for the record or information, where action and return is required, the Designer will review each submittal, mark to indicate action taken, and return promptly.
 - 1. Compliance with specified characteristics is the Contractor's responsibility.
- B. Action Stamp: The Designer will stamp each submittal with a uniform, action stamp. The Designer will mark the stamp appropriately to indicate the action taken, as follows:
 - 1. Final Unrestricted Release: When the Designer marks a submittal "Approved," the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
 - 2. Final-But-Restricted Release: When the Designer marks a submittal "Approved as Noted," the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
 - 3. Returned for Resubmittal: When the Designer marks a submittal "Not Approved, Revise and Resubmit," do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action mark.
 - a. Do not use, or allow others to use, submittals marked "Not Approved, Revise and Resubmit" at the Project Site or elsewhere where Work is in progress.
 - 4. Received - Not Reviewed: When the Designer marks a submittal "Received - Not Reviewed" this acknowledges that the submittal has been received. This action applies to materials that are to be submitted for

SECTION 02 82 25 – SUBMITTALS – ASBESTOS ABATEMENT

information purposes only, and where no review or action by the Designer is required.

5. Other Action: Where a submittal is for information or record purposes or special processing or other activity, the Designer will return the submittal marked "Action Not Required."

- C. Unsolicited Submittals: The Designer will return unsolicited submittals to the sender without action.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 02 82 25

SECTION 02 82 30 – AIR MONITORING – ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to work of this section.
 - 1. Air Monitoring: during work area clearance is described in Section 02 82 84 Work Area Clearance.

1.2 DESCRIPTION OF THE WORK

- A. This section describes work being performed by the Contractor's representative.
- B. This section describes air monitoring carried out by the Contractor to verify that the building beyond the work area and the outside environment remains uncontaminated. This section also sets forth airborne fiber levels both inside and outside the work area as action levels, and describes the action required by the Contractor if an action level is met or exceeded.
- C. Industrial Hygienist will develop air sampling strategies for obtaining area baseline air samples prior to commencement of abatement work, area monitoring samples during removal work and final area clearance samples for releasing contractor. Each facility will be assigned a certified asbestos supervisor who will work under the direction of the Project's Industrial Hygienist. They will perform the area monitoring with high volume eclectic pumps. The contractor will conduct personal air monitoring of at least 25 percent of his employees working within enclosed work areas.
- D. Air monitoring required by OSHA is work of the Contractor and is not covered in this section.

1.3 AIR MONITORING

- A. Work Area Isolation: The purpose of the Contractor's air monitoring is to detect faults in the work area isolation such as:
- B. Contamination of the building outside of the work area with airborne asbestos fibers,
- C. Failure of filtration or rupture in the differential pressure system,
- D. Contamination of air outside the building envelope airborne asbestos fibers.

SECTION 02 82 30 – AIR MONITORING – ASBESTOS ABATEMENT

- E. Should any of the above occur immediately cease asbestos abatement activities until the fault is corrected. Do not recommence work until authorized by the Owner's Representative.
- F. Work Area Airborne Fiber Count: The contractor will monitor airborne fiber counts in the Work Area. The purpose of this air monitoring will be to detect airborne asbestos concentrations which may challenge the ability of the Work Area isolation procedures to protect the balance of the building or outside of the building from the contamination by airborne fibers. Contractor will also use personal air monitoring for 25 percent of workers to comply with OSHA regulations.
- G. Work Area Clearance: To determine if the elevated airborne fiber counts encountered during abatement operations have been reduced to an acceptable level, the Contractor will sample and analyze air per Section 02 82 84 Work Area Clearance.
- H. The Contractor will be conducting air monitoring throughout the course of the project.

1.4 STOP ACTION LEVELS

- A. Inside Work Area: Maintain an average airborne count in the Work Area of less than 0.1 fibers per cubic centimeter. If the fiber counts rise above this figure for any sample taken, revise work procedures to lower fiber counts. If the Time Weighted Average (TWA) fiber count for any work shift or 8 hour period exceeds 0.1 fibers per cubic centimeter, stop all work, leave Pressure Differential System in operation and notify Owner's Representative.
- B. If airborne fiber counts exceed 1.0 fibers per cubic centimeter for any period of time cease all work except corrective action until fiber counts fall below 0.5 fibers per cubic centimeter and notify Owner's Representative. After correcting cause of high fiber levels, do not recommence work for 24 hours unless otherwise authorized, in writing, by Owner's Representative.
- C. Inside Work Area: Maintain an average airborne count in the work area of less than the Stop Action Level given below for the type of respiratory protection in use. If the fiber counts rise above this figure for any sample taken, revise work procedures to lower fiber counts. If the Time Weighted Average (TWA) fiber count for any work shift or 8 hour period exceeds the Stop Action Level, stop all work except corrective action, leave pressure differential and air circulation system in operation and notify Owner's Representative. After correcting cause of high fiber levels, do not recommence work for 24 hours unless otherwise authorized, in writing, by Owner's Representative.

SECTION 02 82 30 – AIR MONITORING – ASBESTOS ABATEMENT

STOP ACTION LEVEL (f/cc)	IMMEDIATE STOP LEVEL (f/cc)	MINIMUM RESPIRATOR REQUIRED	MINIMUM PROTECTION FACTOR
0.1	1.0	Full Face	1000

If airborne fiber counts exceed Immediate Stop Level given above for type of respiratory protection in use for any period of time cease all work except corrective action. Notify Owner's Representative. Do not recommence work until fiber counts fall below AStop Action Level given above for the type of respiratory protection in use. After correcting cause of high fiber levels, do not recommence work for 24 hours unless otherwise authorized, in writing, by Owner's Representative.

- D. Outside Work Area: If any air sample taken outside of the Work Area exceeds the base line established below, immediately and automatically stop all work except corrective action. The Owner's Representative will determine the source of the high reading and so notify the Contractor in writing.
- E. If the high reading was the result of a failure of Work Area isolation measures initiate the following actions:
 1. Immediately erect new critical barriers as set forth in Section 02 82 61 Temporary Enclosures to isolate the affected area from the balance of the building. Erect Critical Barriers at the next existing structural isolation of the involved space (e.g. wall, ceiling, floor).
 2. Decontaminate the affected area in accordance with Section 02 83 83 Cleaning and Decontamination Procedures.
 3. Require that respiratory protection as set forth in Section 02 82 75 Respiratory Protection be worn in affected area until area is cleared for reoccupancy in accordance with Section 02 82 84 Work Area Clearance.
 4. Leave Critical Barriers in place until completion of work and insure that the operation of the pressure differential system in the Work Area results in a flow of air form the balance of the building into the affected area.
 5. If the exit from the clean room of the personnel decontamination unit enters the affected area, establish a decontamination facility consisting of a Shower Room and Changing Room as set forth in Section 02 82 77 Decontamination Units at entry point to affected area.

SECTION 02 82 30 – AIR MONITORING – ASBESTOS ABATEMENT

6. After Certification of Visual Inspection in the Work Area remove critical barriers separating the work area from the affected area. Final air samples will be taken within the entire area as set forth in Section 02 82 83 Work Area Clearance.
- F. Fibers Counted: The following procedure will be used to resolve any disputes regarding fiber types when a project has been stopped due to excessive airborne fiber counts.
- G. Large Fibers: “Airborne Fibers” referred to above include all fibers regardless of composition as counted by phase contrast microscopy (PCM), unless additional analysis by transmission or scanning electron microscopy demonstrates to the satisfaction of the Owner’s Representative that non-asbestos fibers are being counted. “Airborne Fibers” counted in samples analyzed by scanning or transmission electron microscopy shall be asbestos fibers, greater than 5 microns in length and greater than 0.25 microns in diameter. For purposes of stop action levels, subsequent to analysis by electron microscopy, the number of “Airborne Fibers” shall be determined by multiplying the number of fibers, regardless of composition, counted by PCM by a number equal to asbestos fibers counted divided by all fibers counted in the electron microscopy analysis.
- H. Small Structures: “Airborne Fibers” referred to above include asbestos structures (fibers, bundles, clusters, or matrices) of any diameter and any length greater than 0.5 microns.

1.5 ANALYTICAL METHODS

The following methods will be used by the Contractor in analyzing filters used to collect air samples. Sampling rates may be varied from printed standards to allow for high volume sampling.

- A. Phase Contrast Microscopy (PCM): will be performed using the NIOSH 7400 method. This analysis may be carried out at the job site and/or accredited laboratory.
- B. Transmission Electron Microscopy will be performed using the analysis method set forth in the AHERA regulation 40 CFR Part 763 Subpart E Appendix A.

1.6 SAMPLE VOLUMES

SECTION 02 82 30 – AIR MONITORING – ASBESTOS ABATEMENT

- A. General: The number and volume of air samples taken by the Contractor will be in accordance with the following schedule. Sample volumes given may vary depending upon the analytical method used.

1.7 SCHEDULE OF AIR SAMPLES

- A. Before Start of Work:

1. The Contractor will secure the following Air Samples to establish a base line before start of work.
2. Samples cassettes: Samples will be collected on 25 mm. cassettes as follows:

PCM: 0.8 micrometer mixed cellulose ester.

TEM: 0.45 micrometer mixed cellulose ester or 0.40 micrometer polycarbonate, with 5.0 micron cellulose ester backing filter.

- B. Sampling sensitivity in the table below refers to:

1. Detection Limit for PCM analysis as set forth in the analytical method used

Analytical Sensitivity for TEM analysis as set forth in the analytical method used or the AHERA regulation.

Location Sampled	Number of Samples	Analysis Method	Sampling Sensitivity Fibers/cc.	Minimum Volume (Liter)	Rate LPM
Each Work Area*	1	PCM	0.01	1,200	1-10
Each Work Area*	1	hold for TEM	0.005	1,300	1-10

Work Area*

Outside Each	1	hold for TEM	0.005	1,300	1-10
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Work Area*

Outside Building	5	PCM	0.01	1,200	1-10
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Outside Building	1	hold for TEM	0.005	1,300	1-10
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*Work areas may have to be less than 3,000 square feet or 1,000 linear feet to comply with AHERA regulations for determining clearance requirements by PCM and not TEM.

SECTION 02 82 30 – AIR MONITORING – ASBESTOS ABATEMENT

- C. Base Line: an action level expressed in fibers per cubic centimeter which is 25 percent greater than the largest of the following:
- D. Average of the PCM samples collected outside each Work Area
- E. Average of the PCM samples collected outside the building
- F. 0.01 fibers per cubic centimeter
Samples collected for TEM analysis will be held without analysis. These samples will be analyzed under the conditions and terms set forth in “Fibers Counted” and “Affect on Contract Sum.” TEM Analysis may be required if clearance criteria is not officially met and there is some doubt as to the type and size of fibers in clearance samples.
- G. Daily:
From start of work of Section 02 82 61 Temporary Enclosures through the work of Section 02 82 81 Project Decontamination, the Owner may be taking the following samples on a daily basis.

- H. Samples will be collected on 25 mm. cassettes with the following filter media:
PCM: 0.8 micrometer mixed cellulose ester.

Location Sampled	Number of Samples	Analysis Method	Detection Limit Fibers/cc.	Minimum Volume (Liters)	Rate LPM
Each Work Area	2	PCM	0.01	1,200	1-10
OR AS REQUIRED BY CONDITIONS					
Outside Each Work Area at Critical Barrier	1	PCM	0.01	1,200	1-10
Clean Room	1	PCM	0.01	1,200	1-10
Equip Decon	1	PCM	0.01	1,200	1-10
Outside Building Output Pressure	1	PCM	0.01	1,200	1-10
Differential System	1	PCM	0.01	1,200	1-10

Additional samples may be taken at Owner’s or Owner’s Representatives discretion. If airborne fiber counts exceed allowed limits additional samples will be taken as necessary to monitor fiber levels.

1.8 LABORATORY TESTING

SECTION 02 82 30 – AIR MONITORING – ASBESTOS ABATEMENT

- A. The services of a testing laboratory may be employed by the Contractor to perform laboratory analyses of the air samples. A technician will be at the job site, and samples will be sent daily by carrier for next day delivery, so that verbal reports on air samples can be obtained within 24 hours. Industrial Hygienist will coordinate and monitor this job function very closely to assess that maximum respiratory protection is being provided to personnel working at the Owner's Facility.
- B. A complete record of all air monitoring and results will be furnished to the Owner's Representative, the Owner, and the Contractor.
- C. The Owner will have access to all air monitoring tests and results, but will require excellent communication between all parties.
- D. Written Reports: of all air monitoring tests will be posted at the job site on a daily basis or verbally presented to the workers during the prework day staffing's or safety meetings.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.1 ADDITIONAL TESTING

- A. The Owner may conduct his own air monitoring and laboratory testing. If he elects to do this the cost of such air monitoring and laboratory testing shall be at no additional cost to the Contractor.

3.2 PERSONAL MONITORING

- A. Owner will not be performing air monitoring to meet Contractor's OSHA requirements for personnel sampling or any other purpose. It is the Contractor's responsibility to monitor the work area and his own personnel to assure compliance with OSHA and EPA requirements.

END OF SECTION 02 82 30

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, general provisions of Contract, including General and Supplementary Conditions, and other Division 1, and Division 2 Specification Sections apply to work of this section.

1.2 SUMMARY

- A. This Section includes requirements for construction facilities and temporary controls, including temporary utilities, support facilities, and security and protection.
- B. Temporary utilities include, but are not limited to, the following:
 - 1. Water service and distribution
 - 2. Temporary electric power and light
 - 3. Temporary heat
 - 4. Ventilation
 - 5. Telephone service
 - 6. Sanitary facilities, including drinking water
 - 7. Storm and sanitary sewer.
- C. Support facilities include, but are not limited to, the following:
 - 1. Field offices, laboratories and storage sheds
 - 2. Temporary enclosures
 - 3. Hoists.
- D. Security and protection facilities include, but are not limited to, the following:
 - 1. Temporary fire protection.
 - 2. Barricades, warning signs, and lights.

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

1.3 DESCRIPTION OF REQUIREMENTS

- A. General: Provide temporary connection to existing building utilities or provide temporary facilities as required herein or as necessary to carry out the work.

1.4 SUBMITTALS

- A. Before the Start of Work: Submit the following to the Owner's Asbestos Consultant for review. Begin no work until these submittals are returned with Owner's Asbestos Consultant's action stamp indicating that the submittal is returned for unrestricted use or final-but-restricted use.
 - 1. Scaffolding: Submit list of rolling and fixed scaffolding intended for use on the project. Submit sufficient detail to indicate compliance with applicable worker safety regulations or other requirements.
 - 2. Hot Water Heater: Submit manufacturer's name, model number, size in gallons, heating capacity, power requirements.
 - 3. Decontamination Unit Sub-panel: Submit product data.
 - 4. Ground Fault Circuit Interrupters (GFCI): Submit product data.
 - 5. Lamps and Light Fixtures: Submit product data.
 - 6. Temporary Heating Units: Provide product data.
 - 7. Temporary Cooling Units: Provide product data and installation instructions.
 - 8. First Aid Supplies: Provide list of contents of first aid kit. Submit in form of check list.
 - 9. Fire Extinguishers: Provide product data. Submit schedule indicating location at job site.
 - 10. Temporary Utilities: Submit reports of tests, inspections, meter readings, and similar procedures performed on temporary utilities.

1.5 QUALITY ASSURANCE

- A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:
 - 1. Building code requirements

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

2. Health and safety regulations.
 3. Utility company regulations.
 4. Police, fire department, and rescue squad rules.
 5. Environmental protection regulations.
- B. Standards: Comply with NFPA 241 “Standard for Safeguarding Construction, Alterations, and Demolition Operations,” ANSI A 10 Series standards for “Safety Requirements for Construction and Demolition,” and NECA Electrical Design Library “Temporary Electrical Facilities.”
- C. Electrical Services: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with NFPA 70 “National Electric Code.”
- D. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

1.6 PROJECT CONDITIONS

- A. Temporary Utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of permanent service.
- B. Condition of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the Work progresses. Do not overload facilities or permit them to interfere with progress. Take necessary fire-prevention measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on-site.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. General: Provide new or used materials and equipment that are undamaged and in serviceable condition. Provide only materials and equipment that are recognized as being suitable for the intended use and are in compliance with appropriate standards.
- B. Lumber and Plywood

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

1. For fences and vision barriers, provide minimum 3/8-inch thick exterior plywood.

2.2 SCAFFOLDING

- A. Provide all scaffolding, ladders and/or staging, etc. as necessary to accomplish the work of this contract. Scaffolding may be of suspension type or standing type such as metal tube and coupler, tubular welded frame, pole or outrigger type or cantilever type. The type, erection and use of all scaffolding shall comply with all applicable OSHA provisions.
 1. Equip rungs of all metal ladders, etc. with an abrasive non-slip surface.
 2. Provide a non-skid surface on all scaffold surfaces subject to foot traffic.

2.3 WATER SERVICE

- A. Temporary Water Service Connection: All connections to the Owner's water system shall include backflow protection. Valves shall be rated for operation at the temperatures and pressures encountered. After completion of use, connections and fittings shall be removed without damage or alteration to existing water piping and equipment. Leaking or dripping valves shall be piped to the nearest drain or located over an existing sink or grade where water will not damage existing finishes or equipment.
- B. Water Hoses: Employ heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system to provide water into each work area and to each Decontamination Unit. Provide fittings as required to allow for connection to existing wall hydrants or spouts, as well as temporary water heating equipment, branch piping, showers, shut-off nozzles and equipment.
- C. Hot Water Heater: Provide UL rated 40 gallon electric hot water heater to supply hot water for the Decontamination Unit shower. Activate from 30 amp circuit breaker located within the Decontamination Unit subpanel. Provide with relief valve compatible with water heater operation; pipe relief valve down to drip pan on floor with type L copper. Drip pans shall consist of a 12 inches x 12 inches x 6 inches deep pan, made of 19 gauge galvanized steel, with handles. A 3-quart kitchen saucepan may be substituted for this purpose. Drip pan shall be securely fastened to the hot water heater with bailing wire or similar material. Wiring of the hot water heater shall be in compliance with NEMA, NECA, and UL standards.

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

2.4 ELECTRICAL SERVICE

- A. General: Comply with applicable NEMA, NECA and UL standards and governing regulations for materials and layout of temporary electric service.
- B. Temporary Power: Provide service to Decontamination Unit subpanel with minimum 60 amp, two pole circuit breaker or fused disconnect. Subpanel and disconnect shall be sized and equipped to accommodate all electrical equipment required for completion of the work.
- C. Voltage Differences: Provide identification warning signs at power outlets which are other than 110-120 volt power. Provide polarized outlets for plug-in type outlets, to prevent insertion of 110-120 volt plugs into higher voltage outlets. Dry type transformers shall be provided where required to provide voltages necessary for work operations.
- D. Ground Fault Protection: Equip all circuits for any purpose entering Work Area with ground fault circuit interrupters (GFCI).
 - 1. Locate GFCI's exterior to Work Area so that all circuits are protected prior to entry to Work Area. Provide circuit breaker type ground fault circuit interrupters (GFCI) equipped with test button and reset switch for all circuits to be used for any purpose in work area, decontamination units, exterior, or as otherwise required by national electrical code, OSHA or other authority. Locate in panel exterior to Work Area.
- E. Electrical Power Cords: Use only grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Use single lengths or use waterproof connectors to connect separate lengths of electric cords, if single lengths will not reach areas of work.
- F. Lamps and Light Fixtures: Provide general service incandescent lamps or fluorescent 1 amps of wattage indicated or required for adequate illumination as required by the work or this section. Protect lamps with guard cages or tempered glass enclosures, where fixtures are exposed to breakage by construction operations. Provide vapor tight fixtures in work area and decontamination units. Provide exterior fixtures where fixtures are exposed to the weather or moisture.

2.5 TEMPORARY STRUCTURES

- A. Temporary Offices: Provide prefabricated or mobile units or similar job-built construction with lockable entrances, operable windows, and serviceable finishes. Provide heated and air-conditioned units on foundation adequate for normal loading.
- B. Temporary Toilet Units: Provide self-contained, single-occupant toilet units of the

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

chemical, aerated recirculation, or combustion type. Provide units properly vented and fully enclosed with a glass-fiber-reinforced polyester shell or similar non-absorbent material.

2.6 FIRE EXTINGUISHERS

- A. Fire Extinguishers: Provide Type “A” fire extinguishers for temporary offices and similar spaces where there is minimal danger of electrical or grease-oil-flammable liquid fires. In other locations provide type “ABC” dry chemical extinguishers, or a combination of several extinguishers of NFPA recommended types for the exposures in each case.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. General: Use qualified tradesmen for installation of temporary services and facilities. Locate temporary service and facilities where they will serve the entire project adequately and result in minimum interference with the performance of the Work.
 - 1. Require that tradesmen accomplishing this work be licensed as required by local authority for the work performed.
 - 2. Relocate, modify and extend services and facilities as required during the course of work so as to accommodate the entire work of the project.

3.2 SCAFFOLDING

- A. During the erection and/or moving of scaffolding, care must be exercised so that the polyethylene floor covering is not damaged.
- B. Clean as necessary debris from non-slip surfaces.
- C. At the completion of abatement work clean all construction aids within the work area, wrap in one layer of 6 mil polyethylene sheet and seal before removal from the Work Area.

3.3 TEMPORARY UTILITY INSTALLATION

- A. General: Engage the appropriate local utility company to install temporary service or connect to existing service. Where company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with company recommendations.

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

1. Arrange with company and existing users for a time when service can be interrupted, if necessary, to make connections for temporary services.

B. Water Service:

1. Water connection (without charge) to Owner's existing potable water system is limited to one 3/4 inch pipe-size connection, and a maximum flow of 10 gpm to cold water supply. Install using vacuum breakers or other backflow preventer as required by local authority. Supply hot and cold water to the Decontamination Unit in accordance with Section 02 82 77. Hot water shall be supplied at a minimum temperature of 100 degrees.
 - a. Maintain hose connections and outlet valve in leakproof condition. Where finish work below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize the possibility of water damage. Drain water promptly from pans as it accumulates.

C. Electrical Service:

1. Provide a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of work during the construction period. Install temporary lighting adequate for the work area.
2. Lockout: Lockout all existing power to or through the work area as described below. Unless specifically noted otherwise existing power and lighting circuits to the Work Area are not to be used. All power and lighting to the Work Area and Decontamination facilities are to be provided from temporary electrical panel described below.
 - a. Lockout power to Work Area by switching off all breakers serving power or lighting circuits in work area. Label breakers with tape over breaker with notation "DANGER circuit being worked on". Lock panel and have all keys under control of Contractor's Superintendent or Owner's designated Asbestos Consultant.
 - b. Lockout power to circuits running through Work Area wherever possible by switching off all breakers serving these circuits. Label breakers with tape over breaker with notation "DANGER circuit being worked on". Sign and date danger tag. Lock panel and supply keys to Contractor, Owner and Owner's Asbestos Consultant. If circuits cannot be shut down for any reason, label at intervals 4 feet – 0 inches on center with tags reading, "DANGER live electric circuit. Electrocution hazard."

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

3. Temporary Electrical Panel: Provide temporary electrical panel sized and equipped to accommodate all electrical equipment and lighting required by the work. Connect temporary panel to existing building electrical system. Protect with circuit breaker or fused disconnect. Locate temporary panel as directed by Owner or Owner's Asbestos Consultant.
4. Power Distribution System: Provide circuits of adequate size and proper characteristics for each use. In general run wiring overhead, and rise vertically where wiring will be at least exposed to damage from construction operations.
5. Circuit Protection: Protect each circuit with a ground fault circuit interrupter (GFCI) of proper size located in the temporary panel. Do not use outlet type GFCI devices.
6. Temporary Wiring: In the Work Area shall be type UF non-metallic sheathed cable located overhead and exposed for surveillance. Do not wire temporary lighting with plain, exposed (insulated) electrical conductors. Provide liquid tight enclosures or boxes for wiring devices.
7. Number of Branch Circuits: Provide sufficient branch circuits as required by the work. All branch circuits are to originate at temporary electrical panel. At minimum provide the following:
 - a. One (1) Circuit for each HEPA filtered fan unit.
 - b. For power tools and task lighting, provide on temporary 4-gang outlet in the following locations. Provide a separate 110-120 volt, 20 amp circuit for each 4-gang outlet (4 outlets per circuit).
 - c. One (1) outlet in the work area for each 2500 square feet of work area.
 - d. One (1) outlet at each decontamination unit, located in equipment room.
8. 110-120 volt 20 amp branch circuit with 4-gang outlet for Owner's exclusive use while conducting air sampling during the work as follows.
 - a. One (1) in each work area.
 - b. One (1) at clean side of each decontamination unit.
 - c. One (1) at each exhaust location found for HEPA filtered fan units.
9. 110-120 volt 20 amp branch circuits with 4-gang outlet for Owner's exclusive use for conducting final air sampling as set forth in Section 02 82 83 Work Area Clearance as follows:
 - a. Five (5) inside work area.

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

- b. Two (2) outside work area in location designated by Contractor's Asbestos Consultant.

D. Temporary Lighting

1. Lockout: Lock out all existing power to lighting circuits in Work Area as described in Section 02 82 61 Temporary Enclosures. Unless specifically noted otherwise existing lighting circuits to the Work Area are not to be used. All lighting to the Work Area and Decontamination facilities is to be provided from temporary electrical panel described above.
2. Provide the following or equivalent where natural lighting or existing building lighting does not meet the required light level:
 - a. One (1) 200-watt incandescent 1 amp per 1000 square feet of floor area, uniformly distributed, for general construction lighting, or equivalent illumination of a similar nature. In corridors and similar traffic areas provide one 100-watt incandescent lamp every 50 feet. In stairways and at ladder runs, provide one lamp minimum per story, located to illuminate each landing and flight. Provide sufficient temporary lighting to ensure proper workmanship everywhere; by combined use of daylight, general lighting, portable plug-in task lighting.
 - b. Provide adequate lighting in areas where work is being performed as required and to comply with OSHA and governing authority requirements.
 - c. Provide lighting in any area being subjected to a visual inspection as required.
 - d. Provide lighting in the decontamination unit as required to supply a 50 foot candle minimum light level.
3. Number of Lighting Circuits: Provide sufficient lighting circuits as required by the work. All lighting circuits are to originate at temporary electrical panel.
4. Circuit Protection: Protect each circuit with a ground fault circuit interrupter (GFCI) of proper size located in the temporary panel.

3.4 SUPPORT FACILITIES INSTALLATION

- A. Construction Job Trailer: Contractor to provide construction job trailer suitable for storage of contractor's and air monitoring firm's equipment. Trailer must be lockable and secure. Trailer must also have a small office with counter for telephone and abatement documents.

SECTION 02 82 40 – TEMPORARY FACILITIES – ASBESTOS

3.5 TEMPORARY PHONE SERVICE

- A. Contractor shall maintain a phone and active line telephone service during the duration of the project. Owner's phones shall not be utilized by any of the Contractor's or sub-contractor's employees. Phone shall be suitably located to be accessible for emergency use.

3.6 SANITARY FACILITIES

- A. Toilets: Contractor shall supply portable toilet facilities and shall not use facility's toilets unless approved by the Owner's Asbestos Consultant.

3.7 FIRE EXTINGUISHERS

- A. Fire Extinguishers: Comply with the applicable recommendations of NFPA Standard 10 "Standard for Portable Fire Extinguishers". Locate fire extinguishers where they are most convenient and effective for their intended purpose, but provide not less than one extinguisher in each work area in equipment room and one outside work area in clean room.

END OF SECTION 02 82 40

**SECTION 02 82 60 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM
ASBESTOS ABATEMENT**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1, and Division 2 Specification Section, apply to work of this section.

1.2 SUBMITTALS

- A. Before Start of Work: Submit design of pressure differential system to the Owner's Asbestos Consultant for review. So to begin work until submittal is returned with the Owner's Asbestos Consultant's action stamp indicating that the submittal is returned for unrestricted use. Include in the submittal at a minimum:
 - 1. Number of HEPA filtered fan units required and the calculations necessary to determine the number of machines
 - 2. Description of projected air flow within Work Area and methods required to provide adequate air flow in all portions of the work area
 - 3. Anticipated pressure differential across Work Area enclosures
 - 4. Description of methods of testing for correct air flow and pressure differentials
 - 5. Manufacturer's product data on the HEPA filtered fan units to be used
 - 6. Location of the machines in the Work Area
 - 7. Method of supplying adequate power to the machines and designation of building electrical panel(s) which will be supplying the power
 - 8. Description of work practices to insure that airborne fiber travel away from workers
 - 9. Manufacturer's product data on equipment used to monitor pressure differential between inside and outside of Work Area

**SECTION 02 82 60 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM
ASBESTOS ABATEMENT**

PART 2 - PRODUCTS

2.1 HEPA FILTERED FAN UNITS

- A. General: Supply the required number of HEPA filtered fan units to the site in accordance with these specifications. Use units that meet the following requirements.
- B. Cabinet: Constructed of durable materials able to withstand damage from rough handling and transportation. The width of the cabinet should be less than 30 inches to fit through standard-size doorways. Provide units whose cabinets are:
 - 1. Factory-sealed to prevent asbestos-containing dust from being released during use, transport, or maintenance
 - 2. Arranged to provide access to and replacement of all air filters from intake end
 - 3. Mounted on casters or wheels
- C. Fans: Rate capacity of fan according to usable air-moving capacity under actual operating conditions.
- D. HEPA Filters: Provide units whose final filter is the HEPA type with the filter media (folded into closely pleated panels) completely sealed on all edges with a structurally rigid frame.
 - 1. Provide units with a continuous rubber gasket located between the filter and the filter housing to form a tight seal.
 - 2. Provide HEPA filters that are individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3 um dioctylphthalate (DOP) particles when tested in accordance with Military Standard Number 282 and Army Instruction Manual 136-300-175A. Provide filters that bear a UL586 label to indicate ability to perform under specified conditions.
 - 3. Provide filters that are marked with: the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.
 - 4. Prefilters, which protect the final filter by removing the larger particles, are required to prolong the operating life of the HEPA filter. Two (2)

**SECTION 02 82 60 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM
ASBESTOS ABATEMENT**

stages of prefiltration are required. Provide units with the following prefilter:

- a. First-stage prefilter: low-efficiency type (e.g., for particles 100 um and larger)
 - b. Second-stage (or intermediate) filter: medium efficiency (e.g., effective for particles down to 5 um).
 - c. Provide units with prefilters and intermediate filters installed either on or in the intake grid of the unit and held in place with special housings or clamps.
- E. Safety and Warning Devices: Provide units with the following safety and warning devices:
1. Electrical (or mechanical) lockout to prevent fan from operating without a HEPA filter
 2. Automatic shutdown system to stop fan in the event of a rupture in the HEPA filter or blocked air discharge
 3. Warning lights to indicate normal operation (green), too high a pressure drop across the filters (i.e., filter overloading) (yellow), and too low of a pressure drop (i.e., rupture in HEPA filter or obstructed discharge) (red)
 4. Audible alarm if unit fails to shut down due to operation of safety systems
- F. Electrical components: Provide units with electric components approved by the National Electrical Manufacturers Association (NEMA) and Underwriter's Laboratories (UL). Each unit is to be equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet are to be grounded.

PART 3 - EXECUTION

3.1 PRESSURE DIFFERENTIAL ISOLATION

- A. Isolate the Work Area from all adjacent areas or systems of the building with a Pressure Differential that will cause a movement of air from outside to inside at any breach in the physical isolation of the Work Area.
- B. Relative Pressure in Work Area: Continuously maintain the work area at an air pressure that is lower than that in any surrounding space in the building, or at any location in the immediate proximity outside of the building envelope. This pressure differential when measured across any physical or critical barrier must

**SECTION 02 82 60 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM
ASBESTOS ABATEMENT**

equal or exceed a static pressure of:

1. 0.02 inches of water.

C. Accomplish the pressure differential by exhausting a sufficient number of HEPA filtered fan units from the work area. The number of units required will depend on machine characteristics, the seal at barriers, and required air circulation. The number of units will increase with increased make-up air or leaks into the Work Area. Determine the number of units required for pressure isolation by the following procedure:

1. Establish required air circulation in the work area, personnel and equipment decontamination units.
2. Establish isolation by increased pressure in adjacent areas or as part of seals where required.
3. Exhaust a sufficient number of units from the work area to develop the required pressure differential.
4. The required number of units is the number determined above plus one additional unit.
5. Vent HEPA filtered fan units to outside of building unless authorized in writing by Owner's Asbestos Consultant.
6. Mount units to exhaust directly or through disposable ductwork.
7. Use only new ductwork except for sheet metal connections and elbows.
8. Use ductwork and fittings of same diameter or larger than discharge connection on fan unit.
9. Use inflatable, disposable flex duct in lengths not greater than 50 feet.
10. Use spiral wire-reinforced disposable plastic ductwork in lengths not greater than 100 feet.
11. Arrange exhaust as required to inflate duct to a rigidity sufficient to prevent flapping.

**SECTION 02 82 60 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM
ASBESTOS ABATEMENT**

12. If direction of discharge from fan unit is not aligned with duct use sheet metal elbow to change direction. Use 6 feet of spiral wire reinforced flex duct after direction change.

3.2 AIR CIRCULATION IN THE WORK AREA

- A. Air Circulation: For purposes of this section air circulation refers to either the introduction of outside air to the Work Area or the circulation and cleaning of air within the Work Area.
- B. Air circulation in the Work Area is a minimum requirement intended to help maintain airborne fiber counts at a level that does not significantly challenge the work area isolation measures. The Contractor may also use this air circulation as part of the engineering controls in his worker protection program.
- C. Determining the Air circulation Requirements: Provide a fully operational air circulation system supplying a minimum of the following air circulation rate:
 1. Four (4) air changes per hour. Provide additional air changes if it is determined that high fiber counts in the work area require it.
- D. Determine Number of Units needed to achieve required air circulation according to the following procedure:
 1. Determine the volume in cubic feet of the work area by multiplying floor area by ceiling height. Determine total air circulation requirement in cubic feet per minute (CFM) for the work area by dividing this volume by the air change rate and multiplying by 60.
 2. Air Circulation Required in Cubic Feet of Air per Minute (CFM) =
$$\frac{\text{Volume of work area (cu. ft.)}}{60 \text{ (minutes per hour)}} \times \text{Number of air changes per hour}$$
 3. Divide the air circulation requirement (CFM) above by capacity of HEPA filtered fan unit(s) used. Capacity of a unit for purposes of this section is the capacity in cubic feet per minute with fully loaded filters (pressure differential which causes loaded filter warning light to come on) in the machines labeled operating characteristics.
Number of Units Needed =
$$\frac{\text{Air circulation Requirement (CFM)}}{\text{Capacity of Unit with Loaded Filters (CFM)}}$$

**SECTION 02 82 60 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM
ASBESTOS ABATEMENT**

4. Add one additional unit as backup in case of equipment failure or machine shutdown for filter changing.

3.3 EXHAUST SYSTEM

- A. Pressure differential isolation and air circulation in the Work Area are to be accomplished by an exhaust system as described below.
 1. Exhaust all units from the Work Area to meet air circulation requirement of this section.
 2. Location of HEPA Filtered Fan Units: Locate fan unit(s) so that makeup air enters work area primarily through decontamination facilities and traverses Work Area as much as possible. This may be accomplished by positioning the HEPA filtered fan unit(s) at a maximum distance from the worker access opening or other makeup air sources.
 3. Place End of Unit an intake duct or its exhaust duct through an opening in the plastic barrier or wall covering. Seal plastic around the unit or duct with tape.
 4. Vent to Outside of Building, unless authorized in writing by the Owner's Project Designer.
 5. Decontamination Units: Arrange Work Area and decontamination units so that the majority of make-up air comes through the Decontamination Units. Use only personnel or equipment Decontamination Unit at any time and seal the other so that make up air passes through unit in use.
 6. Supplemental Makeup Air Inlets: Provide where required for prior air flow through the Work Area in location approved by the Owner's Asbestos Consultant by making openings in the plastic sheeting that allow clean air from outside the building into the Work Area. Locate auxiliary makeup air inlets as far as possible from the fan unit(s) (e.g., on an opposite wall), off the floor (preferably near the ceiling), and away from barriers that separate the Work Area from occupied clean areas. Cover with flaps to reseal automatically if the pressure differential system should shut down for any reason. Spray flap and around opening with spray adhesive so that if flap closes meeting surfaces are both covered with adhesive. Use adhesive that forms contact bond when dry. Filter these openings with HEPA Pre-Filter Material double taped to the opening.

3.4 RECIRCULATION SYSTEM

**SECTION 02 82 60 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM
ASBESTOS ABATEMENT**

- A. Pressure differential isolation and air circulation in the Work Area are to be accomplished by a recirculation system as described below.
 - 1. Recirculate air in the Work Area through HEPA filtered fan units to accomplish air circulation requirements of this section.
 - 2. Location of Fan Units: Locate HEPA filtered fan units so that air is circulated through all parts of the Work Area, and so that required pressure is maintained at all parts of Work Area geometry. Move units as necessary so that in any location where asbestos-containing materials are being disturbed the discharge from one HEPA filtered fan unit is blowing contamination away from workers. Direct air flow in these locations so that it is predominantly toward workers' backs at the breathing zone elevation.

3.5 AIR CIRCULATION IN DECONTAMINATION UNITS

- A. Pressure Differential Isolation: Continuously maintain the pressure differential required for the work area in the:
 - 1. Personnel Decontamination Unit: across the Shower Room with the Equipment room at a lower pressure than in the Clean Room.
 - 2. Equipment Decontamination Unit: Across the Holding Room with the Wash Room at a lower pressure than the Clean Room.
- B. Air Circulation: continuously maintain air circulation in Decontamination Units at same level as required for Work Area.
- C. Air Movement: Arrange air circulation through the Personnel Decontamination Unit so that it produces a movement of air from the Clean Room through the Shower Room into the Equipment Room. Maintain continuous minimum velocities of 60 feet per minute in the breathing zone area of the shower and 30 feet per minute in all other locations of the shower.

3.6 USE OF THE PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM

- A. General: Each unit shall be serviced by a dedicated minimum 115V-20A circuit with ground fault circuit interrupter (GFCI) supplied from temporary power supply installed under requirements of Section 02 82 40 "Temporary Facilities."

**SECTION 02 82 60 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM
ASBESTOS ABATEMENT**

- B. Air Flow Tests: The Contractor will check air flow patterns before removal operations begin, at least once per operating shift and any time there is a question regarding the integrity of the enclosure. The primary test for air flow is to trace air currents with smoke tubes or other visual methods. Flow checks will be made at each opening and at each doorway to demonstrate that air is being drawn into the enclosure and at each worker's position to show that air is being drawn away from the workers location and toward the HEPA filtration unit.
- C. Demonstrate Condition of Equipment for each HEPA filtered fan unit including proper operation of the following:
 - 1. Squareness of HEPA Filter
 - 2. Condition of Seals
 - 3. Proper operation of all lights
 - 4. Proper operation of automatic shut down if exhaust is blocked
 - 5. Proper operation of alarms
 - 6. Proper operation of Magnehelic gauge.
- D. Demonstrate Operation of the pressure differential system to the Designer prior to beginning abatement operations. The demonstration should include, but not be limited to, the following:
 - 1. Plastic barriers and sheeting move lightly in toward Work Area,
 - 2. Curtain of decontamination units move lightly in toward Work Area,
 - 3. There is noticeable movement of air through the Decontamination Unit.
 - 4. Use of a smoke tube to demonstrate air movement from Clean Room through Shower Room to Equipment Room.
 - 5. Use of a smoke tube to show a definite motion of air across all areas in which work is to be performed.
 - 6. Use of a manometer to demonstrate the required pressure differential at every barrier separating the Work Area from the balance of the building, equipment, ductwork or outside.

**SECTION 02 82 60 - TEMPORARY PRESSURE DIFFERENTIAL AND AIR CIRCULATION SYSTEM
ASBESTOS ABATEMENT**

- E. Modify the Pressure Differential System as necessary to obtain the above.

- F. Use of System During Abatement Operations:
 - 1. Start fan units before beginning work (before any asbestos-containing material is disturbed). After abatement work has begun, run units continuously to maintain a constant pressure differential and air circulation until decontamination of the work area is complete. Do not turn off units at the end of the work shift or when abatement operations temporarily stop.
 - 2. Do not shut down air pressure differential system during encapsulating procedures, unless authorized by the Owner's Project Designer in writing. Supply sufficient pre-filters to allow frequent changes.
 - 3. Start abatement work at a location farthest from the fan units and proceed toward them. If an electric power failure occurs, immediately stop all abatement work and do not resume until power is restored and fan units are operating again.
 - 4. At completion of abatement work, allow fan units to run as specified under section 02 82 81, to remove airborne fibers that may have been generated during abatement work and cleanup and to purge the Work Area with clean makeup air. The units may be required to run for a longer time after decontamination, if dry or only partially wetted asbestos material was encountered during any abatement work.

- G. Dismantling the System:
 - 1. When a final inspection and the results of final air tests indicate that the area has been decontaminated, fan units may be removed from the Work Area, remove and properly dispose of pre-filter decontaminate exterior of machine and seal intake to the machine with 6 mil polyethylene to prevent environmental contamination from the filters. Clean all machine parts within the decontamination unit.

END OF SECTION 02 82 60

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUBMITTALS

- A. Before Start of Work submit the following to the Designer for review. Do not begin work until these submittals are returned with the Designer's action stamp indicating that the submittal is returned for unrestricted use.

PART 2 - PRODUCTS

2.1 SHEET PLASTIC

- A. Polyethylene Sheet: Provide flame-resistant polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-Resistant Textiles and Films. Provide largest size possible to minimize seams, 6.0 mil (0.15 mm) thick frosted or black as indicated.
- B. Reinforced Polyethylene Sheet: Where plastic sheet constitutes the only barrier between the work area and the building exterior, provide translucent, nylon reinforced or woven polyethylene, laminated, flame-resistant, polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-resistant Textiles and Films. Provide largest size possible to minimize seams, 6.0 mil (0.15 mm) thick, frosted or black as indicated.

2.2 MISCELLANEOUS MATERIALS

- A. Duct Tape: Provide duct tape in 2 inch or 3 inch (50 mm or 75 mm) widths as indicated, with an adhesive which is formulated to stick aggressively to sheet polyethylene.
- B. Spray Cement: Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.

PART 3 - EXECUTION

3.1 SEQUENCE OF WORK

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

- A. Carry out work of this section sequentially. Complete each of the following activities in accordance with requirements before proceeding to the next.
 - 1. Provide emergency exits and emergency lighting.
 - 2. Control access.
 - 3. Provide respiratory and worker protection.
 - 4. Provide Critical Barriers.
 - 5. Prepare Area.
 - 6. Provide Primary Barriers.
 - 7. Provide Isolation Areas as required.
 - 8. Provide Secondary Barrier.

3.2 GENERAL

- A. Work Area: the location where asbestos abatement work occurs. The Work Area is a variable of the extent of work of the Contract. It may be a portion of a room, a single room, or a complex of rooms. A "Work Area" is considered contaminated during the work, and must be isolated from the balance of the building, and decontaminated at the completion of the asbestos control work.
- B. Completely isolate the Work Area from other parts of the building so as to prevent asbestos-containing dust or debris from passing beyond the isolated area. Should the area beyond the Work Area(s) become contaminated with asbestos-containing dust or debris as a consequence of the work, clean those areas in accordance with the procedures indicated in Section 02 82 81. Perform all such required cleaning or decontamination at no additional cost to owner.
- C. Construct enclosures to provide an air-tight seal around ducts and openings into existing ventilation systems and around penetrations for electrical conduits, telephone wires, water lines, drain pipes, etc. Construct enclosures to be both airtight and watertight except for those openings designed to provide entry and/or air flow control.
- D. Size: Construct enclosure with sufficient volume to encompass all of the working surfaces yet allow unencumbered movement by the worker(s), provide

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

unrestricted air flow past the worker(s), and ensure walking surfaces can be kept free of tripping hazards.

- E. Shape: The enclosure may be any shape that optimizes the flow of ventilation air past the worker(s).
- F. Structural Integrity: The walls, ceilings and floors must be supported in such a manner that portions of the enclosure will not fall down during normal use.
- G. Barrier Supports: Provide frames as necessary to support all unsupported spans of sheeting.
- H. Openings: It is not necessary that the structure be airtight; openings may be designed to direct air flow. Such openings are to be located at a distance from active removal operations. They are to be designed to draw air into the enclosure under all anticipated circumstances. In the event that negative pressure is lost, they are to be fitted with either HEPA filters to trap dust or automatic trap doors that prevent dust from escaping the enclosure. Openings for exits are to be controlled by an airlock or a vestibule.
- I. Place all tools, scaffolding, staging, etc. necessary for the work in the area to be isolated prior to completion of Work Area isolation.
- J. Areas Within an Enclosure: Each enclosure consists of a work area, a decontamination area, and waste storage area. The work area where the asbestos removal operations occur are to be separated from both the waste storage area and the contamination control area by physical curtains, doors, and/or airflow patterns that force any airborne contamination back into the work area.
- K. Removing Mobile Objects: Clean movable objects and remove them from the work area before an enclosure is constructed unless moving the objects creates a hazard. Mobile objects will be assumed to be asbestos contaminated and are to be either cleaned with amended water and a HEPA vacuum and then removed from the area or wrapped and then disposed of as asbestos-contaminated waste.
- L. Disabling HVAC Systems: The power to the heating, ventilation, and air conditioning systems that service the regulated area must be deactivated and locked out. All ducts, grills, access ports, windows and vents must be sealed off with two (2) layers of plastic to prevent entrainment of contaminated air.
- M. Operating HVAC Systems in the regulated Area: If components of a HVAC system located in the regulated area are connected to a system that will service another zone during the project, the portion of the duct in the regulated area must be sealed and pressurized. Necessary precautions include caulking the duct joints, covering all cracks and openings with two (2) layers of sheeting, and pressurizing

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

the duct throughout the duration of the project by restricting the return air flow. The power to the fan supplying the positive pressure should be locked "on" to prevent pressure loss.

1. If fan providing positive pressure fails for any reason, immediately stop asbestos removal work, mist the area to reduce airborne fiber levels. Notify the Owner. Do not re-start asbestos removal work until authorized by the Designer.
- N. Lockout power to Work Area by switching off all breakers serving power or lighting circuits in work area. A lock and tag shall be placed on each breaker used to de-energize circuits and equipment with notation "DANGER circuit being worked on". Lock panel and have all keys under control of authorized person who has applied the locks.
- O. Lockout power to circuits running through work area wherever possible by switching off all breakers or removing fuses serving these circuits. Label breakers with tape over breaker with notation "DANGER circuit being worked on". Lock panel and have all keys under control of authorized person who applied locks. If circuits cannot be shut down for any reason, label at intervals 4 feet (1.22 m) on center with signs reading, "DANGER live electric circuit. Electrocution hazard." Label circuits in hidden locations but which may be affected by the work in a similar manner.
- P. Inspection Windows: Install inspection windows in locations shown on the plans or as directed by the Designer. Each inspection window is to have a 24 inch by 24 inch (610 by 610 mm) viewing area fabricated from 1/4 inch (6.35 mm) acrylic or polycarbonate sheet. Install window with top at 6 feet-6 inches (1.98 m) above floor height in a manner that provides unobstructed vision from outside to inside of the Work Area. Protect window from damage from scratching, dirt or any coatings used during the work. A sufficient number of windows are to be installed to provide observation of all portions of the Work Area that can be made visible from adjacent areas. Inspection windows that open into uncontrolled area are to be covered with a removable plywood hatch secured by lock and key. Provide keys to Designer for all such locks.

3.3 EMERGENCY EXITS

- A. Provide emergency exits and emergency lighting as set forth below:
1. Emergency Exits: At each existing exit door from the Work Area provide the following means for emergency exiting:
 2. Arrange exit door so that it is secure from outside the Work area but permits exiting from the Work Area.

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

3. Mark outline of door on Primary and Critical Barriers with luminescent paint at least 1 inch wide. Hang a razor knife on a string beside outline. Arrange Critical and Primary barriers so that they can be easily cut with one pass of razor knife. Paint words "EMERGENCY EXIT" inside outline with luminescent paint in letters at least 1 foot high and 2 inches wide.
4. Provide lighted EXIT sign at each exit.
5. Provide battery-operated emergency lighting that switches on automatically in the event of a power failure.

3.4 CONTROL ACCESS

- A. Isolate the Work Area to prevent entry by building occupants into Work Area or surrounding controlled areas. Accomplish isolation by the following:
 1. Submit to Designer a list of doors and other openings that must be secured to isolate Work Area. Include on list notation if door or opening is in an indicated exit route.
 2. After receiving written authorization from the Designer, construct partitions or closures across any opening into Work Area. Partitions are to be a minimum of 8 feet high.
 3. Fabricate partitions from 3-5/8 inch, 25 gauge metal studs with 1/2 inch gypsum board on both faces. Brace at intervals of 4 feet on center.
 4. Rigid-type folding partitions: remove operating bar and latch on clean side of folding partitions. Fasten down operating lever with hook and chain or other secure device on Work Area side. At completion of all abatement work reinstall bar and latch and adjust for proper operation.
- B. Locked Access: Arrange Work Area so that the only access into Work Area is through lockable doors to personnel and equipment decontamination units.
 1. Install temporary doors with entrance type locksets that are key lockable from the outside and always unlocked and operable from the inside. Do not use deadbolts or padlocks.
- C. Visual Barrier: Where the Work Area is immediately adjacent to or within view of occupied areas, provide a visual barrier of opaque polyethylene sheeting at least 6 mil (0.15 mm) in thickness so that the work procedures are not visible to

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

building occupants. Where this visual barrier would block natural light, substitute frosted or woven rip-stop sheet plastic in locations approved by the Designer.

- D. Demarcation. Demarcate the regulated area in any manner that minimizes the number of persons within the area and protects persons outside the area from exposure to airborne concentrations of asbestos. Where critical barriers or negative pressure enclosures are used, they may demarcate the regulated area.
- E. Access. Limit access to regulated areas to authorized persons as defined by OSHA, and to the Owner, Designer, Project Administrator or a representative authorized by one of these entities.
- F. Provide Warning Signs at each locked door leading to Work Area reading as follows:
 - 1. Provide Warning Signs at each locked door leading to Work Area reading as follows

<u>Legend</u>	<u>Notation</u>
KEEP OUT	3 inch Sans Serif Gothic or Block
CONSTRUCTION	1 inch Sans Serif Gothic or Block
WORK AREA	1 inch Sans Serif Gothic or Block
PROTECTIVE CLOTHING REQUIRED	
BEYOND THIS POINT	14 Point Gothic
 - 2. Immediately inside door and outside critical barriers post an approximately 20 inches by 14 inches manufactured caution sign displaying the following legend with letter sizes and styles of a visibility required by 29 CFR 1926:

<u>Legend</u>
DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA
 - 3. Provide spacing between respective lines at least equal to the height of the respective upper line.

3.5 ALTERNATE METHODS OF ENCLOSURE

- A. Alternate methods of containing the Work Area may be submitted to the Designer for approval in accordance with procedures set forth in Section 02 82 79

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

Substitutions. Do not proceed with any such method(s) without prior written approval of the Designer.

- B. Notification: Before work which involves the removal of more than 25 linear or 10 square feet of thermal system insulation or surfacing material is begun using an alternative method which has been the subject of required evaluation and certification. Send a copy of such evaluation and certification to the national office of OSHA, Office of Technical Support, Room N3653, 200 Constitution Avenue, NW, Washington, DC 20210 and to the Designer.
- C. Use a control method that encloses, contains or isolates the processes or source of airborne asbestos dust, or otherwise captures or redirects such dust before it enters the breathing zone of employees.
- D. Certification: Submit a certification from a Certified Industrial Hygienist (CIH) or licensed professional engineer who is also qualified as a project designer, who has evaluated the work area, the projected work practices and the engineering controls and who certifies in writing that the planned control method is adequate to reduce direct and indirect employee exposure to below the PELs and any requirements of Section 02 82 75 “Respiratory Protection” under worst-case conditions of use, and that the planned control method will prevent asbestos contamination outside the regulated area, as measured by clearance sampling which meets the requirements of EPA's Asbestos in Schools rule issued under AHERA, or perimeter monitoring which meets the criteria of OSHA 1926.1101, and as determined in accordance with the portion of Section 02 82 10 “Summary of Work - Asbestos Abatement” that describes the Owner’s monitoring of the project.

3.6 RESPIRATORY AND WORKER PROTECTION

- A. Before proceeding beyond this point in providing Temporary Enclosures:
 - 1. Provide Worker Protection per Section 02 82 73
 - 2. Provide Respiratory Protection per Section 02 82 75
 - 3. Provide Personnel Decontamination Unit per Section 02 82 77

3.7 CRITICAL BARRIERS

- A. Completely Separate the Work Area from other portions of the building, and the outside by closing all openings with sheet plastic barriers at least 6 mil (0.15 mm) in thickness, or by sealing cracks leading out of Work Area with duct tape.
- B. Individually seal all ventilation openings (supply and exhaust), lighting fixtures, clocks, doorways, windows, convectors and speakers, and other openings into the

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

Work Area with duct tape alone or with polyethylene sheeting at least 6 mil (0.15 mm) in thickness, taped securely in place with duct tape. Maintain seal until all work including Project Decontamination is completed. Take care in sealing of lighting fixtures to avoid melting or burning of sheeting.

- C. Provide Sheet Plastic barriers at least 6 mil (0.15 mm) in thickness as required to seal openings completely from the Work Area into adjacent areas. Seal the perimeter of all sheet plastic barriers with duct tape or spray cement.
- D. Mechanically Support sheet plastic independently of duct tape or spray cement seals so that seals do not support the weight of the plastic. Following are acceptable methods of supporting sheet plastic barriers. Alternative support methods may be used if approved in writing by the Designer.
 - 1. Plywood squares 6 inch by 6 inch by 3/8 inch held in place with one 6d smooth masonry nail or electro-galvanized common nail driven through center of the plywood and duct tape on plastic so that plywood clamps plastic to the wall. Locate plywood squares at each end, corner and at maximum 4 feet on centers.
 - 2. Nylon or polypropylene rope or wire with a maximum unsupported span of 10 feet, minimum 1/4 inch in diameter suspended between supports securely fastened on either side of opening at maximum 1 foot below ceiling. Tighten rope so that it has 2 inches maximum dip. Drape plastic over rope from outside Work Area so that a 2 foot long flap of plastic extends over rope into Work Area. Staple or wire plastic to itself 1 inch below rope at maximum 6 inches on centers to form a sheath over rope. Lift flap and seal to ceiling with duct tape or spray cement. Seal loop at bottom of flap with duct tape. Erect entire assembly so that it hangs vertically without a "shelf" upon which debris could collect.
- E. Provide Pressure Differential System per Section 02 82 60.
 - 1. Clean housings and ducts of all overspray materials prior to erection of any Critical Barrier that will restrict access.

3.8 PREPARE AREA

- A. Scaffolding: If fixed scaffolding is to be used to provide access HEPA vacuum and wet clean area prior to scaffolding installation.
- B. Remove all electrical and mechanical items, such as lighting fixtures, clocks, diffusers, registers, escutcheon plates, etc. which cover any part of the surface to be worked on with the work.

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

- C. Remove all general construction items such as cabinets, casework, door and window trim, moldings, ceilings, trim, etc., which cover the surface of the work as required to prevent interference with the work.
- D. Clean All Surfaces In Work Area with a HEPA filtered vacuum or by wet wiping prior to the installation of primary barrier.
- E. Cleaning and Sealing Surfaces: After cleaning with water and a HEPA vacuum, surfaces of stationary objects should be covered with two (2) layers of plastic sheeting. The sheeting should be secured with duct tape or an equivalent method to provide a tight seal around the object.

3.9 PRIMARY BARRIER

- A. Protect building and other surfaces in the Work Area from damage from water and high humidity or from contamination from asbestos-containing debris, slurry or high airborne fiber levels by covering with a primary barrier as described below.
- B. Sheet Plastic: Protect surfaces in the Work Area with two (2) layers of plastic sheeting on floor and walls, or as otherwise directed on the Contract Drawings or in writing by the Designer. Perform work in the following sequence.
 - 1. All seams in the sheeting should overlap, be staggered and not be located at corners or wall-to-floor joints.
 - 2. Cover Floor of Work Area with two (2) individual layers of clear polyethylene sheeting, each at least 6 mil (0.15 mm) in thickness, turned up walls at least 12 inches. Form a sharp right angle bend at junction of floor and wall so that there is no radius which could be stepped on causing the wall attachment to be pulled loose. Both spray-glue and duct tape all seams in floor covering. Locate seams in top layer 6 feet from, or at right angles to, seams in bottom layer. Install sheeting so that top layer can be removed independently of bottom layer.
 - 3. Stairs and Ramps: Do not cover stairs or ramps with unsecured sheet plastic. Where stairs or ramps are covered with plastic, provide 3/4 inch exterior grade plywood treads securely held in place, over plastic. Do not cover rungs or rails with any type of protective materials.
 - 4. Repair of Damaged Polyethylene Sheeting: Remove and replace plastic sheeting which has been damaged by removal operations or where seal has failed allowing water to seep between layers. Remove affected sheeting and wipe down entire area. Install new sheet plastic only when area is completely dry.

SECTION 02 82 61 – TEMPORARY ENCLOSURES - ASBESTOS

3.10 ISOLATION AREA

- A. Maintain isolation areas between the Work Area and adjacent building area:

3.11 STOP WORK

- A. If the Critical or Primary barrier falls or is breached in any manner stop asbestos removal work immediately and comply with “Stop Work requirements of Section 02 82 10 “Summary of Work - Asbestos Abatement”. Do not start work until authorized in writing by the Designer.

3.12 EXTENSION OF WORK AREA

- A. Extension of Work Area: If the Critical Barrier is breached in any manner that could allow the passage of asbestos debris or airborne fibers, then add affected area to the Work Area, enclose it as required by this Section of the specification and decontaminate it as described in Section 02 82 81 Project Decontamination.

3.13 SECONDARY BARRIER

- A. Secondary layer of plastic as a drop cloth to protect the primary layer from debris generated by the asbestos abatement work is specified in the appropriate work sections.

END OF SECTION 02 82 61

SECTION 02 82 73 - WORKER PROTECTION - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION OF WORK

- A. This section describes the equipment and procedures required for protecting workers against asbestos contamination and other workplace hazards except for respiratory protection.

1.3 RELATED WORK SPECIFIED ELSEWHERE

- A. Respiratory Protection: is specified in Section 02 82 75.

1.4 WORKER TRAINING

- A. AHERA Accreditation: All workers are to be accredited as Abatement Workers as required by the EPA Model Accreditation Plan (MAP) asbestos abatement worker training (40 CFR Part 763, Subpart E, Appendix C).
- B. State and Local License: All workers are to be trained, certified and accredited as required by state or local code or regulation.
- C. Training - Class I: Train in accordance with 29 CFR 1926.1101. Provide training for all workers who will perform Class I operations that is the equivalent in curriculum, training method and length to the EPA Model Accreditation Plan (MAP) asbestos abatement worker training (40 CFR Part 763, Subpart E, Appendix C).

1.5 MEDICAL SURVEILLANCE

- A. Provide a medical surveillance program for all employees who are:
 - 1. engaged in Class I, II and III work for a combined total of 30 or more days per year or,
 - a. For the purposes of this paragraph, any day in which a worker engages in Class II or Class III work or a combination thereof for one hour or less (taking into account the entire time spent on the

SECTION 02 82 73 - WORKER PROTECTION - ASBESTOS ABATEMENT

removal operation, including cleanup) and, while doing so, adheres fully to the work practices specified in the OSHA standard (29 CFR 1926.1101) is not counted.

2. are exposed at or above the permissible exposure limit or excursion limit or,
 3. before an employee can be assigned to work requiring use of a respirator.
- B. Provide a medical surveillance program and physician's opinion before a respirator is assigned as required by 29 CFR 1910.134 and 29 CFR 1926.103(e)(10) .
- C. Provide medical examination that as a minimum meets OSHA requirements as set forth in 29 CFR 1926.1101. In addition, require that the physician provide an evaluation of the individual's ability to work in environments capable of producing heat stress in the worker.

1.6 SUBMITTALS

- A. Before Start of Work: Submit the following to the Designer for review. Do not start work until these submittals are returned with Designer's action stamp indicating that the submittal is returned for unrestricted use.
1. AHERA Accreditation: Submit copies of certificates from an EPA-approved AHERA Abatement Workers course for each worker as evidence that each asbestos Abatement Worker is accredited as required by the EPA Interim Final Model Accreditation Plan (MAP) asbestos abatement worker training (40 CFR Part 763, Subpart E, Appendix C).
 2. State and Local License: Submit evidence that all workers have been trained, certified and accredited as required by state or local code or regulation.
 3. Certificate Worker Acknowledgment: Submit an original signed copy of the Certificate of Worker's Acknowledgment found at the end of this section, for each worker who is to be at the job site or enter the Work Area.
 4. Report from Medical Examination: conducted within last 12 months as part of compliance with OSHA medical surveillance requirements for each worker who is to enter the Work Area. Submit, at a minimum, for each worker the following:

SECTION 02 82 73 - WORKER PROTECTION - ASBESTOS ABATEMENT

- a. Name and Social Security Number
 - b. The physician's written opinion as to whether the employee has any detected medical conditions that would place the employee at an increased risk of material health impairment from exposure to asbestos;
 - c. Any recommended limitations on the employee or on the use of personal protective equipment such as respirators; and
 - d. A statement that the employee has been informed by the physician of the results of the medical examination and of any medical conditions that may result from asbestos exposure.
 - e. A statement that the employee has been informed by the physician of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure (29 CFR 1926.1101(m)).
 - f. A legible typed version of the physician's name, the physician's signature, and date of examination.
5. Notarized Certifications: Submit certification signed by an officer of the abatement contracting firm and notarized that exposure measurements, medical surveillance, and worker training records are being kept in conformance with 29 CFR 1926.

PART 2 - EQUIPMENT

2.1 PROTECTIVE CLOTHING

- A. General. Provide and require the use of protective clothing, such as coveralls or similar whole-body clothing, head coverings, gloves, and foot coverings for any employee exposed to airborne concentrations of asbestos that exceed the TWA and/or excursion limit prescribed by 29 CFR 1926.1101 or for which a required negative exposure assessment is not produced, and for any employee performing Class I operations which involve the removal of over 25 linear or 10 square feet of TSI or surfacing ACM or PACM.
- B. Coveralls: Provide disposable full-body coveralls and disposable head covers, and require that they be worn by all workers in the Work Area. Provide a sufficient number for all required changes, for all workers in the Work Area.
- C. Additional Protective Clothing: Provide each worker with the protective clothing as required by Federal State and local regulations. This includes, but is not necessary limited by hard hats, cold weather gear, gloves, boots and goggles.

SECTION 02 82 73 - WORKER PROTECTION - ASBESTOS ABATEMENT

2.2 ADDITIONAL PROTECTIVE EQUIPMENT

- A. Disposable coveralls, head covers, and footwear covers shall be provided by the Contractor for the Owner, Designer, Project Administrator, and other authorized representatives who may inspect the job site. Provide six complete coveralls per day.

PART 3 - EXECUTION

3.1 GENERAL

- A. Provide worker protection as required by the most stringent OSHA and/or EPA standards applicable to the work. The following procedures are minimums to be adhered to regardless of fiber count in the Work Area.
- B. Each time Work Area is entered remove all street clothes in the Changing Room of the Personnel Decontamination Unit and put on new disposable coverall, new head cover, and a clean respirator. Proceed through shower room to equipment room and put on work boots.

3.2 DECONTAMINATION PROCEDURES

- A. Require all workers to adhere to the following personal decontamination procedures whenever they leave the Work Area:
 - 1. Type C Supplied Air or Powered Air-Purifying Respirators: Require that all workers use the following decontamination procedure as a minimum requirement whenever leaving the Work Area:
 - a. When exiting area, remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the equipment room.
 - b. Still wearing respirators, proceed to showers. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator to avoid asbestos fibers while showering. The following procedure is required as a minimum:
 - c. Thoroughly wet body including hair and face. If using a Powered Air-Purifying Respirator (PAPR) hold blower unit above head to keep canisters dry.
 - d. With respirator still in place thoroughly wash body, hair, respirator face piece, and all parts of the respirator except the blower unit and battery pack on a PAPR. Pay particular attention to seal between face and respirator and under straps.

SECTION 02 82 73 - WORKER PROTECTION - ASBESTOS ABATEMENT

- e. Take a deep breath, hold it and/or exhale slowly, completely wet hair, face, and respirator. While still holding breath, remove respirator and hold it away from face before starting to breath.
 - f. Carefully wash face piece of respirator inside and out.
2. If using PAPR: shut down in the following sequence, first cap inlets to filter cartridges, then turn off blower unit (this sequence will help keep debris which has collected on the inlet side of filter from dislodging and contaminating the outside of the unit). Thoroughly wash blower unit and hoses. Carefully wash battery pack with wet rag. Be extremely cautious of getting water in battery pack as this will short out and destroy battery.
- a. Shower completely with soap and water.
 - b. Rinse thoroughly.
 - c. Rinse shower room walls and floor prior to exit.
 - d. Proceed from shower to Changing Room and change into street clothes or into new disposable work items.
3. Air Purifying-Negative Pressure Respirators: Require that all workers use the following decontamination procedure as a minimum requirement whenever leaving the Work Area with a half or full face cartridge type respirator:
- a. When exiting area, remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the Equipment Room.
 - b. Still wearing respirators, proceed to showers. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator and filters to avoid asbestos fibers while showering. The following procedure is required as a minimum:
 - c. Thoroughly wet body from neck down.
 - d. Wet hair as thoroughly as possible without wetting the respirator filter if using an air purifying type respirator.
 - e. Take a deep breath, hold it and/or exhale slowly, complete wetting of hair, thoroughly wetting face, respirator and filter (air purifying respirator). While still holding breath, remove respirator and hold it away from face before starting to breath.
 - f. Dispose of wet filters from air purifying respirator.
 - g. Carefully wash face piece of respirator inside and out.
 - h. Shower completely with soap and water.
 - i. Rinse thoroughly.
 - j. Rinse shower room walls and floor prior to exit.
 - k. Proceed from shower to Changing Room and change into street clothes or into new disposable work items.

SECTION 02 82 73 - WORKER PROTECTION - ASBESTOS ABATEMENT

- B. Remote Shower: The procedures above are to be used if the decontamination facility is used as a remote shower. If a worker cannot gain direct access to the Equipment Room require that he enter Decontamination Unit and proceed directly through Shower Room to Equipment Room. Decontamination procedure is then completed as required above.
- C. Within Work Area:
 - 1. Require that workers NOT eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the Work Area. To eat, chew, drink or smoke, workers shall follow the procedure described above, then dress in street clothes before entering the non-Work Areas of the building.

3.3 CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

Following this section is a Certificate of Worker Training. After each worker has been included in the Contractor's Respiratory Protection Program, completed the training program and medical examination, secure a fully executed copy of this form.

END OF SECTION 02 82 73

SECTION 02 82 74 – CERTIFICATE WORKER PROTECTION - ASBESTOS ABATEMENT

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

PROJECT NAME _____ DATE _____

PROJECT ADDRESS _____

CONTRACTOR'S NAME _____

WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBERS HAS BEEN LINKED WITH VARIOUS TYPES OF CANCER. IF YOU SMOKE AND INHALE ASBESTOS FIBERS THE CHANCE THAT YOU WILL DEVELOP LUNG CANCER IS GREATER THAN THAT OF THE NON-SMOKING PUBLIC.

Your employer's contract with the Owner for the above project requires that: You be supplied with the proper respirator and be trained in its use. You be trained in safe work practices and in the use of the equipment found on the job. You receive a medical examination. These things are to have been done at no cost to you.

RESPIRATORY PROTECTION: You must have been trained in the proper use of respirators, and informed of the type respirator to be used on the above referenced project. You must be given a copy of the written respiratory protection manual issued by your employer. You must be equipped at no cost with the respirator to be used on the above project.

TRAINING COURSE: You must have been trained in the dangers inherent in handling asbestos and breathing asbestos dust and in proper work procedures and personal and area protective measures. This training must have been the equivalent in curriculum, training method and length to the EPA Model Accreditation Plan (MAP) asbestos abatement worker training (40 CFR Part 763, Subpart E, Appendix C).

MEDICAL EXAMINATION: You must have had a medical examination within the past 12 months at no cost to you. This examination must have included: health history, pulmonary function tests and may have included an evaluation of a chest x-ray.

By signing this document you are acknowledging only that the Owner of the building you are about to work in has advised you of your rights to training and protection relative to your employer.

Signature _____ Social Security No _____

Printed Name _____

Witness _____

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION OF WORK

- A. Instruct and train each worker involved in asbestos abatement or maintenance and repair of friable asbestos-containing materials (ACM) in proper respiratory use and require that each worker always wear a respirator, properly fitted on the face in the Work Area from the start of any operation which may cause airborne asbestos fibers until the Work Area is completely decontaminated. Use respiratory protection appropriate for the fiber level encountered in the work place or as required for other toxic or oxygen-deficient situations encountered.

1.3 DEFINITIONS

- A. "Negative Pressure Respirator": A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere.
- B. "Protection Factor": The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.
- C. "Respirator": A device designed to protect the wearer from the inhalation of harmful atmospheres.

1.4 STANDARDS

- A. Except to the extent that more stringent requirements are written directly into the Contract Documents, the latest edition of the following regulations and standards have the same force and effect (and are made a part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if published copies were bound herewith. Where there is a conflict in requirements set forth in these regulations and standards, meet the more stringent requirement.

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

1. OSHA - U.S. Department of Labor Occupational Safety and Health Administration, Safety and Health Standards Section 29 CFR 1910.1001, Section 1910.134, and Section 29 CFR 1926.1101.
2. CGA - Compressed Gas Association, Inc., New York, Pamphlet G-7, "Compressed Air for Human Respiration", and Specification G-7.1 "Commodity Specification for Air".
3. CSA - Canadian Standard Association, Rexdal, Ontario, Standard Z180.1, "Compressed Breathing Air".
4. ANSI - American National Standard Practices for Respiratory Protection, ANSI Z88.2.
5. NIOSH - National Institute for Occupational Safety and Health
 - NIOSH Respirator Decision Logic (May 1987) DHHS/NIOSH Publication No. 87-108;
 - NIOSH/EPA, "A Guide to Respiratory Protection for the Asbestos Abatement Industry" EPA-560-OPTS-86-001 (September 1986);
 - 42 CFR 84, NIOSH Standard for Certification of Non-Powered Air Purifying Respirator filters;
 - 30 CFR 11, NIOSH - Certification of Respirators
6. MSHA - Mine Safety and Health Administration

1.5 SUBMITTALS

- A. Before Start of Work submit the following to the Designer for review. Do not begin work until these submittals are returned with the Designer's action stamp indicating that the submittal is returned for unrestricted use.
 1. Product Data: Submit manufacturer's product information for each component used, including NIOSH and MSHA Certifications for each component in an assembly and/or for entire assembly.
 2. System Diagram: When a supplied air respiratory system is required by the work, submit drawing showing assembly of components into a complete supplied air respiratory system. Include diagram showing location of compressor, filter banks, backup air supply tanks, hose line connections in Work Area(s), routing of air lines to Work Area(s) from compressor.

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

3. Operating Instruction: Submit complete operating and maintenance instructions for all components and systems as a whole. Submittal is to be in bound manual form suitable for field use.
4. Respiratory Protection Program: Submit Contractor's written respiratory protection program manual as required by OSHA 1926.1101.
5. Initial Exposure Assessment: Submit level of respiratory protection intended for each operation required by the project. Base this selection on an Initial Exposure Assessment as required by OSHA 29 CFR 1926.1101. Submit information to support this "Initial Exposure Assessment on the form included at the end of this Section."
 - a. Submit data from exposure monitoring for the PEL and EL from prior asbestos jobs within 12 months;
 - b. Submit monitoring and analysis that were performed in compliance with the OSHA asbestos standard in effect;
 - c. Submit data that was obtained under workplace conditions "closely resembling" those that will exist during the Work;
 - d. Submit data from past asbestos jobs where the type of asbestos abatement and other work, material, control methods, work practices, and environmental conditions closely resemble those that will exist during the Work;
 - e. Submit exposure data from prior asbestos jobs where the work that was conducted by employees whose training and experience are no more extensive than that of employees performing the current job;
 - f. Based on the exposure data from the previous asbestos jobs, select respiratory protection for the Work that will, to a high degree of certainty, prevent worker exposures (inside the respirator) that exceed the Permissible Exposure Limits (PEL) set forth in this Section of the specifications.
6. Resume information: Submit resume and information on training for individual monitoring the operation of supplied air respiratory systems. Submit training certifications where applicable.

1.6 AIR QUALITY FOR SUPPLIED AIR RESPIRATORY SYSTEMS

- A. Provide air used for breathing in supplied air respiratory systems that meets or exceeds standards set for C.G.A. Type 1 (Gaseous Air) Grade H or CSA Z180.1 whichever presents the more stringent quality standard.

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

1.7 ALLOWABLE CONTAMINANTS

- A. Supply air that has an asbestos concentration no greater than outside ambient conditions.
- B. Supply air that meets the level of contaminants allowed according to the air quality standard specified.

1.8 DELIVERY

- A. Deliver replacement parts, etc., not otherwise labeled by NIOSH or MSHA to job site in manufacturer's containers.

PART 2 - EQUIPMENT

2.1 AIR PURIFYING RESPIRATORS

- A. Respirator Bodies: Provide half face or full face type respirators. Equip full face respirators with a nose cup or other anti-fogging device as would be appropriate for use in air temperatures less than 32 degrees Fahrenheit (0 degrees Celsius).
- B. Filter Cartridges: Provide, at a minimum, HEPA type filters labeled with NIOSH and MSHA Certification for "Radionuclides, Radon Daughters, Dust, Fumes, Mists including Asbestos-Containing Dusts and Mists" and color coded in accordance with 42 CFR Part 84 and ANSI Z228.2. Also, additional cartridge sections may be added, if required, for solvents, etc., in use. In this case, provide cartridges that have each section of the combination canister labeled with the appropriate color code and NIOSH/MSHA Certification.
- C. Non-permitted respirators. Do not use single use, disposable or quarter face respirators.

2.2 SUPPLIED AIR RESPIRATOR SYSTEMS

- A. Provide equipment capable of producing air of the quality and volume required by the above reference standards applied to the job site conditions and crew size. Comply with provisions of this specification if more stringent than the governing standard.
- B. Face piece and Hose: Provide full Face piece and hose by same manufacturer that has been certified by NIOSH/MSHA as an approved Type "C" respirator assembly operating in pressure demand mode with a positive pressure Face piece.

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

- C. Escape air supply: In atmospheres which are oxygen deficient (less than 19.5 percent oxygen) provide a pressure-demand full Face piece supplied air respirator incorporating an auxiliary self-contained breathing apparatus (SCBA) which automatically maintains an uninterrupted air supply in pressure demand mode with a positive pressure face piece.
- D. Backup air supply: Provide a reservoir of compressed air located outside the Work Area which will automatically maintain a continuous uninterruptible source of air automatically available to each connected Face piece and hose assembly in the event of compressor shut-down, contamination of air delivered by compressor, power loss or other failure. Provide sufficient capacity in the back-up air supply to allow a minimum escape time of one-half hour times the number of connections available to the Work Area. Air requirement at each connection is the air requirement of the respirators in use plus the air requirement of an average-sized adult male engaged in moderately strenuous activity.
- E. Warning device: Provide a warning device that will operate independently of the building's power supply. Locate so that alarm is clearly audible above the noise level produced by equipment and work procedures in use, in all parts of the Work Area and at the compressor. Connect alarm to warn of:
 - 1. Compressor shut down or other fault requiring use of backup air supply
 - 2. Carbon Monoxide (CO) levels in excess of 5 PPM/V
- F. Carbon Monoxide (CO) Monitor: Continuously monitor and record on a strip chart recorder Carbon Monoxide (CO) levels. Place monitors in the air line between compressor and back-up air supply and between backup air supply and workers. Connect monitors so that they also sound an alarm as specified under "Warning Devices".
- G. Compressor Shut Down: Interconnect monitors, alarms and compressor so that compressor is automatically shut down and the alarms sound if any of the following occur:
 - 1. Carbon Monoxide (CO) concentrations exceed 5 PPM/v in the air line between the filter bank and backup air supply
 - 2. Compressor temperature exceeds normal operating range
- H. Compressor Location: Locate compressor outside of building in location that will not impede access to the building, and that will not cause a nuisance by virtue of noise or fumes to occupied portions of the building.

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

- I. Air Intake: Locate air intake remotely from any source of automobile exhaust or any exhaust from engines, motors, auxiliary generator or buildings.
- J. After-Cooler: Provide an after-cooler at entry to filter system which is capable of reducing temperatures to outside ambient air temperatures.
- K. Self Contained Breathing Apparatus (SCBA): Configure system to permit the recharging of 1/2 hour 2260 PSI (15.58 MPa) SCBA cylinders.

PART 3 - EXECUTION

3.1 GENERAL

- A. Respiratory Protection Program: Comply with ANSI Z88.2 "Practices for Respiratory Protection" and OSHA 29 CFR 1910.314 and 1926.103.
- B. Require that respirators be used in the following circumstances:
 - 1. During all Class I asbestos jobs.
 - 2. During all Class II work where the ACM is not removed in a substantially intact state,
 - 3. During all Class II and III work which is not performed using wet methods.
 - 4. During all Class II and III asbestos jobs where the employer does not produce a "negative exposure assessment".
 - 5. During all Class III jobs where TSI or surfacing ACM or PACM is being disturbed.
 - 6. During all Class IV work performed within regulated areas where employees performing other work are required to wear respirators.
 - 7. During all work covered by this section where employees are exposed above the OSHA PEL (TWA, or excursion limit).
 - 8. In emergencies. During emergencies where the airborne asbestos fiber concentration is not known, a self-contained breathing apparatus (SCBA) must be used.
- C. Require that respiratory protection be used at all times that there is any possibility of disturbance of ACM whether intentional or accidental.

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

- D. Require that a respirator be worn by anyone in a Work Area at all times, regardless of activity, during a period that starts with any operation which could cause airborne fibers until the area has been cleared for re-occupancy in accordance with Section 02 82 73.
- E. Regardless of Airborne Fiber Levels: Require that the minimum level of respiratory protection used be half-face air-purifying respirators with high efficiency filters.
- F. Do not allow the use of single-use, disposable, or quarter-face respirators for any purpose.

3.2 FIT TESTING

- A. Initial Fitting: Provide initial fitting of respiratory protection during a respiratory protection course of training set up and administered by an individual qualified to do fit testing. Fit types and sizes of respirator to be actually worn by each individual. Allow an individual to use only those respirators for which training and fit testing has been provided.
- B. On a Weekly Basis, check the fit of each worker's respirator by having irritant smoke blown onto the respirator from a smoke tube.
- C. Upon Each Wearing: Require that each time an air-purifying respirator is put on it be checked for fit with a positive and negative pressure fit test in accordance with the manufacturer's instructions or ANSI Z88.2.

3.3 TYPE OF RESPIRATORY PROTECTION REQUIRED

- A. General: After reducing airborne asbestos levels to the lowest feasible level with engineering controls and work practices, provide respiratory protection as necessary to ensure that workers are not exposed to an airborne concentration of asbestos in excess of the Specified Permissible Exposure Limits (SPEL) set forth in this Section.
- B. Level of Respiratory Protection: Determine the proper level of respiratory protection by dividing the expected or actual airborne fiber count in the Work Area by the "protection factors" given below. The level of respiratory protection which supplies an airborne fiber level inside the respirator, at the breathing zone of the wearer, at or below the Specified Permissible Exposure Limits (PEL) set forth in this Section is the minimum level of protection allowed.

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

- C. Specific Respiratory Protection Requirements: Provide respiratory protection as indicated below as a minimum requirement:
1. Half-face or full face Negative Pressure Air-Purifying Respirators: Provide half-face or full face negative pressure air-purifying respirators during installation of Critical or Primary Barriers or other removal activities where there has been an "Initial Exposure Assessment" that has determined that airborne asbestos fiber levels will not exceed 0.1 fiber per cubic centimeter (0.1 f/cc). Provide a PAPR where a half-face negative pressure air-purifying respirator is allowed to any worker who so requests.
 2. Powered Air-Purifying Respirators (PAPR): Provide powered air-purifying respirators (PAPR) during removal of asbestos-containing thermal system insulation (TSI) or surfacing material where there has been an "Initial Exposure Assessment" that has determined that airborne asbestos fiber levels will not exceed 1.0 fiber per cubic centimeter (1.0 f/cc).
 3. Type "C" Supplied-air respirators: full Face piece pressure demand supplied air respirators may be used by all workers engaged in the removal of thermal system insulation (TSI) or surfacing materials, or demolition of pipes, structures, or equipment covered or insulated with asbestos, or in the removal or demolition of asbestos insulation or coverings, or any other activity which results in or may result in airborne asbestos fiber levels above 1.0 fibers per cubic centimeter (1.0 f/cc).
- D. Provide a full Face piece supplied air respirator operated in the pressure demand mode equipped with an auxiliary positive pressure self-contained breathing apparatus for all workers within a regulated area where Class I work is being performed and for which an initial exposure assessment has not been produced. After an initial exposure assessment is made, use the level of respiratory protection required by that assessment and requirements of this specification and the OSHA Asbestos Construction Standard 29 CFR 1926.1101.

3.4 SPECIFIED PERMISSIBLE EXPOSURE LIMITS (SPEL)

- A. Specified Permissible Exposure Limits (SPEL): Ensure that no worker is exposed to an airborne concentration of asbestos in excess of the Time-Weighted Average (TWA) limit, and Excursion Limit (EL) set forth below.
1. Time Weighted Average (TWA) limit - Concentration of airborne asbestos fibers to which any worker may be exposed as an eight hour time-weighted average (TWA) shall not exceed the following.

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

- a. 0.01 fibers per cubic centimeter
- 2. Excursion Limit (EL) - Concentration of airborne asbestos fibers to which any worker may be exposed as averaged over a sampling period of 30 minutes shall not exceed the following.
 - a. 1.0 fibers per cubic centimeter
- B. Fibers: For purposes of this section, fibers are defined as all fibers regardless of composition as counted in the OSHA Reference Method (ORM), or NIOSH 7400 procedure.
 - 1. Electron Microscopy: If Electron Microscopy is used to determine airborne fiber levels, only asbestos fibers will be enumerated, but fibers of any size detected by the testing of Section 02 82 81 Project Decontamination will be counted.

3.5 RESPIRATORY PROTECTION FACTOR

A.	Respirator Type	Protection Factor
1.	Air purifying: Negative pressure respirator High efficiency filter Half Face piece	10
2.	Air purifying: Negative pressure respirator High efficiency filter Full Face piece	50
3.	Powered Air Purifying (PAPR): Positive pressure respirator High efficiency filter Half Face piece	50
4.	Supplied air: Positive pressure respirator Pressure demand or other positive pressure mode Full face piece Equipped with an auxiliary HEPA Cartridge or positive pressure Self-contained breathing apparatus (SCBA) for escape	1,000

SECTION 02 82 75 – RESPIRATORY PROTECTION - ASBESTOS ABATEMENT

3.6 AIR PURIFYING RESPIRATORS

- A. Negative pressure - half or full face mask: Supply a sufficient quantity of respirator filters approved for asbestos, so that workers can change filters during the work day. Require that respirators be wet-rinsed, and filters discarded, each time a worker leaves the Work Area. Require that new filters be installed each time a worker re-enters the Work Area. Store respirators and filters at the job site in the changing room and protect totally from exposure to asbestos prior to their use.
- B. Powered air purifying - half or full face mask: Supply a sufficient quantity of high efficiency respirator filters approved for asbestos so that workers can change filters at any time that flow through the Face piece decreases to the level at which the manufacturer recommends filter replacement. Require that regardless of flow, filter cartridges be replaced after 40 hours of use. Require that HEPA elements in filter cartridges be protected from wetting during showering. Require entire exterior housing of respirator, including blower unit, filter cartridges, hoses, battery pack, face mask, belt, and cords, be washed each time a worker leaves the Work Area. Caution should be used to avoid shorting battery pack during washing. Provide an extra battery pack for each respirator so that one can be charging while one is in use.

3.7 SUPPLIED AIR RESPIRATOR

- A. Air Systems Monitor: Continuously monitor the air system operation including compressor operation, filter system operation, backup air capacity and all warning and monitoring devices at all times that system is in operation. Assign an individual, trained by manufacturer of the equipment in use or by a Certified Industrial Hygienist, in the operation and maintenance of the system to provide this monitoring. Assign no other duties to this individual which will take him away from monitoring the air system.

END OF SECTION 02 82 75

SECTION 02 82 76 – RESPIRATORY PROTECTION INITIAL ASSESSMENT - ASBESTOS ABATEMENT

INITIAL EXPOSURE ASSESSMENT

Project No: _____

Date: _____

Project Name: _____

Facility: _____

Work Area(s): _____

Reference Job:

Description of Work: _____

Asbestos Containing Materials _____

Asbestos/Type Percentage _____

Task	Personal Monitoring Level			Respirator Worn	Comments
	High	Low	Average		
Prep / Set up	_____	_____	_____	_____	_____
Removal of Surfacing	_____	_____	_____	_____	_____
Removal of TSI	_____	_____	_____	_____	_____
Removal of Misc Mat	_____	_____	_____	_____	_____
Bag Out	_____	_____	_____	_____	_____
Clean Up	_____	_____	_____	_____	_____
Other	_____	_____	_____	_____	_____
Experience Level of Work Force: _____					

Reference Job:

Description of Work: _____

Asbestos Containing Materials _____

Asbestos/Type Percentage _____

Task	Personal Monitoring Level			Respirator Worn	Comments
	High	Low	Average		
Prep / Set up	_____	_____	_____	_____	_____
Removal of Surfacing	_____	_____	_____	_____	_____
Removal of TSI	_____	_____	_____	_____	_____
Removal of Misc Mat.	_____	_____	_____	_____	_____
Bag Out	_____	_____	_____	_____	_____
Clean Up	_____	_____	_____	_____	_____
Other	_____	_____	_____	_____	_____

Experience Level of Work Force: _____

SECTION 02 82 76 – RESPIRATORY PROTECTION INITIAL ASSESSMENT - ASBESTOS ABATEMENT

Expected Conditions of This Job

Task	Anticipated Level	Respirator	Comments
Prep / Set up	_____ f/cc	_____	_____
Removal of Surfacing	_____ f/cc	_____	_____
Removal of TSI	_____ f/cc	_____	_____
Removal of Misc Mat.	_____ f/cc	_____	_____
Bag Out	_____ f/cc	_____	_____
Clean Up	_____ f/cc	_____	_____
Other	_____ f/cc	_____	_____

Experience Level of Work Force:

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

PART 1- GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION OF WORK

- A. Provide separate Personnel and Equipment Decontamination facilities. Require that the Personnel Decontamination Unit be the only means of ingress and egress for the Work Area. Require that all materials exit the Work Area through the Equipment Decontamination Unit.

1.3 RELATED WORK SPECIFIED ELSEWHERE

- A. Refer to Section 02 82 40 Temporary Facilities - Asbestos Abatement for electrical requirements and requirements relative to connection of decontamination facilities to building systems such as water, sewer, and electrical.

1.4 SUBMITTALS

- A. Before the Start of Work: Submit the following to the Designer for review. Do not begin work until these submittals are returned with Designer's action stamp indicating that the submittal is returned for unrestricted use or final-but-restricted use.
 - 1. Personnel Decontamination Unit: Provide shop drawing showing location and assembly of personnel decontamination units.
 - 2. Equipment Decontamination Unit: Provide shop drawing showing location and assembly of equipment decontamination units.
 - 3. Shower Pan: Provide shop drawing.
 - 4. Shower Walls: Provide product data.
 - 5. Shower Head and Controls: Provide product data.
 - 6. Filters: Provide product data and shop drawing of installation on decontamination unit.

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

7. Hose Bib: Provide product data.
8. Shower Stall: for Wash Down Station provide product data and shop drawing showing and modifications.
9. Lumber: Provide product data on fire resistance treatment.
10. Sump Pump: Provide product data.
11. Signs: Submit samples of signs to be used.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Polyethylene Sheet: Provide flame resistant polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-resistant Textiles and Films. Provide largest size possible to minimize seams, 6.0 mil (0.15 mm) thick, frosted or black as indicated.
- B. Reinforced Polyethylene Sheet: Where plastic sheet is the only separation between the Work Area and building exterior, provide translucent, nylon reinforced, laminated, flame resistant, polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-resistant Textiles and Films. Provide largest size possible to minimize seams, 6.0 mil (0.15 mm) thick, frosted or black as indicated.
- C. Duct Tape: Provide duct tape in 2 inch or 3 inch widths as indicated, with an adhesive which is formulated to stick aggressively to sheet polyethylene.
- D. Spray Adhesive: Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.
- E. Shower Pan: Provide one piece waterproof shower pan.
- F. Shower Walls: Provide walls fabricated from rigid, impervious, waterproof material.
- G. Shower Head and Controls: Provide a factory-made shower head producing a spray of water which can be adjusted for spray size and intensity. Feed shower

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

with water mixed from hot and cold supply lines. Arrange so that control of water temperature, flow rate, and shut off is from inside shower without outside aid.

- H. Filters: Provide cascaded filter units on drain lines from showers or any other water source carrying asbestos-contaminated water from the Work Area. Provide units with disposable filter elements as indicated below. Connect so that discharged water passes primary filter and output of primary filter passes through secondary filter.
 - 1. Primary Filter - Passes particles 20 microns and smaller
 - 2. Secondary Filter - Passes particles 5 microns and smaller
- I. Hose Bib: Provide heavy bronze angle type with wheel handle, vacuum breaker, and 3/4 inch National Standard male hose outlet.
- J. Shower Stall: For Wash Down Station provide leak tight shower enclosure with integrated drain pan fabricated from fiberglass or other durable waterproof material, approximately 3 feet by 3 feet square with minimum 6 feet high sides and back. Structurally support as necessary for stability. Equip with hose bib, as specified in this section, mounted at approximately 4 feet above drain pan. Connect drain to a reservoir, pump water from reservoir through filters to a drain or store and use for amended water. Mount filters inside shower stall on back wall beneath hose bib.
- K. Lumber: Provide kiln dried lumber of any grade or species.
- L. Sump Pump: Provide totally submersible waterproof sump pump with integral float switch. Provide unit sized to pump two times the flow capacity of all showers or hoses supplying water to the sump, through the filters specified herein when they are loaded to the extent that replacement is required. Provide unit capable of pumping debris, sand, plaster or other materials washed off during decontamination procedures without damage to mechanism of pump. Adjust float switch so that a minimum of 3 inches remains between top of liquid and top of sump pan.

PART 3 - EXECUTION

3.1 PERSONNEL DECONTAMINATION UNIT

- A. Provide a Personnel Decontamination Unit consisting of a serial arrangement of connected rooms or spaces, Changing Room, Drying Room, Shower Room, and Equipment Room. Require all persons without exception to pass through this Decontamination Unit for entry into and exiting from the Work Area for any

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

purpose. Do not allow parallel routes for entry or exit. Do not remove equipment or materials through Personnel Decontamination Unit. Provide temporary lighting within Decontamination Units as necessary to reach a lighting level of 100 foot candles (1076 lumens / sq meter).

- B. Changing Room (clean room): Provide a room that is physically and visually separated from the rest of the building for the purpose of changing into protective clothing.
1. Construct using polyethylene sheeting, at least 6 mil in thickness, to provide an airtight seal between the Changing Room and the rest of the building.
 2. Locate so that access to Work Area from Changing Room is through Shower Room.
 3. Separate Changing Room from the building by a sheet plastic flapped doorway.
 4. Require workers to remove all street clothes in this room, dress in clean, disposable coveralls, and don respiratory protection equipment. Do not allow asbestos-contaminated items to enter this room. Require Workers to enter this room either from outside the structure dressed in street clothes, or naked from the showers.
 5. An existing room may be utilized as the Changing Room if it is suitably located and of a configuration whereby workers may enter the Changing Room directly from the Shower Room. Protect all surfaces of room with sheet plastic as set forth in Section 02 82 61 Temporary Enclosures. Authorization for this must be obtained from the Designer in writing prior to start of construction. Submit written request in accordance with Section 02 82 79 "Substitutions" detailing layout and protective measures proposed.
 6. Maintain floor of changing room dry and clean at all times. Do not allow overflow water from shower to wet floor in changing room.
 7. Damp wipe all surfaces twice after each shift change with a disinfectant solution.
 8. Provide posted information for all emergency phone numbers and procedures.
 9. Provide one storage locker per employee.

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

- C. Drying Room: Provide a drying room as an airlock and a place for workers to dry after showering.
1. Construct room by providing a pan continuous with or draining to Shower Room pan. Install a freely draining wooden or non-skid metal floor in pan at elevation of top of pan.
 2. Separate this room from the rest of the building with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
 3. Separate this room from the Changing Room and Shower Room with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
 4. Separate from Changing Room by a sheet plastic flapped doorway.
 5. Provide a continuously adequate supply of disposable bath towels.
- D. Shower Room: Provide a completely watertight operational shower to be used for transit by cleanly dressed workers heading for the Work Area from the Changing Room, or for showering by workers headed out of the Work Area after undressing in the Equipment Room.
1. Construct room by providing a shower pan and two (2) shower walls in a configuration that will cause water running down walls to drip into pan. Install a freely draining wooden floor in shower pan at elevation of top of pan.
 2. Separate this room from the rest of the building with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
 3. Separate this room from the Drying Room and Airlock with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
 4. Provide splashproof entrances to Drying Room and Airlock.
 5. Provide shower head and controls.
 6. Provide temporary extensions of existing hot and cold water and drainage, as necessary for a complete and operable shower.
 7. Provide a soap dish and a continuously adequate supply of soap and maintain in sanitary condition.

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

8. Arrange so that water from showering does not splash into the Changing or Equipment Rooms.
 9. Arrange water shut off and drain pump operation controls so that a single individual can shower without assistance from either inside or outside of the Work Area.
 10. Provide flexible hose shower head.
 11. Pump waste water to drain or to storage for use in amended water. If pumped to drain, provide 20 micron and 5 micron waste water filters in line to drain or waste water storage. Change filters daily or more often if necessary. Locate filters inside shower unit so that water lost during filter changes is caught by shower pan.
 12. Provide hose bib.
- E. Airlock: Provide an airlock between Shower Room and Equipment Room. This is a transit area for workers. Separate this room from Equipment Room by a sheet plastic flap doorway.
1. Separate this room from the rest of the building with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
 2. Separate this room from the Equipment Room and Shower Room with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
 3. Separate from Equipment Room by a sheet plastic flapped doorway.
- F. Equipment Room (contaminated area): Require work equipment, footwear and additional contaminated work clothing to be left here. This is a change and transit area for workers.
1. Separate this room from the Work Area by a 6 mil (0.15 mm) polyethylene flapped doorway.
 2. Separate this room from the rest of the building with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
 3. Separate this room from the Shower Room and Work Area with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
 4. Provide a drop cloth layer of sheet plastic on floor in the Equipment Room for every shift change expected. Roll drop cloth layer of plastic from

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

Equipment Room into Work Area after each shift change. Replace before next shift change. Provide a minimum of two (2) layers of plastic at all times. Use only clear plastic to cover floors.

- G. Work Area: Separate Work Area from the Equipment Room by polyethylene barriers. If the airborne asbestos level in the Work Area is expected to be high, as in dry removal, add an intermediate cleaning space between the Equipment Room and the Work Area. Damp wipe clean all surfaces after each shift change. Provide one additional floor layer of 6 mil (0.15 mm) polyethylene per shift change and remove contaminated layer after each shift.
- H. Decontamination Sequence: Require that all workers adhere to the following sequence when entering or leaving the Work Area.
 - 1. Entering Work Area: Worker enters Changing Room and removes street clothing, puts on clean disposable overalls and respirator, and passes through the Shower Room into the Equipment Room.
 - 2. Any additional clothing and equipment left in Equipment Room needed by the worker are put on in the Equipment Room.
 - 3. Worker proceeds to Work Area.
- I. Exiting Work Area:
 - 1. Before leaving the Work Area, require the worker to remove all gross contamination and debris from overalls and feet.
 - 2. The worker then proceeds to the Equipment Room and removes all clothing except respiratory protection equipment.
 - 3. Extra work clothing such as boots, hard hats, goggles, gloves are to be stored in contaminated end of the Equipment Room.
 - 4. Disposable coveralls are placed in a bag for disposal with other material.
 - 5. Require that Decontamination procedures found in Section 02 82 73 be followed by all individuals leaving the Work Area.
 - 6. After showering, the worker moves to the Changing Room and dresses in either new coveralls for another entry or street clothes if leaving.

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

3.2 EQUIPMENT DECONTAMINATION UNIT

- A. Provide an Equipment Decontamination Unit consisting of a serial arrangement of rooms, Clean Room, Holding Room, Wash Room for removal of equipment and material from Work Area. Do not allow personnel to enter or exit Work Area through Equipment Decontamination Unit.
- B. Arrange with airlocks between rooms as required below.
- C. Wash Down Station: Provide an enclosed Shower Unit located in Work Area just outside Wash Room as an equipment, bag and container cleaning station.
 - 1. Fabricate waterproof floor extending 6 feet beyond Wash Down station in all directions. Install seamless waterproof membrane over area and extend over curbs on all four sides. Form curbs from 2 inch by 4 inch lumber laid on the flat.
 - 2. Waterproof membrane is to be fabricated from minimum 10 mil (.254 mm) polyethylene.
 - 3. Do not allow water to collect on waterproof membrane. Remove continuously with a wet vacuum or mops.
- D. Wash Room: provide wash room for cleaning of bagged or containerized asbestos-containing waste materials passed from the Work Area.
 - 1. Construct wash room of metal stud and polyethylene sheeting, at least 6 mil (0.15 mm) in thickness and located so that packaged materials, after being wiped clean, can be passed to the Holding Room.
 - 2. Separate this room from the Work Area by a single flapped door of 6 mil (0.15 mm) polyethylene sheeting.
 - 3. Provide a drop cloth layer of plastic on floor in the Wash Room for every load-out operation. Roll this drop cloth layer of plastic from Wash Room into Work Area after each load-out. Provide a minimum of two (2) layers of plastic at all times. Use only clear plastic to cover floors.
- E. Airlock: Provide an airlock between Wash Room and Holding Room. This is a transit area.
 - 1. Separate this room from adjacent spaces by a sheet plastic flapped doorway.

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

2. Separate this room from the rest of the building and adjacent spaces with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
- F. Holding Room: Provide Holding Room as a drop location for bagged asbestos-containing materials passed from the Wash Room. Construct Holding Room of nominal 2 inch by 4 inch wood framing and polyethylene sheeting, at least 6 mil (0.15 mm) in thickness and located so that bagged materials cannot be passed from the Wash Room through the Holding Room to the Clean Room.
1. Separate this room from the adjacent rooms by flap doors fabricated from 6 mil (0.15 mm) sheet plastic.
- G. Airlock: Provide an airlock between Holding Room and Clean Room. This is a transit area.
1. Separate this room from adjacent spaces by a sheet plastic flap doorway.
 2. Separate this room from the rest of the building and adjacent spaces with airtight walls fabricated of 6 mil (0.15 mm) polyethylene.
- H. Clean Room: provide Clean Room to isolate the Holding Room from the building exterior. If possible locate to provide direct access to the Holding Room from the building exterior.
1. Erect Critical and Primary Barriers as described in Section 02 82 61 "Temporary Enclosures" in an existing space. If no space exists construct Clean Room of 2 inch by 4 inch wood framing and polyethylene sheeting, at least 6 mil (0.15 mm) in thickness.
 2. Separate this room from the exterior by a single flap door of 6 mil (0.15 mm) polyethylene sheeting.
- I. Load-out Area: The load-out area is the transfer area from the building to a truck or dumpster. It may be the Clean Room of the Equipment Decontamination unit or a separate room or loading dock area. Erect Critical and Primary barriers as described in Section 02 82 61 "Temporary Enclosures" in load-out area.
1. During transfer of material from load-out area erect primary barriers as described in Section 02 82 61 "Temporary Enclosures" as necessary to seal path from load-out area to truck or dumpster.

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

- J. Decontamination Sequence: Take all equipment or material from the Work Area through the Equipment Decontamination Unit according to the following procedure:
1. At washdown station, thoroughly wet clean contaminated equipment or sealed polyethylene bags and pass into Wash Room.
 2. When passing equipment or containers into the Wash Room, close all doorways of the Equipment Decontamination Unit, other than the doorway between the Washdown Station and the Wash Room. Keep all outside personnel clear of the Equipment Decontamination Unit.
 3. Once inside the washroom, wet clean the bags and/or equipment.
 4. When cleaning is complete pass items into Holding Room. Close all doorways except the doorway between the Holding room and the Clean Room.
 5. Workers from the building exterior enter Holding Area and remove decontaminated equipment and/or containers for disposal.
 6. Require these workers to wear full protective clothing and appropriate respiratory protection.
 7. At no time is a worker from an uncontaminated area to enter the enclosure when a removal worker is inside.

3.3 CONSTRUCTION OF THE DECONTAMINATION UNITS

- A. Walls and Ceiling: Construct airtight walls and ceiling using polyethylene sheeting, at least 6 mil (0.15 mm) in thickness. Attach to existing building components or a temporary framework.
- B. Floors: Use two (2) layers (minimum) of 6 mil (0.15 mm) polyethylene sheeting to cover floors in all areas of the Decontamination Units. Use only clear plastic to cover floors.
- C. Flap Doors: Fabricated from three (3) overlapping sheets with openings a minimum of 3 feet wide. Configure so that sheeting overlaps adjacent surfaces. Weights at bottom of sheets as required so that they quickly close after being released. Put arrows on sheets to indicate direction of overlap and/or travel. Provide a minimum of 6 feet between entrance and exit of any room. Provide a minimum of 3 feet between doors to airlocks.

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

- D. If the Decontamination area is located within an area containing friable asbestos on overhead ceilings, ducts, piping, etc., provide the area with a minimum 1/4 inch hardboard or 1/2 inch plywood "ceiling" with polyethylene sheeting, at least 6 mil (0.15 mm) in thickness covering the top of the "ceiling".
- E. Visual Barrier: Where the Decontamination area is immediately adjacent to and within view of occupied areas, provide a visual barrier of opaque polyethylene sheeting at least 6 mil (0.15 mm) in thickness so that worker privacy is maintained and work procedures are not visible to building occupants. Where the area adjacent to the Decontamination area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting. Construct barrier with metal studs covered with minimum 1/2 inch sheet rock. Where the solid barrier is provided, sheeting need not be opaque.
- F. Alternate methods of providing Decontamination facilities may be submitted to the Designer for approval. Do not proceed with any such method(s) without written authorization of the Designer.
- G. Electrical: Provide subpanel at Changing Room to accommodate all removal equipment. Power subpanel directly from a building electrical panel.
 - 1. Connect all electrical branch circuits in Decontamination unit and particularly any pumps in shower room to a ground-fault circuit protection device.

3.4 CLEANING OF DECONTAMINATION UNITS

- A. Clean debris and residue from inside of Decontamination Units on a daily basis or as otherwise indicated on Contract Drawings. Damp wipe or hose down all surfaces after each shift change. Clean debris from shower pans on a daily basis.
- B. If the Changing Room of the Personnel Decontamination Unit becomes contaminated with asbestos-containing debris, abandon the entire Decontamination Unit and erect a new Decontamination Unit. Use the former Changing Room as an inner section of the new Equipment Room.

3.5 SIGNS

- A. Post an approximately 20 inch by 14 inch manufactured caution sign at each entrance to the Work Area displaying the following legend with letter sizes and styles of a visibility required by 29 CFR 1926:
 - 1. Provide signs in both English and Spanish.

SECTION 02 82 77 – DECONTAMINATION UNITS - ASBESTOS

2. Legend:
DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN
THIS AREA
 3. Provide spacing between respective lines at least equal to the height of the respective upper line.
- B. Post an approximately 10 inch by 14 inch manufactured sign at each entrance to each Work Area displaying the following legend with letter sizes and styles of a visibility at least equal to the following:
1. Provide signs in both English and Spanish.
 2. Legend Notation
- | | |
|---|----------------|
| NO FOOD, BEVERAGES OR TOBACCO PERMITTED | 3/4 inch Block |
| ALL PERSONS SHALL DON PROTECTIVE | 3/4 inch Block |
| CLOTHING (COVERINGS) BEFORE ENTERING THE WORK | |
| AREA | |
| ALL PERSONS SHALL SHOWER IMMEDIATELY | 3/4 inch Block |
| AFTER LEAVING WORK AREA AND BEFORE | |
| ENTERING THE CHANGING AREA | |

END OF SECTION 02 82 77

SECTION 02 82 78 – MATERIALS AND EQUIPMENT ASBESTOS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A This Section includes administrative and procedural requirements governing the Contractor's selection of products for use in the Project.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. The Contractor's Construction Schedule is included under Section 02 82 12 Coordination - Asbestos Abatement.
 - 2. The Contractor's Schedule of Submittals is included under Section 02 82 25 Submittals - Asbestos Abatement respectively.
 - 3. The applicability of industry standards to products specified is included under Section 02 82 21 Reference Standards and Definitions - Asbestos Abatement respectively.
 - 4. The administrative procedures for handling requests for substitutions made after award of the Contract is included under Section 02 82 79 Substitutions - Asbestos Abatement.

1.3 DEFINITIONS

- A. Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms. Such terms are self-explanatory and have well-recognized meanings in the construction industry.
 - 1. "Products" are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

SECTION 02 82 78 – MATERIALS AND EQUIPMENT ASBESTOS

2. "Named Products" are items identified by the manufacturer's product name, including make or model number or other designation, shown or listed in the manufacturer's published product literature, that is current as of the date of the Contract Documents.
3. "Foreign Products" as distinguished from "domestic products," are items substantially manufactured (50 percent or more of value) outside the United States and its possessions. Products produced or supplied by entities substantially owned (more than 50 percent) by persons who are not citizens of, nor living within, the United States and its possessions are also considered to be foreign products.
4. "Materials" are products substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
5. "Equipment" is a product with operational parts, whether motorized or manually operated, that requires service connections, such as wiring or piping.
6. "Equipment" are products that may be either operational or fixed.
 - a. Operational Equipment are products with operating parts, whether motorized or manually operated, that requires temporary or permanent service connections, such as wiring or piping.
 - b. Fixed Equipment are products necessary for accomplishing the work that are used as a temporary facility during the work and removed afterward.

1.4 SUBMITTALS

- A. Required submittals: A general listing of products requiring submittals is included at the end of Section 02 82 25 "Submittals." This listing may not be complete. Submittal requirements are found in each specification section. Prepare a schedule in tabular form showing each product listed. Include the manufacturer's name and proprietary product names for each item listed.
 1. Form: Prepare product list with information on each item tabulated under the following column headings:
 - a. Related Specification Section number.
 - b. Generic name used in Contract Documents.
 - c. Proprietary name, model number, and similar designations.
 - d. Manufacturer's name and address.

SECTION 02 82 78 – MATERIALS AND EQUIPMENT ASBESTOS

2. Initial Submittal: Within 10 days after date of Notice of Award, submit three (3) copies of an initial product list. Provide a written explanation for omissions of data and for known variations from Contract requirements.
 - a. At the Contractor's option, the initial submittal may be limited to product selections and designations that must be established early in the Contract period.
3. Designer's Action: The Designer will respond in writing to Contractor within one week of receipt of the completed product list. No response within this period constitutes no objection to listed manufacturers or products but does not constitute a waiver of the requirement that products comply with Contract Documents. The Owner's representative's response will include a list of unacceptable product selections, containing a brief explanation of reasons for this action.

1.5 QUALITY ASSURANCE

- A. Source Limitations: To the fullest extent possible, provide products of the same kind from a single source.
 1. When specified products are available only from sources that do not, or cannot, produce a quantity adequate to complete project requirements in a timely manner, consult with the Owner's representative to determine the most important product qualities before proceeding. Qualities may include attributes, such as visual appearance, strength, durability, or compatibility. When a determination has been made; select products from sources producing products that possess these qualities to the fullest extent possible.
- B. Compatibility of Options: When the Contractor is given the option of selecting between two (2) or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.
 1. The contractor is responsible for providing products and construction methods that are compatible with products and construction methods to be installed after completion of the work of this contract.
 2. If a dispute arises between contractors over concurrently selectable, but incompatible products, the Designer will determine which products shall be retained and which are incompatible and must be replaced.

SECTION 02 82 78 – MATERIALS AND EQUIPMENT ASBESTOS

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products according to the manufacturer's recommendations, using means and methods that will prevent damage, deterioration, and loss, including theft.
 - 1. Schedule delivery to minimize long-term storage at the site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to assure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to the site in an undamaged condition in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products upon delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 - 5. Store products at the site in a manner that will facilitate inspection and measurement of quantity or counting of units.
 - 6. Store heavy materials away from the Project structure in a manner that will not endanger the supporting construction.
 - 7. Store products subject to damage by the elements above ground, under cover in a weather tight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required by manufacturer's instructions.

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, new at the time of installation.

SECTION 02 82 78 – MATERIALS AND EQUIPMENT ASBESTOS

1. Provide products complete with accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and the intended use and effect.
 2. Standard Products: Where available, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- B. Product Selection Procedures: The Contract Documents and governing regulations govern product selection. Procedures governing product selection include the following:
1. Descriptive Specification Requirements: Where Specifications describe a product or assembly listing exact characteristics required with or without use of a brand or trade name provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.
 2. Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements and are recommended by the manufacturer for the application indicated.
 - a. Manufacturer's recommendations may be contained in published product literature or by the manufacturer's certification of performance.
 3. Compliance with Standards, Codes, and Regulations: Where Specifications only require compliance with an imposed code, standard, or regulation, select a product that complies with the standards, codes, or regulations specified.
 4. Allowances: Refer to individual Specification Sections and "Allowance" provisions in Division 1 for allowances that control product selection and for procedures required for processing such selections.

PART 3 - EXECUTION

3.1 INSTALLATION OF PRODUCTS

- A. Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other Work.

SECTION 02 82 78 – MATERIALS AND EQUIPMENT ASBESTOS

1. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

END OF SECTION 02 82 78

SECTION 02 82 79 - SUBSTITUTIONS - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. Related Sections: The following Sections contain requirements that relate to the Section:
 - 1. Division 1 Section 02 82 21 "Reference Standards and Definitions - Asbestos Abatement" specifies the applicability of industry standards to products specified.
 - 2. Division 1 Section 02 82 12 "Coordination - Asbestos Abatement" specifies requirements for submitting the Contractor's Construction Schedule.
 - 3. Division 1 Section 02 82 25 "Submittals - Asbestos Abatement" specifies requirements for submitting the Submittal Schedule.
 - 4. Division 1 Section 02 82 78 "Materials and Equipment - Asbestos Abatement" specifies requirements governing the Contractor's selection of products and product options.

1.3 DEFINITIONS

- A. Definitions in this Article do not change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract are considered to be requests for substitutions. The following are not considered to be requests for substitutions:
 - 1. Substitutions requested during the bidding period, and accepted by Addendum prior to award of the Contract, are included in the Contract

SECTION 02 82 79 - SUBSTITUTIONS - ASBESTOS ABATEMENT

Documents and are not subject to requirements specified in this Section for substitutions.

2. Revisions to the Contract Documents requested by the Owner or Designer.
3. Specified options of products and construction methods included in the Contract Documents.
4. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

1.4 SUBMITTALS

- A. Substitution Request Submittal: The Designer will consider requests for substitution if received within 60 days after commencement of the Work. Requests received more than 60 days after commencement of the Work may be considered or rejected at the discretion of the Designer.
1. Submit three (3) copies of each request for substitution for consideration. Submit requests in the form and according to procedures required for change-order proposals.
 2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
 3. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:
 - a. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate contractors that will be necessary to accommodate the proposed substitution.
 - b. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements, such as performance, weight, size, durability, and visual effect.
 - c. Product Data, including Drawings and descriptions of products and fabrication and installation procedures.
 - d. Samples, where applicable or requested.
 - e. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval

SECTION 02 82 79 - SUBSTITUTIONS - ASBESTOS ABATEMENT

- of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
- f. Cost information, including a proposal of the net change, if any in the Contract Sum.
 - g. The Contractor's certification that the proposed substitution conforms to requirements in the Contract Documents in every respect and is appropriate for the applications indicated.
 - h. The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
4. Designer's Action: If necessary, the Designer will request additional information or documentation for evaluation within one week of receipt of a request for substitution. The Designer will notify the Contractor of acceptance or rejection of the substitution within 2 weeks of receipt of the request, or one week of receipt of additional information or documentation, whichever is later. Acceptance will be in the form of a change order.
- a. Use the product specified if the Designer cannot make a decision on the use of a proposed substitute within the time allocated.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Conditions: The Designer will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Designer. If the following conditions are not satisfied, the Designer will return the requests without action except to record noncompliance with these requirements.
- 1. Extensive revisions to the Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of the Contract Documents.
 - 3. The request is timely, fully documented, and properly submitted.
 - 4. The specified product or method of construction cannot be provided within the Contract Time.
 - 5. The Designer will not consider the request if the product or method cannot be provided as a result of failure to pursue the Work promptly or

SECTION 02 82 79 - SUBSTITUTIONS - ASBESTOS ABATEMENT

coordinate activities properly.

- B. The Contractor's submittal and the Designer's acceptance of Shop Drawings, Product Data, or Samples for construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 02 82 79

SECTION 02 82 80 – PROJECT/CONTRACTOR CLOSEOUT - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Project record document submittal.
 - 3. Submittal of warranties.
 - 4. Final cleaning.
- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 2 through 16.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request.
 - 1. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete.
 - a. Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
 - b. If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.
 - 2. Advise the Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.

SECTION 02 82 80 – PROJECT/CONTRACTOR CLOSEOUT - ASBESTOS ABATEMENT

4. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 5. Complete final cleanup requirements.
- B. Inspection Procedures: On receipt of a request for inspection, the Designer will either proceed with inspection or advise the Contractor of unfilled requirements. The Designer will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
1. The Designer will repeat inspection when requested and assured that the Work is substantially complete.
 2. Results of the completed inspection will form the basis of requirements for final acceptance.

1.4 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.
 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
 3. Submit a certified copy of the Designer's final inspection list of items to be completed or corrected, endorsed and dated by the Designer. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Designer.
 4. Submit consent of surety to final payment.
 5. Submit a final liquidated damages settlement statement.
 6. Submit copy of daily log, final project photographs, damage or settlement surveys, and similar final record information.

SECTION 02 82 80 – PROJECT/CONTRACTOR CLOSEOUT - ASBESTOS ABATEMENT

- B. Reinspection Procedure: The Designer will reinspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Designer.
 - 1. Upon completion of reinspection, the Designer will prepare a certificate of final acceptance. If the Work is incomplete, the Designer will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
 - 2. If necessary, reinspection will be repeated.
- C. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order. Identify miscellaneous records properly and bind or file, ready for continued use and reference. Submit to the Designer for the Owner's records.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: The General Conditions require general cleaning during construction. Regular site cleaning is included in Division 1 Section "Construction Facilities and Temporary Controls." The cleaning in this Section is in addition to cleaning which is part of decontamination work. This section is intended to return the facility to the Owner in presentable condition.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion.
- C. Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.
- D. Compliance: Comply with regulations of authorities having jurisdiction and

SECTION 02 82 80 – PROJECT/CONTRACTOR CLOSEOUT - ASBESTOS ABATEMENT

safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from the site and dispose of lawfully.

1. Where extra materials of value remain after completion of associated Work, they become the Owner's property. Dispose of these materials as directed by the Owner.

END OF SECTION 02 82 80

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Work of This Section includes the decontamination of air in the Work Area which has been, or may have been, contaminated by the elevated airborne asbestos fiber levels generated during abatement activities, or which may previously have had elevated fiber levels due to friable asbestos-containing materials (ACM) in the space.
- B. Work of This Section includes the cleaning, decontamination, and removal of temporary facilities installed prior to abatement work, including:
 - 1. Primary and Critical Barriers erected by work of Section 02 82 61
 - 2. Decontamination Unit erected by work of Section 02 82 77
 - 3. Pressure Differential System installed by work of Section 02 82 60
- C. Work of This Section includes the cleaning, and decontamination of all surfaces (ceiling, walls, floor) of the Work Area, and all furniture or equipment in the Work Area.

1.2 RELATED DOCUMENTS

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

1.3 DESCRIPTION OF REQUIREMENTS

- A. General: Decontamination of the Work Area following asbestos abatement.
- B. If the asbestos abatement work is on damaged or friable materials the work is a four step procedure with two (2) cleanings of the Primary Barrier plastic prior to its removal and two (2) cleanings of the room surfaces to remove any new or existing contamination.
- C. If the asbestos abatement work is on undamaged and non-friable materials the decontamination procedure is a two (2) step procedure with two (2) cleanings of the Primary Barrier plastic to remove contamination, thus preventing contamination of the building when the Work Area isolation barriers are removed.

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

- D. In both cases operation of the pressure differential system is used to remove airborne fibers generated by the abatement work.

1.4 RELATED WORK SPECIFIED ELSEWHERE

- A. Removal of Gross Debris is integral with the performance of abatement work and as such is specified in the appropriate work section(s) of these specifications:

- 1. Section 02 83 30 Removal of Asbestos-containing Materials

1.5 CLEARANCE AIR SAMPLING BY THE CONTRACTOR

- A. To determine if the elevated airborne asbestos structure concentration encountered during abatement operations has been reduced to the specified level, the Contractor will secure samples and analyze them according to the following procedures.

- 1. Aggressive sampling procedures as described below will be followed.
 - 2. TEM samples will be secured as indicated below and transmitted to the laboratory. Samples will be analyzed utilizing transmission electron microscopy (TEM) and the analytical protocol specified in the Louisiana Administrative Codes, Title 33, Part III Chapter 27, Section 2727, Subsection I, Paragraph 3 or Paragraph 4). If the area meets the TEM clearance criteria, the work of Section 02 82 81 Project Decontamination can continue.

1.6 AGGRESSIVE SAMPLING BY THE CONTRACTOR

- A. All Air Samples will be taken using aggressive sampling techniques as follows:

- 1. Before sampling pumps are started the exhaust from forced-air equipment (leaf blower with an approximately 1 horsepower electric motor) will be swept against all walls, ceilings, floors, ledges and other surfaces in the room. This procedure will be continued for five minutes per 10,000 cubic feet of room volume.
 - 2. One 20 inch diameter fan per 10,000 cubic feet of room volume will be mounted in a central location at approximately 6 feet -6 inches above floor, directed toward ceiling and operated at low speed for the entire period of sample collection.

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

3. Air samples will be collected in areas subject to normal air circulation away from room corners, obstructed locations, and sites near windows, doors of vents.
4. After air sampling pumps have been shut off, fans will be shut off.
5. In work areas where a dirt floor or exposed fibrous glass insulation is in the space, but outside the work area, maintain a critical barrier to prevent disturbance of these surfaces during aggressive sampling.

1.7 SCHEDULE OF CLEARANCE AIR SAMPLES BY CONTRACTOR

- A. Sample cassettes: Samples will be collected on 25 mm. cassettes as follows:
 1. TEM: 0.45 micrometer mixed cellulose ester or 0.40 micrometer polycarbonate, with 5.0 micron mixed cellulose ester backing filter.
- B. Number and Volume of Samples: The number and volume of air samples will be determined by the provisions in the Louisiana Administrative Codes, Title 33, Part III Chapter 27, Section 2727, Subsection I, Paragraph 3 or Paragraph 4,
- C. Sampling sensitivity:
 1. TEM: Analytical Sensitivity as set forth in the analytical method used or the AHERA regulation.

1.8 TRANSMISSION ELECTRON MICROSCOPY

- A. Regardless if Paragraph 3 or Paragraph 4 of the Louisiana Administrative Codes, Title 33, Part III Chapter 27, Section 2727, Subsection I is the clearance protocol chosen, a minimum of 13 samples will be taken for each work area. If Paragraph 3 is chosen, all 13 samples will be analyzed. If Paragraph 4 is chosen, just the five samples taken from the work area and the three blanks will be analyzed.

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

Location Sampled	Number of Samples	Analytical Sensitivity Struct/cc	Approx. Volume (Liters)	Rate Liters/Minute
Each Work Area	5	0.005	1,300-1,800	1-10
Outside Each Work Area	5	0.005	1,300-1,800	1-10
Work Area Blank	1	0.005	0	Open for 30 Seconds
Outside Blank	1	0.005	0	Open for 30 Seconds
Laboratory Blank	1	0.005	0	Do Not Open

- B. Analysis will be performed using the analysis method specified in the Louisiana Administrative Codes, Title 33, Part III Chapter 27, Section 2727, Subsection I, Paragraph 3 or Paragraph 4.)
- C. Asbestos Structures referred to in this Section include asbestos fibers, bundles, clusters or matrices, as defined by method of analysis.
- D. Release Criteria: Decontamination of the work site is complete if either of the following two (2) sets of conditions are met:
1. Work Area Samples are below filter background levels
 - a. All Work Area sample volumes are greater than 1,199 liters for a 25 mm. sampling cassette.
 - b. The average asbestos concentration of the three blanks is below the filter background level of 70 structures per square millimeter of filter area.
 - c. The average concentration of asbestos of the five Work Area Samples does not exceed the filter background level of 70 structures per square millimeter of filter area.
 2. Work Area Samples are not statistically different from Outside samples
 - a. All sample volumes except for blanks are greater than 560 liters for a 25 mm. sampling cassette.
 - b. The average asbestos concentration of the three blanks is below the filter background level of 70 structures per square millimeter of filter area.
 - c. Average asbestos concentrations in Work Area Samples are not statistically different from Outside samples, as determined by the

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

Z-test calculation found in 40 CFR Part 763, Subpart E, Appendix A (Z is less than or equal to 1.65)

- E. If these conditions are not met then the decontamination is incomplete, repeat the cleaning procedures of this section.
- F. Termination of Analysis: if the arithmetic mean (average) asbestos concentration on the blank filters exceeds 70 structures per square millimeter of filter area the analysis will cease and new samples collected.

1.9 LABORATORY TESTING BY THE CONTRACTOR

- A. Phase Contrast Microscopy by the Contractor:
 - 1. The services of a testing laboratory must be employed by the Contractor to perform laboratory analysis of the air samples. A microscope and technician will be set up at the job site, or samples will be sent daily by overnight mail, so that verbal reports on air samples can be obtained within 24 hours. A complete record, certified by the testing laboratory, of all air monitoring tests and results will be furnished to the Designer, the Owner, and the Contractor.
- B. Transmission Electron Microscopy by the Contractor:
 - 1. Samples will be sent by overnight courier for analysis by Transmission Electron Microscopy. Samples will not be carried on weekends, so that samples shipped on Friday will arrive on the following Monday. Verbal results will normally be available within 24 hours of receipt of samples by the laboratory. The laboratory shall be capable of analyzing a maximum of 13 such samples from this project at any one time. All Transmission Electron Microscopy results will be available to the Contractor, the Designer and the Owner.

1.10 SUBMITTALS

- A. Before Start of Work submit the following to the Designer for review. Do not begin work until these submittals are returned with the Designer's action stamp indicating that the submittal has been "Received - Not Reviewed."

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

1. Safety Data Sheet: Submit Safety Data Sheets, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for the following:

- a. “Lock-Back,” sealer.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.1 START OF WORK

- A. Previous Work: During completion of the asbestos abatement work specified in other sections, the Secondary Barrier of polyethylene sheeting will have been removed and disposed of along with any gross debris generated by the asbestos abatement work.
- B. Visual inspection: Perform visual inspections of the work area along with the Project Administrator at each step of the decontamination process.
 1. Follow inspection procedures in EPA Purple Book.
- C. Start of Work: Work of this section begins with the cleaning of the Primary Barrier. At start of work the following will be in place:
 1. Primary Barrier: Two (2) layers of polyethylene sheeting on floor and one layer on walls.
 2. Critical Barrier: An airtight barrier between the Work Area and other portions of the building or the outside.
 3. Critical Barrier Sheeting: Over lighting fixtures and clocks, ventilation openings, doorways, convectors, speakers and other openings.
 4. Decontamination Units: For personnel and equipment in operating condition.
 5. Pressure Differential System: In operation.

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

3.2 FIRST CLEANING

- A. First Cleaning: Carry out a first cleaning of all surfaces of the work area including items of remaining sheeting, tools, scaffolding and/or staging by use of damp-cleaning and mopping, and/or a High Efficiency Particulate Air (HEPA) filtered vacuum. (Note: A HEPA vacuum may fail if used with wet material.) Do not perform dry dusting or dry sweeping. Use each surface of a cleaning cloth one time only and then dispose of as contaminated waste. Continue this cleaning until there is no visible debris from removed materials or residue on plastic sheeting or other surfaces.
 - 1. Remove All Filters in Air Handling System(s) and dispose of as asbestos-containing waste in accordance with requirements of Section 02 83 32 Disposal of Regulated Asbestos-Containing Material.
 - 2. After the surfaces have passed a visual inspection verifying that all debris and residue has been removed from the sheet plastic, allow a waiting period that is long enough for the HEPA-filtered fan units operating in the work area to provide 96 air changes to clean air of airborne asbestos fibers. Use oscillating fans as necessary to assure circulation of air in all parts of work areas during this period. Maintain Pressure Differential System in operation for the entire 96 air change period.

3.3 SECOND CLEANING

- A. Second Cleaning: Carry out a second cleaning of all surfaces in the work area in the same manner as the first cleaning.
- B. Visual inspection: Perform a visual inspection to determine if all ACM including debris and residue has been removed. When the area is visually clean, remove primary barriers.
 - 1. Surfaces to be covered with sealer have met the requirements for a visual inspection in this section.
- C. Removal of Primary Barriers:
 - 1. Immediately following the second cleaning of the Primary plastic, remove all Primary Barrier sheeting and Material Decontamination Unit, if there is one, leaving only:
 - a. Critical Barrier: Which forms the sole barrier between the Work Area and other portions of the building or the outside.

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

- b. Critical Barrier Sheeting: Over lighting fixtures and clocks, ventilation openings, doorways, convectors, speakers, and other openings.
- c. Decontamination Unit: For personnel, in operating condition.
- d. Pressure Differential System: Maintain in continuous operation.

3.4 FINAL CLEANING

- A. Final Cleaning: Carry out a final cleaning of all surfaces in the Work Area in the same manner as the previous cleaning.
- B. Contractor's Testing: At the completion of the above cleaning visually inspect all surfaces. Reclean if any dust, debris, etc. is found. At completion of this inspection sweep entire Work Area including walls, ceilings, ledges, floors and other surfaces in the Work Area with exhaust from forced air equipment (leaf blower with approximately 1 horsepower electric motor or equivalent). Do not direct forced air equipment at any seal in any critical barrier. If any debris or dust is found repeat the final cleaning. Continue this process until no debris dust or other material is found while sweeping of all surfaces with forced air equipment.
- C. After a visual inspection, again wait for a period of time long enough for the HEPA-filtered fan units operating in the work area to provide 96 air changes to allow HEPA filtered fan units to clean air of airborne asbestos fibers. Use oscillating fans as necessary to assure circulation of air in all parts of Work Areas during this period. Maintain Pressure Differential System in operation for the entire 96 air change period.

3.5 VISUAL INSPECTION

- A. After Final Cleaning Perform a Complete Visual Inspection of the entire Work Area including: all surfaces, ceiling, walls, floor, decontamination unit, all plastic sheeting, seals over ventilation openings, doorways, windows, and other openings; look for debris from any source, residue on surfaces, dust or other matter. Perform visual inspection along with Owner's Representative during visual inspection sweep entire work area including walls, ceilings, ledges, floors, and other surfaces in the room with exhaust from forced air equipment (leaf blower with approximately 1 horsepower electric motor or equivalent). If any debris, residue, dust or other matter is found repeat final cleaning and continue decontamination procedure from that point. When the area is visually clean, and if after sweeping of all surfaces with leaf blower, no debris, residue, dust or other material is found, complete the certification at the end of this section. Visual inspection is not complete until confirmed in writing, on the certification, by Owner's Representative.

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

- B. Temporary lighting: Provide a minimum of 100 foot candles (1075 lumens / sq meter) of lighting on all surfaces in the areas to be subjected to visual inspection. Provide hand held lights providing 150 foot candles (1600 lumens / sq meter) at 4 feet (1.25 meter) capable of reaching all locations in work area.
- C. Lifts: Provide ladders, scaffolding, and lifts as required to provide access to all surfaces in the area to be subjected to visual inspection. Access is to allow touching of all surfaces.

3.6 CLEARANCE AIR SAMPLING BY CONTRACTOR (TEM)

- A. Transmission Electron Microscopy (TEM): After the Work Area is found to be visually clean, TEM air samples will be collected and analyzed by the Contractor in accordance with the procedure for Transmission Electron Microscopy set forth in Part 1 of this section.
 - 1. If Release Criteria are not met, repeat Final Cleaning and continue decontamination procedure from that point.
 - 2. If Release Criteria are met the Owner will continue with the clearance air testing by Transmission Electron Microscopy.

3.7 LOCK-BACK

- A. Encapsulation of substrate: Perform encapsulation of substrate or installation of spray-applied finishes or fireproofing, where required, before Removal of Work Area Isolation as specified below. Maintain Pressure Differential System in operation during encapsulation work.

3.8 REMOVAL OF WORK AREA ISOLATION

- A. After all requirements of this section and Section 02 82 83 Work Area Clearance have been met:
 - 1. Shut down and remove the Pressure Differential System. Seal HEPA filtered fan units, HEPA vacuums and similar equipment with 6 mil (0.15 mm) polyethylene sheet and duct tape to form a tight seal at intake end before being moved from Work Area.
 - 2. Remove Personnel Decontamination Unit.
 - 3. Remove the Critical Barriers separating the Work Area from the rest of the building. Remove any small quantities of residual material found upon

SECTION 02 82 81 - PROJECT DECONTAMINATION - ASBESTOS ABATEMENT

removal of the plastic sheeting with wet wiping, HEPA filtered vacuum cleaners and local area protection.

4. Remove all equipment, materials, debris from the work site.
5. Dispose of all asbestos-containing waste material as specified in Section 02 83 32 Disposal of Regulated Asbestos Containing Material.

3.9 SUBSTANTIAL COMPLETION OF ABATEMENT WORK

- A. Asbestos Abatement Work is Substantially Complete upon meeting the requirements of this section including submission of:
 1. Certificate of Visual Inspection
 2. Receipts Documenting proper disposal as required by Section 02 83 32 Disposal of Regulated Asbestos-Containing Material.
 3. Punch list detailing repairs to be made and incomplete items.

3.10 CERTIFICATE OF VISUAL INSPECTION

- A. Following this section is a "Certificate of Visual Inspection". This certification is to be completed by the Contractor and certified by the Owner's Representative. Submit completed Certificate with Application for Final Payment. Final payment will not be made until this Certification is executed.

END OF SECTION 02 82 81

SECTION 02 82 82 – CERTIFICATE OF VISUAL INSPECTION - ASBESTOS ABATEMENT

CERTIFICATION OF VISUAL INSPECTION

In accordance with Section 02 82 81 "Project Decontamination" the Contractor hereby certifies that he has visually inspected the Work Area (all surfaces including pipes, beams, ledges, walls, ceiling and floor, Decontamination Unit, sheet plastic, etc.) and has found no dust, debris or residue.

by: (Signature)_____ Date _____

(Print Name)_____

(Print Title)_____

OWNER'S REPRESENTATIVE CERTIFICATION

The Owner's Representative hereby certifies that he has accompanied the Contractor on the Contractor's visual inspection and verifies that this inspection has been thorough and to the best of their knowledge and belief, the Contractor's Certification above is a true and honest one.

by: (Signature)_____ Date _____

(Print Name)_____

(Print Title)_____

**SECTION 02 82 83 – CLEANING AND DECONTAMINATION PROCEDURES - ASBESTOS
ABATEMENT**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

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

1.2 DESCRIPTION OF THE WORK:

- A. The extent of cleaning and decontamination work is shown on the drawings.

1.3 RELATED WORK SPECIFIED ELSEWHERE:

- A. Work Area Clearance: Specified in Section 02 82 84 Work Area Clearance.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.1 GENERAL:

- A. Complete the following before start of work of this section:
 - 1. 02 82 76 Respiratory Protection
 - 2. 02 82 74 Worker Protection - Repair and Maintenance

3.2 WET CLEANING:

- A. Accomplish wet cleaning during decontamination with paper towels or disposable rags.
- B. Immerse paper towel or rag in container of amended water or dilute removal encapsulant.
- C. Wring out. Fold into quarters.
- D. Wipe surface once and refold to a fresh face of cloth. Proceed in this manner until all available faces of paper towel or rag have been used.
- E. Dispose of paper towel or rag

SECTION 02 82 83 – CLEANING AND DECONTAMINATION PROCEDURES - ASBESTOS ABATEMENT

- F. Do not place rag back in container to rinse out or for any other purpose. If a used towel or rag comes in contact with water, empty container and refill.
- G. Material adhered to a surface with removal encapsulant may require the application of additional removal encapsulant to facilitate cleaning.

3.3 REMOVAL OF ASBESTOS-CONTAINING DEBRIS

- A. Remove asbestos-containing debris and decontaminate the area involved using the following sequence:
 - 1. Shut down all ventilation into room.
 - 2. Seal entry to work area with 6 mil (0.15 mm) polyethylene. Slit polyethylene for entry. Install a flap to cover the slit automatically; tape slit closed after entry.
 - 3. Start HEPA vacuum before entering the area.
 - 4. Use the HEPA vacuum to clean a path at least 6 feet (1.83 m) wide from the entry point of the work area to the site of the fallen material.
 - 5. Remove all small debris with the HEPA vacuum.
 - 6. HEPA vacuum surfaces of all pieces too large to be removed by the suction of the HEPA vacuum.
 - 7. Pick up such pieces and place in the bottom of a 6 mil (0.15 mm) polyethylene disposal bag conforming to the requirements of Section 02 83 Disposal of Regulated Asbestos-Containing Material. Place pieces in the bag without dropping and avoiding unnecessary disturbance and release of material.
 - 8. Remove all remaining visible debris with HEPA vacuum.
 - 9. HEPA vacuum an area 3 feet (0.91 m) beyond the location in which any visible debris was found in two (2) directions each at right angles to the other.
 - 10. Place a 6 mil (0.15 mm) polyethylene drop cloth immediately on top of the HEPA vacuumed area before performing any repair work on site from

SECTION 02 82 83 – CLEANING AND DECONTAMINATION PROCEDURES - ASBESTOS ABATEMENT

which fall-out occurred.

11. HEPA vacuum the site from which material fell removing all loose material which can be removed by the vacuums suction.
12. Repair or remove remaining material.
13. HEPA vacuum ladder and/or any tools used and pass out of the work area.
14. HEPA vacuum all surfaces in the room starting at the top of wall and working downward to the floor. Then start at corner of floor farthest from Work Area entrance and work towards entrance.
15. HEPA vacuum the floor using a floor attachment with rubber floor seals and adjustable floor to attachment height. Adjust the height so that the rubber seals just touch the floor if carpeted and are within 1/16 inch (1.6 mm) of hard surface floors. Vacuum the floor in parallel passes with each pass overlapping the previous by one-half the width of the floor attachment. At the completion of one cleaning vacuum the floor a second time at right angles to the first.
16. Secure area from occupancy until air monitoring results per Section 02 82 77 Project Decontamination indicate that area is safe for reoccupancy.

3.4 CLEANING AND DECONTAMINATING OBJECTS

- A. Perform all work of decontaminating objects wherever possible on a plastic drop sheet installed in conformance with Section 02 82 77.
- B. HEPA vacuum all surfaces of object and immediate area before moving the object.
- C. Pick-up object, if possible, and HEPA vacuum all surfaces.
- D. Hand to off-sheet worker who will wet-clean object, if possible, and place in storage location.
- E. Decontaminate area where object was located by HEPA vacuuming twice, in two (2) perpendicular directions. Wet clean if necessary to remove any debris.
- F. Return object to its original location.

**SECTION 02 82 83 – CLEANING AND DECONTAMINATION PROCEDURES - ASBESTOS
ABATEMENT**

3.5 DECONTAMINATION OF ROOMS:

- A. Shut down all ventilation into space.
- B. Seal entry to Work Area with 6 mil (0.15 mm) polyethylene. Slit polyethylene for entry. Install a flap to cover the slit automatically; tape slit closed after entry.
- C. Install Differential Pressure System in accordance with Section 02 82 60.
- D. Recirculate HEPA filtered fan units in space by operating them so that discharge from machine is back into room. Use one HEPA filtered fan unit for each 2,500 cubic feet (70.8 cubic meters) of room volume.
- E. HEPA vacuum all surfaces in the room starting at the ceiling, then top of wall and working downward to the floor.
- F. HEPA vacuum the floor using a floor attachment with rubber floor seals and adjustable floor to attachment height. Adjust the height so that the rubber seals just touch the floor if carpeted and are within 1/16 inch (1.6 mm) of hard surface floors. Vacuum the floor in parallel passes with each pass overlapping the previous by one half the width of the floor attachment. At the completion of one cleaning, vacuum the floor a second time at right angles to the first.
- G. Operate HEPA filtered fan unit in space for 96 air changes minimum.
- H. At completion of Decontamination Work workers decontaminate in accordance with Section 02 82 73 Worker Protection.
- I. Secure area from occupancy until air monitoring results per Section 02 82 84 Work Area Clearance indicate area is safe for reoccupancy.

END OF SECTION – 02 82 83

SECTION 02 82 84 – WORK AREA CLEARANCE - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to work of this section.
 - 1. Visual Inspection: required as a prerequisite of air testing, is set forth in Section 02 82 81 Project Decontamination.
 - 2. Air Monitoring: performed by the Owner during abatement work, is described in Section 02 82 30 Test Laboratory Services.

1.2 SUMMARY

- A. This section describes work being performed by the Owner's Representative. This work is not in the Contract Sum, except where the initial test results are not satisfactory, then the Contractor shall pay for the cost of all TEM and PCM retesting and analysis of all PCM and TEM samples taken by the Hygienist. Contractor shall pay re-testing costs for samples at laboratory selected by the Owner.
- B. This Section sets forth required post-abatement airborne asbestos concentrations in the Work Area and describes testing procedures the Owner's Representative will use to measure these levels.

1.3 CONTRACTOR RELEASE CRITERIA

- A. The Asbestos Abatement Work Area is Cleared when the Work Area is visually clean and airborne asbestos structure concentrations have been reduced to the level specified below.
- B. VISUAL INSPECTION: Work of this Section will not begin until the visual inspection described in Section 02 82 81 Project Decontamination is complete and has been certified by the Project Administrator.
- C. AIR MONITORING: To determine if the elevated airborne asbestos structure concentration encountered during abatement operations has been reduced to the specified level, the Owner will secure samples and analyze then according to the following procedures.
 - 1. Aggressive sampling procedures as described below will be followed.

SECTION 02 82 84 – WORK AREA CLEARANCE - ASBESTOS ABATEMENT

2. PCM samples will be secured as indicated below. If the area meets the clearance criteria TEM sampling will proceed.
3. Aggressive sampling procedures will be repeated.
4. TEM samples will be secured and analyzed as indicated below.
5. Work Area Clearance: upon meeting the TEM Clearance requirements the work of Section 02 82 81 Project Decontamination can continue.

1.4 AGGRESSIVE SAMPLING

- A. All Air Samples will be taken using aggressive sampling techniques as follows:
 1. Before sampling pumps are started the exhaust from forced-air equipment (leaf blower with an approximately 1 horsepower electric motor) will be swept against all walls, ceilings, floors, ledges, and other surfaces in the room. This procedure will be continued for 5 minutes per 10,000 cubic feet of room volume.
 2. One 20 inch diameter fan per 10,000 cubic feet of room volume will be mounted in a central location at approximately 2 meters above floor, directed toward ceiling and operated at low speed for the entire period of sample collection.
 3. Air samples will be collected in areas subject to normal air circulation away from room corners, obstructed locations, and sites near windows, doors, or vents.
 4. After air sampling pumps have been shut off, fans will be shut off.

1.5 SCHEDULE OF AIR SAMPLES

- A. General: The number and volume of air samples taken and analytical methods used by the Owner will be in accordance with the following schedule. Sample volumes given may vary depending upon the analytical instruments used.

1.6 PHASE MICROSCOPY CONTRAST

- A. In each homogeneous Work Area after completion of all cleaning work, a minimum of 7 samples will be taken and analyzed as follows:
- B. Samples will be collected on 25 mm. cassettes with the following filter media:
PCM: 0.8 mixed cellulose ester in a cassette with a conductive extension cowl.

SECTION 02 82 84 – WORK AREA CLEARANCE - ASBESTOS ABATEMENT

Location Sampled	Number of Samples	Analysis Method	Detection Limit Fibers/cc.	Minimum Volume (Liters)	Rate LPM
Each Work Area or	5	PCM	0.01	1,200	1-10
Each Room of Work Area	1 (5 min.)	PCM	0.01	1,200	1-10
Work Area Blank	1	PCM	0.01	0	open for 30 seconds
Laboratory Blank	1	PCM	0.01	0	Do not Open

- C. Analysis: Fibers on each filter will be measured using the NIOSH Method 7400 entitled “Fibers” published in the NIOSH Manual of Analytical Methods, 3rd Edition, Second Supplement, August 1987.
- D. Fibers: referred to in this section include fibers regardless of composition as counted by the phase contrast microscopy method used.
- E. Split Sample: One Work Area sample will be split and both halves analyzed separately for duplicate analysis.
- F. Release Criteria: Decontamination of the work site is complete when every Work Area sample is at or below the Detection Limit above. If any sample is above the Detection Limit, then the decontamination is incomplete and recleaning per section 02 82 81 Project Decontamination is required.

SECTION 02 82 84 – WORK AREA CLEARANCE - ASBESTOS ABATEMENT

1.7 TRANSMISSION ELECTRON MICROSCOPY

- A. In each homogeneous work area after completion of all cleaning work, a minimum of 13 samples will be taken and analyzed as follows:

Location Sampled	Number of Samples	Analysis Method	Analytical Sensitivity Fibers/cc.	Recommended Volume (Liters)	Rate LPM
Each Work Area	5	TEM	0.005	1,300-1,800	1-10
Outside Each Work Area	5	TEM	0.005	1,300-1,800	1-10
Work Area Blank	1	TEM	0.005	0	Open for 30 sec.
Outside Blank	1	TEM	0.005	0	Open for 30 sec.
Laboratory Blank	1	TEM	0.005	0	Do Not open

- B. Analysis will be performed using the analysis method set forth in the AHERA Regulation 40 CFR Part 763 Appendix A.
- C. Asbestos Structures referred to in this Section include asbestos fibers, bundles, clusters or matrices, as defined by method of analysis.
- D. Release Criteria: Decontamination of the work site is complete if either of the following two (2) sets of conditions are met:
- a. Work Area Samples are below filter background levels:
 - 1) All Work Area samples volumes are greater than 1,199 liters for a 25 mm. sampling cassette.
 - 2) The average concentration of asbestos on the five Work Area Samples does not exceed the filter background level of 70 structures per square millimeter of filter area.
 - b. Work Area Samples are not statistically different from Outside samples:
 - 1) All sample volumes except for blanks are greater than 560 liters for a 25 mm. sampling cassette.

SECTION 02 82 84 – WORK AREA CLEARANCE - ASBESTOS ABATEMENT

- 2) The average asbestos concentration of the three (3) blanks is below the filter background level of 70 structures per square millimeter of filter area.
 - 3) Average asbestos concentrations in Work Area Samples are not statistically different from Outside samples, as determined by the Z-test calculation found in 40 CFR Part 763, Subpart E, Appendix A (Z is less than or equal to 1.65)
- c. If these conditions are not met then the decontamination is incomplete and the cleaning procedures of Section 01710 shall be repeated.
- D. Termination of Analysis: if the arithmetic mean (average) asbestos concentration on the blank filters exceed 70 structures per square millimeter of filter area the analysis will cease and new samples collected.

1.8 LABORATORY TESTING

- A. PHASE CONTRAST MICROSCOPY: The services of a testing laboratory will be employed by the Owner to perform laboratory analysis of the air samples. A microscope and technician will be set up at the job site, or samples will be sent daily by overnight mail, so that verbal reports on air samples can be obtained within 24 hours. A complete record, certified by the testing laboratory, or all air monitoring tests and results will be furnished to the Owner's Representative, the Owner and the Contractor.
- B. TRANSMISSION ELECTRON MICROSCOPY: Samples will be sent by overnight courier for analysis by Transmission Electron Microscopy. Samples will not be carried on weekends, so that samples shipped on Friday will arrive on the following Monday. Verbal results will normally be available during the 5th working day after receipt of samples by the laboratory. The laboratory is capable of analyzing a maximum of 13 such samples from this project at any one time. All Transmission Electron Microscopy results will be available to the Contractor.

1.9 FINAL AIR CLEARANCE

- A. Final area air clearance samples will be accomplished by TEM. Contractor will plan for approximately five days in the TEM process as well as for any possibilities of TEM failures. A prospective schedule may be as follows:
 - a. 24 hour settling/waiting-period after final visual inspection and written certification by Contractor to proceed with final TEM.
 - b. Air samples taken - several hour.
 - c. Samples directed to laboratory.
 - d. Waiting period for analysis report from laboratory.
 - e. Verbal reporting

SECTION 02 82 84 – WORK AREA CLEARANCE - ASBESTOS ABATEMENT

- f. Faxing of information to Industrial Hygienist will serve as preliminary notification for final clearance.
 - g. Final written authorization to encapsulate abated areas.
- B. PCM analysis may be used for final work area clearance when areas are less than 3000 square feet or 1000 linear feet.

2.0 FINAL SOIL CLEARANCE

- A. Final area soil clearance samples will be accomplished by PLM.
 - a. A core sample of soil shall be collected in Lab approved sampling tubes.
 - b. One (1) PLM sample for every 50 linear feet of pipe insulation that has been removed will be required.
 - c. Samples to be sent to laboratory for analysis.
 - d. Waiting period for analysis report from laboratory.
 - e. Verbal reporting to Project Designer of results.
 - f. Email of information to Project Designer will serve as preliminary notification for final clearance.
 - g. If samples are above 1% ACM, then an additional 1 inch (1”) (25mm) of soil will be required to be removed and retested at contractor’s expense to follow for Clearance.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

END OF SECTION 02 82 84

SECTION 02 83 30 - REMOVAL OF ASBESTOS CONTAINING MATERIALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Worker Protection requirements are set forth in Section 02 82 73 Worker Protection - Asbestos Abatement.
- B. Installation of Critical and Primary Barriers, and Work Area Isolation Procedures are set forth in Section 02 82 61 Temporary Enclosures.
- C. Project Decontamination procedures after removal of the Secondary Barrier are specified in Section 02 82 81 Project Decontamination.
- D. Disposal of asbestos-containing waste is specified in Section 02 83 32 Disposal of Regulated Asbestos-Containing Material.

1.3 SUBMITTALS

- A. Before Start of Work: Submit the following to the Designer for review. Do not start work until these submittals are returned with Designer's action stamp indicating that the submittal is returned for unrestricted use.
 - 1. Surfactant: Submit product data, use instructions and recommendations from manufacturer of surfactant intended for use. Include data substantiating that material complies with requirements.
 - 2. Removal Encapsulant: Submit product data, use instructions and recommendations from manufacturer of removal encapsulant intended for use. Include data substantiating that material complies with requirements.
 - 3. NESHAP Certification: Submit certification from manufacturer of surfactant or removal encapsulant that, to the extent required by this specification, the material, if used in accordance with manufacturer's instructions, will wet Asbestos-Containing Materials (ACM) to which it is applied as required by the National Emission Standard for Hazardous Pollutants (NESHAP) Asbestos Regulations (40 CFR 61, Subpart M).

SECTION 02 83 30 - REMOVAL OF ASBESTOS CONTAINING MATERIALS

- B. Before Start of Work submit the following to the Designer for review. Do not begin work until these submittals are returned with the Designer's action stamp indicating that the submittal has been "Received - Not Reviewed."
 - 1. Safety Data Sheet: Submit Safety Data Sheets, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for the following:
 - a. Surfactants.
 - b. Encapsulants.
 - c. Solvents.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Wetting Materials: For wetting prior to disturbance of ACM use either amended water or a removal encapsulant:
- B. Amended Water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in wetting of the ACM and retardation of fiber release during disturbance of the material equal to or greater than that provided by the use of 1 ounce of a surfactant consisting of 50 percent polyoxyethylene ester and 50 percent polyoxyethylene ether mixed with 5 gallons (19 liters) of water.
- C. Removal Encapsulant: Provide a penetrating type encapsulant designed specifically for removal of ACM. Use a material which results in wetting of the ACM and retardation of fiber release during disturbance of the material equal to or greater than that provided by water amended with a surfactant consisting of 1 ounce of a mixture of 50 percent polyoxyethylene ester and 50 percent polyoxyethylene ether in 5 gallons (19 liters) of water.
- D. Polyethylene Sheet: Provide flame resistant polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-resistant Textiles and Films. Provide largest size possible to minimize seams, 6.0 mil (0.15 mm) thick, frosted or black as indicated.
- E. Duct Tape: Provide duct tape in 2 inch or 3 inch (50 mm or 75 mm) widths as indicated, with an adhesive which is formulated to stick aggressively to sheet polyethylene.
- F. Spray Cement: Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.

SECTION 02 83 30 - REMOVAL OF ASBESTOS CONTAINING MATERIALS

- G. Disposal Bags: Provide 6 mil (0.15 mm) thick leak-tight polyethylene bags labeled as required by Section 02 83 32 Disposal of Regulated Asbestos Containing Material.
- H. Fiberboard Drums: Provide heavy duty leak tight fiberboard drums with tight sealing locking metal tops.
- I. Paper board Boxes: Provide heavy duty corrugated paper board boxes coated with plastic or wax to retard deterioration from moisture. Provide in sizes that will easily fit in disposal bags.
- J. Felt: Standard felt approximately 1/16 inch (1.6 mm) thick and 36 inches (900 mm) to 72 inches (1800 mm) in width.

PART 3 - EXECUTION

3.1 SECONDARY BARRIER

- A. Secondary Barrier: Over the Primary Barrier, install as a drop cloth a clear 6 mil (0.15 mm) sheet plastic in all areas where asbestos removal work is to be carried out. Completely cover floor with sheet plastic. Where the work is within 10 feet (3 m) of a wall extend the Secondary Barrier up wall to ceiling. Support sheet plastic on wall with duct tape, seal top of Secondary plastic to Primary Barrier with duct tape so that debris is unable to get behind it. Provide cross strips of duct tape at wall support as necessary to support sheet plastic and prevent its falling during removal operations.
 - 1. Install Secondary Barrier at the beginning of each work shift. Install only sufficient plastic for work of that shift.
 - 2. Remove Secondary Barrier at end of each work shift or as work in an area is completed. Fold plastic toward center of sheet and pack in disposal bags. Keep material on sheet continuously wet until bagged.

3.2 WORKER PROTECTION

- A. Before beginning work with any material for which a Safety Data Sheet has been submitted provide workers with the required protective equipment. Require that appropriate protective equipment be used at all times.

3.3 WET REMOVAL

- A. Thoroughly wet to satisfaction of Designer any ACM to be removed prior to stripping and/or tooling to reduce fiber dispersal into the air. Accomplish wetting by a fine spray (mist) of amended water or removal encapsulant. Saturate material sufficiently

SECTION 02 83 30 - REMOVAL OF ASBESTOS CONTAINING MATERIALS

to wet to the substrate without causing excess dripping. Allow time for amended water or removal encapsulant to penetrate material thoroughly. If amended water is used, spray material repeatedly during the work process to maintain a continuously wet condition. If a removal encapsulant is used, apply in strict accordance with manufacturer's written instructions. Perforate outer covering of any installation which has been painted and/or jacketed in order to allow penetration of amended water or removal encapsulant, or use injection equipment to wet material under the covering. Where necessary, carefully strip away while simultaneously spraying amended water or removal encapsulant on the installation to minimize dispersal of asbestos fibers into the air.

1. Mist work area continuously with amended water whenever necessary to reduce airborne fiber levels.
 2. Remove saturated ACM in small sections from all areas. Do not allow material to dry out. As it is removed, simultaneously pack material while still wet into disposal bags. Twist neck of bags, bend over and seal with minimum three (3) wraps of duct tape. Clean outside and move to Wash Down Station adjacent to Material Decontamination Unit.
 3. Evacuate air from disposal bags with a HEPA filtered vacuum cleaner before sealing.
- B. Pipe Insulation: Spray with a mist of amended water or removal encapsulant. Allow amended water or removal encapsulant to saturate material to substrate. If a removal encapsulant is used, use in strict accordance with manufacturer's instructions. Cut bands holding preformed pipe insulation, slit jackets at seams, remove and hand-place in a disposal bag. Remove job-molded fitting insulation in chunks and hand place in a disposal bag. Do not drop to floor. Remove any residue on pipe or fitting with stiff bristle nylon hand brush. In locations where pipe fitting insulation is removed from pipe with straight runs insulated with fibrous glass or other non-asbestos-containing fibrous material, remove fibrous material 6 inches (150 mm) from the point where it contacts the asbestos-containing insulation.

END OF SECTION 02 83 30

SECTION 02 83 32 - DISPOSAL OF REGULATED ASBESTOS-CONTAINING MATERIAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Worker protection requirements are set forth in Sections 02 82 73 Worker Protection - Asbestos abatement
- B. Section 02 82 23 Codes, Regulations and Standards - Asbestos Abatement describes applicable federal, state and local regulations.

1.3 DESCRIPTION OF THE WORK

- A. This section describes the disposal of Regulated Asbestos-Containing Materials (RACM). Disposal includes packaging of Regulated Asbestos-Containing Materials. Disposal may be accomplished either by land filling or converting Regulated Asbestos Containing Materials to non Asbestos waste.

1.4 SUBMITTALS

- A. Before Start of Work: Submit the following to the Designer for review. Do not start work until these submittals are returned with Designer's action stamp indicating that the submittal is returned for unrestricted use.
 - 1. Copy of state or local license for waste hauler.
 - 2. Name and address of landfill where Regulated Asbestos Containing Materials are to be buried. Include contact person and telephone number.
 - 3. Sample of disposal bag and any added labels to be used.
- B. On a weekly basis submit copies of all manifests and disposal site receipts to Designer.
- C. Waste Shipment Record: Maintain a waste shipment record as required by the NESHAP regulation which indicates the waste generator, transporter, and disposal site, and which describes the nature, size, type of container, and form of asbestos waste. Submit to Designer within 35 days of departure from building.

SECTION 02 83 32 - DISPOSAL OF REGULATED ASBESTOS-CONTAINING MATERIAL

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Disposal Bags: Provide 6 mil (0.15 mm) thick leak-tight polyethylene bags labeled with three (3) labels with text as follows:
1. First Label: Provide in accordance with 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
BREATHING AIRBORNE FIBERS IS HAZARDOUS TO YOUR HEALTH
 2. Second Label: Provide in accordance with U. S. Department of Transportation regulation on hazardous waste marking. 49 CFR parts 171 and 172. Hazardous Substances

RQ-ASBESTOS WASTE
CLASS 9
NA2212-PG III
 3. Third Label: Provide the name of the waste generator (Owner's name), the location from which the waste was generated and the names and addresses of the contractor and transporter. This label must be durable, able to repel dirt and moisture (e.g., permanent marker). Label must be placed directly on disposal bag(s) in a legible format. Peel and stick type labels are expressly prohibited.

PART 3 - EXECUTION

3.1 SEQUENCE

- A. Comply with the following sections during all phases of this work:
1. Section 02 82 73 Worker Protection - Asbestos Abatement
 2. Section 02 82 75 Respiratory Protection

SECTION 02 83 32 - DISPOSAL OF REGULATED ASBESTOS-CONTAINING MATERIAL

3.2 GENERAL

- A. All waste is to be hauled by a waste hauler with all required licenses from all state and local authority with jurisdiction.
- B. Liquid waste: Mix all liquid asbestos-containing waste or asbestos contaminated waste with a bladeable material so that it forms a bladeable (non-liquid) form, and have the concurrence of the landfill operator prior to disposal.
- C. Load all adequately wetted Regulated Asbestos-Containing Material in disposal bags or leak-tight containers. All materials are to be contained in one of the following
 - 1. Two (2) 6 mil (0.15 mm) disposal bags or
 - 2. Two (2) 6 mil (0.15 mm) disposal bags and a fiberboard drum or
 - 3. Sealed steel drum with no bag
- D. Protect interior of truck or dumpster with Critical and Primary Barriers as described in Section 02 82 61 Temporary Enclosures.
- E. Carefully load containerized waste in fully enclosed dumpsters, trucks or other appropriate vehicles for transport. Exercise care before and during transport, to insure that no unauthorized persons have access to the material.
- F. Warning Signs: During loading and unloading mark dumpsters, receptacles and vehicles with a sign complying with requirements of the EPA NESHAP regulation (40 CFR Part 61), in a manner and location that a person can read the following legend:

DANGER
ASBESTOS DUST HAZARD
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
- G. Do not store containerized materials outside of the Work Area. Take containers from the Work Area directly to a sealed truck or dumpster.
- H. Do not transport disposal bagged materials on open trucks. Label drums with same warning labels as bags. Uncontaminated drums may be reused. Treat drums that have

SECTION 02 83 32 - DISPOSAL OF REGULATED ASBESTOS-CONTAINING MATERIAL

been contaminated as Regulated Asbestos-Containing Material and dispose of in accordance with this specification.

- I. Advise the landfill operator or processor, at least 10 days in advance of transport, of the quantity of material to be delivered.
- J. At disposal site unload containerized waste:
 - 1. At a disposal site, sealed plastic bags may be carefully unloaded from the truck. If bags are broken or damaged, return to work site for rebagging. Clean entire truck and contents using procedures set forth in section 02 82 81 Project Decontamination.
- K. Retain receipts from landfill or processor for materials disposed of.
- L. At completion of hauling and disposal of each load submit copy of waste manifest, chain of custody form, and landfill receipt to Designer.

END OF SECTION 02 83 32

SECTION 02 83 33 - RESILIENT FLOORING REMOVAL - AGGRESSIVE ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Asbestos abatement project requirements to be completed prior to start of the work of this section are set forth in the following sections:
 - 1. 02 82 40 Temporary Facilities - Asbestos Abatement
 - 2. 02 82 60 Temporary Pressure Differential & Air Circulation System
 - 3. 02 82 61 Temporary Enclosures - Complete Work Except Delete Floor Plastic.
 - 4. 02 82 73 Worker Protection - Asbestos Abatement
 - 5. 02 82 73 Worker Protection - Repair & Maintenance
 - 6. 02 82 77 Decontamination Units
- B. Asbestos abatement project requirements to be completed at completion of the work of this section are set forth in the following sections:
 - 1. 02 82 81 Project Decontamination

1.3 SUBMITTALS

- A. Before Start of Work: Submit the following to the Designer for review. Do not start work until these submittals are returned with Designer's action stamp indicating that the submittal is returned for unrestricted use.
 - 1. Wetting Materials: Submit product data, use instructions and recommendations from manufacturer of wetting material (surfactant and/or removal encapsulant) intended for use. Include data substantiating that material complies with requirements.
 - 2. NESHAP Compliance Documentation: Submit manufacturer's documentation for removal encapsulants proposed for use that, to the extent required by this specification, the material, if used in accordance with

SECTION 02 83 33 - RESILIENT FLOORING REMOVAL - AGGRESSIVE ASBESTOS ABATEMENT

manufacturer's instructions, will comply with the wetting requirements of National Emission Standard for Hazardous Pollutants (NESHAP) Asbestos Regulations (40 CFR 61, Subpart M).

3. Adhesive Removal Solvent: Submit product data, use instructions and recommendations from manufacturer of adhesive removal solvent intended for use. Include data substantiating that material complies with requirements.
- B. Before Start of Work submit the following to the Designer for review. Do not begin work until these submittals are returned with the Designer's action stamp indicating that the submittal has been "Received - Not Reviewed."
1. Safety Data Sheet: Submit Safety Data Sheets, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for all materials proposed for use on the work including:
 - a. Surfactants.
 - b. Adhesive Removal Solvents.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Wetting Materials: For wetting prior to disturbance of asbestos-containing materials use:
1. Amended Water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in wetting of the asbestos-containing material (ACM) and retardation of fiber release during disturbance of the material equal to or greater than that provided by the use of one ounce of a surfactant consisting of 50 percent polyoxyethylene ester and 50 percent polyoxyethylene ether mixed with 5 gallons of water.
 2. Removal Encapsulant: Provide a penetrating-type encapsulant designed specifically for removal of ACM. Use a material which results in wetting of the asbestos-containing material and retardation of fiber release during disturbance of the material equal to or greater than that provided by water amended with a surfactant consisting of one ounce of 50 percent polyoxyethylene ester and 50 percent polyoxyethylene ether mixed with 5 gallons of water.
 3. Dishwashing detergent that contains anionic, nonionic, and amphoteric surfactants.

SECTION 02 83 33 - RESILIENT FLOORING REMOVAL - AGGRESSIVE ASBESTOS ABATEMENT

- B. Polyethylene Sheet: A single polyethylene film in the largest sheet size possible to minimize seams, 6.0 mil (0.15 mm) thick, clear, frosted, or black as indicated.
- C. Polyethylene Sheet: Provide flame resistant polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-resistant Textiles and Films. Provide largest size possible to minimize seams, 6.0 mil (0.15 mm) thick frosted or black as indicated.
- D. Duct Tape: Provide duct tape in 2 inch or 3 inch widths as indicated, with an adhesive formulated for use on sheet polyethylene.
- E. Spray Cement: Provide, in aerosol cans, spray adhesive which is formulated for use on sheet polyethylene. Provide materials that do not contain methylene chloride.
- F. Disposal Bags: Provide 6 mil (0.15 mm) thick leak-tight polyethylene bags labeled as required by Section 02 83 32 Disposal of Regulated Asbestos-Containing Material.
- G. Fiberboard Drums: Provide heavy duty leak-tight fiberboard drums with tight sealing locking metal tops.
- H. Steel Drums: Provide leak-tight steel drums with tight-sealing locking metal tops.
- I. Injection Molded Plastic Drums: Provide leak-tight injection-molded plastic drums with tight sealing locking tops.
- J. Paper board Boxes: Provide heavy-duty corrugated paperboard boxes coated with plastic or wax to retard deterioration from moisture. Provide in sizes that will easily fit in disposal bags.
- K. Polyethylene Boxes: Provide heavy-duty polyethylene boxes. Provide leak-tight boxes or boxes in sizes that will easily fit in disposal bags.

2.2 PRIMARY RESILIENT FLOORING REMOVAL EQUIPMENT

- A. Manual Spades:
 - 1. Hand operated scraper/chisels with long handles and replaceable blades for removal of resilient flooring.
 - 2. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the Work include, but are not limited to, the following:

SECTION 02 83 33 - RESILIENT FLOORING REMOVAL - AGGRESSIVE ASBESTOS ABATEMENT

- | | | |
|----|--|--|
| a. | Crain Cutter Co., Inc.
1155 Wrigley Way
Milpitas, CA 95035
p. (408) 946-6100 | No. 700 "Bearcat" Stripper
- without blades
- various blades available |
| b. | Beno J. Gundlach Company
211 North 21 st Street
P.O. Box 544
Belleville, IL 62222
p. 618-233-1781 | No. 500
No. 525 |
| c. | Palmer Distributing & Sales Co.
P.O. Box 911777
St. George, UT 84791
337 River Rock
Spanishfork, UT 84660
p. (435) 798-8467 or (800) 423-2733 | Model 460
Model PG 101
Model PG 102 |
| d. | Roofing Equipment, Inc.
Taylor Tools
5045 Paris Street
Denver, CO 80239
p. (303) 371-7667 | |
| e. | Warner Manufacturing
13435 Industrial Park Blvd.
Minneapolis, MN 55441
p. (612) 559-4740 or (800) 444-0606 | No. 7079 Warner Floor
Stripper |

B. Powered Spades:

1. Long-handled scraper/chisels used in a full-standing position that have replaceable blades and are pneumatically or electrically-powered to move in a reciprocating (in and out) motion.
2. Provide powered spades that are equipped with pneumatic vents and piston seals that prevent compressed air or blow by from sweeping floor.

SECTION 02 83 33 - RESILIENT FLOORING REMOVAL - AGGRESSIVE ASBESTOS ABATEMENT

3. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the Work include, but are not limited to, the following:

AramSCO	"Air Powered Tile Removal System"
1655 Imperial Way	- hose
Thorofare, NJ 08086	- compressor
p. (800) 767-6933 or (856) 848-5330	- spade, chisel
f. (856) 848-0802	

Equipment Development Co., Inc.	"A-LR-5"
100 Thomas Johnson Drive	
Frederick, MD 21702	
p. (301) 663-1600 or (800) 638-EDCO	

C. Stripper Machines:

1. These are walking units with blades at the front, driven by electric motors, and move either in a reciprocating (in and out) or an oscillating orbital motion.
2. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the Work include, but are not limited to, the following:

Crain Cutter Co., Inc.	No. 700 "Bearcat" Stripper
1155 Wrigley Way	- without blades
Milpitas, CA 95035	- various blades available
p. (408) 946-6100	

Beno J. Gundlach Company	No. 500
211 North 21 st Street	No. 525
P.O. Box 544	
Belleville, IL 62222	
p. (618) 233-1781	

Inventive Manufacturing	"The Big Rip-Off"
1440 South Seneca	
Wichita, KS 67213	
p. (316) 267-2443	

SECTION 02 83 33 - RESILIENT FLOORING REMOVAL - AGGRESSIVE ASBESTOS ABATEMENT

Palmer Distributing & Sales Co. Model 460
P.O. Box 911777 Model PG 101
St. George, UT 84791 Model PG 102
337 River Rock
Spanishfork, UT 84660
p. (435) 798-8467 or (800) 423-2733

Roofing Equipment, Inc.
Taylor Tools
5045 Paris Street
Denver, CO 80239
p. (303) 371-7667

Warner Manufacturing No. 7079 Warner Floor Stripper
13435 Industrial Park Blvd.
Minneapolis, MN 55441
p. (877) WARNER-1 or (800) 444-0606
f. (877) 927-6870

2.3 THERMAL EQUIPMENT WITH AUTOMATIC CONTROL

A. Thermal Equipment with Automatic Control:

1. Equipment utilizing controlled infrared radiant heat to make the resilient floor tiles and adhesive soft and pliable for removal.
2. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the Work include, but are not limited to, the following:

Enviromethods, Inc. "Delta T" series
P.O. Box 6151
Wolcott, CT 06716
p. (203) 879-5527

UAS Automation Systems, Inc. "ATR" (Automated Tile 3413
Lake Breeze Drive Removal) SERIES
Orlando, FL 32808
p. (407)294-8551 or (800) 969-8837

SECTION 02 83 33 - RESILIENT FLOORING REMOVAL - AGGRESSIVE ASBESTOS ABATEMENT

PART 3 - EXECUTION

3.1 RESILIENT FLOOR COVERINGS

- A. Pre-requisite activities: Before starting removal of ACM using the procedures of this section complete work of the following sections:
 - 1. 02 82 40 Temporary Facilities - Asbestos Abatement
 - 2. 02 82 60 Temporary Pressure Differential & Air Circulation System
 - 3. 02 82 61 Temporary Enclosures - Complete work except delete floor plastic.
 - 4. 02 82 73 Worker Protection - Asbestos abatement
 - 5. 02 82 73 Worker Protection - Repair & Maintenance
 - 6. 02 82 75 Respiratory Protection
 - 7. 02 82 77 Decontamination Units
- B. Preparation: Prior to beginning the removal of any resilient floor covering complete the following:
 - 1. Remove appliances and furniture from the work area.
 - 2. Mix a detergent solution (16 ounces (0.5 liters) of liquid dishwashing detergent to 1 gallon (4 liters) of warm water) and pour into a garden sprayer.
- C. Seal Floor Penetrations: Before using wet methods to remove resilient flooring, seal openings, and penetrations in the floor to prevent water leakage.
 - 1. Seal openings with a wooden or plywood plug. Seal with urethane foam caulk.
 - 2. Remove flooring material in the immediate area of floor penetrations with a hand spade or scraper.
 - 3. Remove adhesive by hand scraping as necessary to permit installation of seals.
 - 4. Remove any adhesive residue from slab where cover on openings and penetrations must seal to floor to accomplish a water tight assembly.

SECTION 02 83 33 - RESILIENT FLOORING REMOVAL - AGGRESSIVE ASBESTOS ABATEMENT

Remove this residue by abrasion using dampened, clean, sharp, cutting sand and a hand-held rubbing stone as necessary. Use minimum wetting required to permit removal. Use caution to prevent water leakage into opening or penetration.

5. Cover sealed openings with sheet plastic. Seal plastic to floor with spray glue or urethane caulk.
- D. Remove Resilient Flooring: Use the three (3) step process described in the following sections:
1. First Step: "Removal of Resilient Tile Floor Covering," and/or "Removal of Resilient Sheet Flooring." This step involves removal of tiles or the wear layer of sheet flooring using a powered spade or stripper machine.
 2. Second Step: "Removal of Heavy Residue of Adhesive" and/or "Removal of Residual Backing." This step involves the use of a rotary cutter to remove the bulk of these residual materials. As an alternative hand scraping can be used for this purpose.
 3. Third Step: "Removal of Adhesive Residue." After completion of the first two steps there will be a thin residue of adhesive left on the floor. This is removed using a shot/bead blast machine. If the thickness of adhesive residue is too thick to permit effective use of the shot/bead blast machine, repeat the second and third steps.
 4. At the completion of all work, leave the substrate in such a state as to comply with all requirements and recommendations of manufacturer of replacement flooring.

3.2 STEP ONE REMOVAL OF RESILIENT TILE FLOOR COVERING

- A. Remove resilient tile floor covering using the following procedure:
1. General:
 - a. Remove binding strips or other restrictive molding from doorways, walls, etc. clean and dispose of as non-asbestos waste. Dispose of any materials that have glue or floor mastic on them as asbestos-containing waste.
 2. Wet Floor:
 - a. Wet floor with amended water, removal encapsulant, or detergent solution, so that entire surface is wet. Do not allow to puddle or run

SECTION 02 83 33 - RESILIENT FLOORING REMOVAL - AGGRESSIVE ASBESTOS ABATEMENT

off to other areas. If a removal encapsulant is used, use in strict accordance with manufacturer's instructions. Cover with sheet polyethylene to allow humidity to release tile from floor. Allow time for humidity and water or removal encapsulant to loosen tiles prior to removal.

- b. Keep floor continuously wet throughout removal operation.
- c. Remove tiles using a manual or powered spade, or stripping machine. Continuously mist floor in area where machine is working with amended water, removal encapsulant or detergent solution. Wet any debris generated as necessary to keep continuously wet. Keep floor where tile has been removed continuously wet until after completion of heavy adhesive residue removal.

B. Debris and Waste

- 1. Dispose of all friable materials in accordance with Section 02 83 32 Disposal of Regulated Asbestos containing Material. Dispose of Category I non-friable waste in accordance with State and Local Regulations.

3.6 WORK AREA CLEARANCE

- A. After completion of all resilient flooring and adhesive removal work and prior to removal of critical barriers, decontamination units, and shut down of pressure differential and ventilation system; complete project decontamination and clearance in accordance with section 02 82 81 "Project Decontamination."

END OF SECTION 02 83 33

SECTION 028500

MICROBIAL REMEDIATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:

1. Mold Remediation Procedures

- A. The work shall include remediation and decontamination of the entire structure/building.
- B. The work shall be done by trained and qualified workers under a project supervisor. Project supervisor must have WRT (Water Restoration Technician) for category 1 & 2. Project supervisor must have AMRT (Applied Microbial Remediation Technician) for category 3.
- C. All workers shall use the appropriate personal protection equipment. The contractor supervisor shall be responsible for maintaining this level of protection for all workers on this project.
- D. The contractor shall provide a list of all materials and equipment to be used along with a remediation plan prior to the beginning of work.
- E. Any suspect materials encountered during scheduled site removal should be tested prior to disturbance or otherwise handled as Presumed Asbestos Containing Materials (PACM) using the same controls and procedures for asbestos abatement. Buildings constructed before 1991 shall be tested for suspect ACM and should be removed or handled by property certified asbestos abatement personnel in compliance with Federal and State regulations.

2. Procedures for Post Remediation Testing and Final Treatment

- A. The contractor shall include the cost of the post remediation testing in this project.
- B. When the work starts the contractor shall report directly to the owner's environmental consultant.
- C. Let the fogged area settle for twenty-four (24) hours. No fogging shall occur any sooner to testing with in 6 hours. It is preferred that the fogging occur approximately 12 hours before testing.
- D. Test for post-remediation work success.
- E. Rebuild all areas with proper material specified and directed by the owner.

1.3 GOVERNING REQUIREMENTS

- A. The work outlined in this specification qualifies as "mold remediation" as that term is defined under Chapter 24-A of Title 37 of the Louisiana Revised Statutes (LRS), also known as the Louisiana Mold Remediation Contracting Act (MRCA). The area within the

structure impacted by mold growth exceeds the minimum area exemption of 20 square feet as outlined in MRCA §2185.B(5) and the mold remediation work will not be performed by the Owner or his agent; therefore, the mold remediation work must be performed by a contractor properly licensed by the Louisiana State Licensing Board for Contractors in the field of "Mold Remediation". A list of licensed mold remediation contractors from the Louisiana State Licensing Board for Contractors' website is available at www.lslbc.state.la.us.

- B. Any remediation conducted must comply with the requirements of the MRCA and this specification and is to include a post-remediation assessment overseen by an Environmental Consultant (EC).
- C. As outlined in MRCA §2187.B, an EC may not perform both mold assessment and remediation on the same project or have an ownership interest in both an entity which performs mold assessment services and an entity which performs mold remediation services on the same project. In accordance with this provision the General Contractor shall employ an MRC that is independent of the EC.
- D. The Mold Remediation Contractor (MRC) who utilizes certain antimicrobial products may be subject to the licensing, certification, and supervision requirements as an Antimicrobial Pest Control Applicator, in accordance with Louisiana Department of Agriculture and Forestry (LDAF) regulations, as codified in the Louisiana Administrative Code (LAC), Title 7, Part XXIII. Prior to utilizing any antimicrobial product, the EC shall determine the requirements applicable to the use of that product through coordination with the LDAF.

1.4 BACKGROUND INFORMATION

- A. Purpose. This specification is intended as a standard specification for the remediation of mold/fungi at Cardinal Cove, Mandeville, Louisiana. This specification has been developed to address the components of the structure and associated finishes as well as the contents within the structure. This specification is not approved for any other purpose or project.
- B. Roles of Parties to Remediation: Unless otherwise noted, the work identified in this specification is intended for execution by an MRC retained by the General Contractor. The remediation must be coordinated with, and a post-remediation assessment conducted by an EC. Variations from the procedures identified in this specification shall require the prior approval of the EC and the Owner. Any determination as to whether an item qualifies as contents or as a component of the structure shall be made by the EC.
- C. Additional Hazards. This specification addresses the hazards presented by the identified mold and/or water damage. Additional hazards may exist that are dependent on the specific equipment and procedures used by the contractor to conduct the remediation. In addition to the work practice hazards, Asbestos Containing Materials (ACM), and Lead Based Paint (LBP) may be present within the structure and could be included in some of the materials specified for removal as a part of this mold remediation protocol. It is the responsibility of the Contractor to perform whatever investigation he deems necessary to identify these additional hazards and to take any necessary precautions to protect remediation workers from these and other hazards not addressed in the scope of work. In conducting the work, the Contractor shall comply with all Federal, State and Local requirements regarding hazard identification, communication, and worker protection.
- D. Code Compliance. Contractors should be familiar with the impacts that the remediation work will have on the structure's compliance with applicable building code requirements.

All repair and replacement work performed on components of the structure should conform to the applicable building codes.

1.5 PERSONNEL REQUIREMENTS

- A. Environmental Consultant (EC). The EC shall have training and experience in mold assessment and remediation, with at least one of the following credentials:
 - 1. A Certified Industrial Hygienist (CIH) as certified by the American Board of Industrial Hygiene,
 - 2. A Professional Engineer (PE), licensed in the State of Louisiana,
 - 3. An Architect, licensed in the State of Louisiana,
 - 4. A Council-Certified Microbial Consultant (CMC) or Council-Certified Microbial Investigator (CMI) or Certified Indoor Environmentalist (CIE), as certified by the American Council for Accredited Certification (ACAC), or Certified Indoor Environmental Consultant (CIEC), as certified by the American Council for Accredited Certification (ACAC)
 - 5. A State or National Certification in Mold Assessment with comparable education, qualification, and experience requirements, as approved by the Owner.
- B. Microbial Remediation Supervisor. The Onsite supervisor shall have training and experience in mold remediation, with at least one of the following credentials:
 - 1. Council-Certified Microbial Remediator (CMR) or Council-Certified Microbial Remediation Supervisor (CMRS), as certified by the ACAC,
 - 2. Applied Microbial Remediation Specialist (AMRS), as certified by the Institute for Inspection, Cleaning and Restoration Certification (IICRC), or Applied Microbial Remediation Technician (AMRT)
 - 3. A State or National Certification in Mold Remediation with comparable education, qualification, and experience requirements, as approved by the Owner.

1.6 SUBMITTALS

- A. Preconstruction Submittals. Within 10 days of the award of the contract and prior to the start of the work, submit to the Contracting Officer six (6) copies of the following items for review and permanent file.
 - 1. Preliminary Visual Assessment Report. A written report to document the pre-remediation condition of the work areas.
 - 2. Remediation Workplan. The CIE and/or CIEC shall prepare a remediation work plan before starting the remediation project which is to be given to the Owner for approval.
 - 3. The plan shall address the following items at a minimum:

- a. Description of materials to be remediated, providing location and quantities (map if available), and methods to be used for remediation.
 - b. The timeframe for proposed completion of the work.
 - c. The identification and intended use any of biocides and/or fungicidal agents, including any registration, licensing or certification requirements originating from EPA or LDAF regulations.
 - d. Containment procedures to include description and locations of engineering controls and decontamination unit to include entry and exit procedures (provide sketch of floor plan showing location of containment barriers and decontamination units). Plan shall include locations of AFUs and AFU discharges to the outside.
 - e. Description of personal protective equipment to be used during the remediation.
 - f. Construction barricades and barriers in occupied areas.
 - g. HVAC Shut down and start-up procedures.
 - h. HVAC Evaluation and remediation procedures.
 - i. Moisture and relative humidity control procedures and equipment.
 - j. Packaging and disposal procedures.
 - k. Safety Precautions include lockout/ tag-out, fall protection, confined space entry procedures, and fire protection.
 - l. Description of the method employed to control cross contamination of areas not in the work area. This shall include a risk assessment related to the suitability of people to occupy areas adjoining the remediation area while remediation activities are ongoing.
4. Respiratory Protection Program. Provide written copy of Contractor's Respiratory Protection Program.
 5. Worker Records. Provide the following documents for all workers, including supervisory personnel. If new workers are added to the crew, provide the same documentation for them.
 6. Employee Instruction and Release Form. Provide documentation showing that each employee has been instructed on the following items:
 - a. Use and fit of respirators (for employees entering and working in the containment).
 - b. Protective clothing.
 - c. Protective measures.
 - d. Safety and Emergency Egress Procedures.
 - e. Site specific fall protection plan and training.
 - f. Microbial remediation hazards and practices including engineering controls and isolation. Training should include "hands-on" training for microbial remediation supervisors.
 - g. Workers' release forms stating the potential hazards involved with the scope of the work.
 7. Microbial Remediation Supervisor Qualifications. Onsite supervisor shall have one of the following certifications:
 - a. Certified Mold Remediator (CMR)
 - b. Certified Mold Remediation Supervisor (CMRS),
 - c. Applied Microbial Remediation Specialist (AMRS), or
 - d. A State or National Certification in Mold Remediation supervision with comparable education, qualification, and experience requirements.
 - e. Water Damage Restoration Technician (WRT)

- f. Applied Microbial Remediation Technician (AMRT)
- B. Product Data. Within 10 days of contract award, submit product data for items identified for use in Microbial Remediation Plan.
- C. Daily Reports. Prepare a written report for each day that microbial remediation work is being accomplished. Submit this report to the Contracting Officer by 1000 hours of the following day, attached to the Contractor Quality Control Report. Referred to collectively as the Daily Report, the report at a minimum shall include measurements of differential pressure and temperature and relative humidity in work areas and detail any non-compliance issues observed.
- D. Submittals at Completion of Remediation Work. Within 14 days of completion, provide the following information:
 - a. Supervisor Logs.
 - b. Daily Reports.
 - c. Photographic Logs.
 - d. Contractor's Industrial Hygienist Report certifying the microbial remediation is complete.

1.7 RECORD KEEPING

- A. A Daily Project Log shall form a permanent record of the project. Secure and maintain these logs and any other required documentation as part of the permanent project file.
 - 1. Daily Log. The Microbial Remediation Supervisor shall maintain a Daily Project Log. The Daily Project Log shall be used each day of the project to document the following information.
 - a. Date.
 - b. Name of Microbial Remediation Supervisor.
 - c. Name of Industrial Hygienist monitoring work area.
 - d. Number of workers on site.
 - e. Equipment utilized.
 - f. Brief description of daily work activities.
 - g. Listing of any non-compliance noted, emergencies, stop work orders (with detailed explanation), [exhaust system pressure differential recordings] and descriptions of any other noteworthy events.

1.9 REFERENCE STANDARDS.

- A. "American National Standard for Industrial Head Protection" ANSI, Publication ANSI/ISEA Z89.1.
- B. "American National Standard for Limited Use and Disposable Coveralls — Size and Labeling Requirements", ANSI, Publication ANSI/ISEA 101.
- C. "American National Standard for Occupational and Educational Personal Eye and Face Protection Devices", American National Standards Institute (ANSI), Publication ANSI/ISEA Z87.1, latest edition.
- D. "Assessment, Cleaning, and Restoration of HVAC Systems", National Air Duct Cleaners Association (NADCA), Publication ACR-2021, 2021

- E. "Bioaerosols: Assessment and Control", American Conference of Governmental and Industrial Hygienists (ACGIH), 2002.
- F. "Guidelines on Assessment and Remediation of Fungi in Indoor Environments; New York City Department of Health and Mental Hygiene, November 2008.
- G. "Mold Remediation in Schools and Commercial Buildings", Publication No. 402-K-01-001, U.S. Environmental Protection Agency (EPA), Washington, D.C., September 2008.
- H. "NIOSH Respirator Selection Logic 2004", National Institute for Occupational Safety and Health (NIOSH), Publication NIOSH 2005-100, October 2004.
- I. "Standard and Reference Guide for Professional Mold Remediation — S520", Institute of Inspection, Cleaning, and Restoration Certification (IICRC), Vancouver, Washington, 2021, Publication No, ANSI/IICRC S520-2015.
- J. "Standard and Reference Guide for Professional Water Damage Restoration — S500", IICRC, Vancouver, Washington, 2021, Publication No. ANSI/IICRC S500-2021.
- K. "Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear", American Society for Testing and Materials (ASTM), Publication F2413, latest edition.

PART 2 - PRODUCTS

2.1 PERSONAL PROTECTION EQUIPMENT

- A. Protective Clothing. Disposable coveralls shall be Tyvek® or equivalent complying with ANSI 101, with hoods.
- B. Head Protection. Head protection should comply with ANSI Z89, latest edition.
- C. Protective Eyewear. Protective eyewear should comply with ANSI Z87, latest edition.
- D. Protective Footwear. Protective footwear should comply with ASTM F2413, latest edition.
- E. Respiratory Protection. All respiratory protection equipment shall comply with the applicable standards of the National Institute for Occupational Safety and Health (NIOSH). Particulate respirators shall be at least N-95. If extensive, exposed mold contamination is present, the respiratory protection level may need to be increased to a NIOSH classification P-100 half face respirator coupled with an air purifying organic vapor cartridge. The specific respiratory protection for the project should be selected based on NIOSH 2005-100 and should address any other potential respiratory threats identified, including oxygen deficient atmospheres.
- F. Gloves. For destructive work, work gloves (leather or equivalent). For cleaning work, no gloves are required, except for chemical protection.
- G. Splash Protection. For employees applying liquid cleaners/agents and all employees doing material removal and disposal of liquid items, appropriate splash protection shall be provided for the face. This shall include a face shield, or a NIOSH approved full face respirator.
- H. Additional PPE. If using cleaning agents, biocides, solvents or encapsulant materials, the contractor shall utilize any additional PPE (e.g., upgraded respiratory protection, chemical

protective clothing, gloves, etc.) that is identified in the product manufacturer's instructional literature available for the products utilized.

2.2 APPROVED MATERIALS

1. The contractor shall use the following list of materials on the job site. Materials not listed must be approved prior to their arrival on site for use:
 - a. Aftershock Fungicidal Coating
 - b. Fiberlock IAQ 2000 Cleaner, Fungicide, Mildewstat, Disinfectant, Concentrate
 - c. Fiberlock IAQ 2500 Cleaner, Fungicide, Mildewstat, Disinfectant, Pre-Mixed
 - d. Fiberlock IAQ 6000 Mold-Resistant Coating
 - e. Fiberlock Shockwave Cleaner, Disinfectant, Fungicide, Sanitizer
 - f. Foster 40-20 Fungicidal Protective Coating
 - g. Fiberlock IAQ Advanced Peroxide Cleaner
 - h. Bioesque Solutions Botanical Disinfectant Solution
 - i. Benefect Botanical Decon 30

2.3 REMEDIATION

- A. Fungicidal Coatings. Fungicidal coatings shall be registered with the U.S. Environmental Protection Agency and approved by the EC.
- B. Disinfectants, Biocides, Sanitizing Solutions and Fungicidal Agents. These items shall be registered with the U.S. Environmental Protection Agency and approved by the EC. All products shall be used in accordance with the manufacturer's specifications.

PART 3 – EXECUTION

3.1 PREPARATION

- A. De-energizing Work Areas. Prior to performing any destructive work, the Contractor shall properly de-energize the systems likely to be encountered. These include electricity, natural gas, steam, telephone as well as other energy systems. The Contractor shall follow proper lock-out/tag-out and testing procedures to verify that these systems are properly de-energized.
- B. Examine areas and substrates, with Installer present, and including welded hollow-metal frames, cast-in anchors, and structural framing, for compliance with requirements and other conditions affecting performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 EQUIPMENT

- A. Provide protective clothing and respirators as required by the Microbial Remediation Plan for use by any authorized visitors. Provide manufacturer's certificate of compliance for all equipment used to contain the microbial contamination. Contractors shall not be required to certify that visitors entering work areas be capable of wearing respirators.
 1. Respirators. Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services. Provide personnel engaged in set-up, pre-cleaning, cleanup, handling,

and removal of contaminated materials with the appropriate respiratory protection as specified in 29 CFR 1910.134. A microbial remediation plan shall consider Table 17.1 in AIHA IMOM08-679 "Recognition, Evaluation, and Control of Indoor Mold", which lists the minimum levels of respiratory protection based on the activity and size of the remediated area.

2. Protective Clothing. Provide all workers with protective clothing as appropriate for the work being accomplished, as required by the Microbial Remediation Plan. Do not permit any person to enter the work area without the appropriate protective clothing and equipment.
3. Warning Signs and Labels. Provide bilingual warning signs printed in English and Spanish at all approaches to the work areas. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Warning signs may be in the form of continuous plastic tape. The warning signs shall have black characters on a yellow background.

WARNING

DO NOT ENTER

MICROBIAL REMEDIATION WORK IN PROGRESS

Alternate wording for the warning signs will be approved by the Owner.

4. Dehumidifiers. Install and use dehumidifiers as needed during the remediation to maintain relative humidity below 60 percent in the work area. Drain the condensate water to a permanent drain, or empty as needed to prevent water overflowing from the dehumidifiers.
5. Air Filtration Units (AFU). Install and use AFUs with HEPA filters, and manufacturer specified pre-filters, as part of the exhaust ventilation system to develop and maintain the specified desired air pressure differential inside the enclosed work area relative to the outside areas. The MRC shall be responsible for acquiring and paying for any licenses needed for use of any equipment, including but not limited to, air pressure differential systems and air filtration systems. Replace HEPA filters and pre-filters for AFUs as required to maintain pressurization performance requirements during demolition and cleaning. Do not reuse filters. Bag used filters at a minimum in clear 0.15-millimeter 6 mil polyethylene bags within the containment and disposed as contaminated. Discharge air from any AFUs located in the work area containment to the outside environment when creating a negative pressure containment to create a negative pressure relative to occupied areas of 5 pascals 0.02-inch H₂O to 10 pascals 0.04-inch H₂O. Discharge air more than that required for creating the proper negative pressure to the work area. The AFUs shall provide four to six (4 to 6) air changes per hour in the work area. Under no circumstances may air from AFUs discharge to an occupied area. Coordinate location of window sashes or doors required for discharge openings with the Owner. Seal around openings used for discharge of exhaust air airtight. Exhaust discharge openings may be constructed of plywood. Seal all exhaust and intake openings in AFUs with one layer of 0.15 millimeters 6 mil polyethylene sheeting when not in use.
6. Vacuum Cleaners Equipped with HEPA Filters. Provide vacuum cleaners equipped with HEPA filters designed for continuous operation to perform the work in a timely and efficient manner. Provide nozzle attachments as required, to adequately remove all dust. As a minimum, nozzle attachments shall include crevice and extended bristle brush nozzles. Any vacuum that is not equipped with a HEPA filter shall not be used at any time. Provide sufficient vacuum

cleaners equipped with HEPA filters designed for continuous operation in the work area during microbial remediation inside the containment area. Provide additional vacuum cleaners equipped with HEPA filters in the enclosed work area during remediation or cleaning work as required by the size (area) of the containment and to maintain timely progress of the work.

3.3 CONTAINMENT

- A. The purpose of remediation is to remove or clean mold-impacted materials in a manner that prevents mold and other residuals from leaving the remediation work area and entering a non-remediation area. Unless otherwise specified, containment shall be implemented as outlined in IICRC S520. The following procedures shall govern the containment to be used in conjunction with the remediation.
1. Control of Transport of Mold Materials. The two (2) primary mechanisms for mold material leaving the remediation area are tracking and aerial transport. To prevent tracking, all contents and flooring within the remediation zones should be covered with adequate reinforced polyethylene sheeting during the remediation work. Alternatively, items may be cleaned with a High Efficiency Particulate Arresting (HEPA) filtered vacuum and then relocated to prevent them from encountering dust and/or mold from the remediation work. Should the items need to be relocated to another structure, they should be stored in a climate-controlled area. Aerial transport can be prevented by isolating the remediation zone from the rest of the structure and utilizing either source, local or full-scale containment as described below.
 2. Containment Types
 - a. Source Containment. Source containment is used when there are small or limited areas of mold growth and hidden mold growth is not anticipated. Source containment will utilize a critical barrier to isolate the remediation area from other parts of the structure and will typically include "glove-bag" or other techniques that do not involve placing remediation personnel inside the containment area. Source containment does not require maintaining negative pressure within the containment.
 - b. Local Containment. Local containment is used where moderate levels of mold growth are present and/or hidden mold growth is anticipated. Local containment will utilize critical barriers to isolate the remediation area from other parts of the structure and will typically involve only one (1) room or part of one room and will require remediation personnel to work inside the containment area. Local containment will require maintaining negative pressure within the containment. For local containment, a HEPA filtered vacuum may be used if it can sustain negative pressure within the enclosure.
 - c. Full Scale Containment. Full scale containment is used where significant or extensive mold growth is present or anticipated. Full scale containment will utilize critical barriers to isolate the remediation area from other parts of the structure and will require remediation personnel to work inside the containment area. Full scale containment will require maintaining negative pressure within the containment, using one (1) or more NEPA filtered negative pressure devices or negative air machines (NAMs). The NAMs should discharge outdoors and should be sized to maintain adequate negative pressure and air change rates (i.e., air changes per hour [ACH]). Exhaust procedures should facilitate in

- avoiding cross-contamination within the containment and outside the containment.
- d. Containment Areas with One or More Surfaces Common to the Exterior. In instances where the remediation is to be conducted with one (1) or more surfaces common to the exterior of the structure, and in those instances where there is a continuous, intact wall, ceiling or floor, such intact wall, ceiling, or floor may be considered a critical barrier. In instances where the wall, ceiling, or floor common to the exterior is not intact or is not continuous, a critical barrier may be established by sealing the compromised portion to provide a continuous, intact barrier.
- 3. Critical Barriers and Isolation. Where critical barriers or isolation are required, the Contractor shall utilize suitable structural materials combined with adequate polyethylene sheeting and sealing tape to erect and maintain the barriers. Unless otherwise specified, the critical barriers will be self-supporting and will only be attached to the structure at locations required to make a satisfactory seal. Where polyethylene sheeting is used, it shall consist of fire-retardant, reinforced polyethylene. All joints, seams and penetrations shall be properly taped and sealed.
 - 4. Ingress/Egress. Ingress/Egress for the remediation work may be outside the negative pressure enclosure but should be isolated from the remainder of the structure. These areas should be covered with polyethylene sheeting, with all joints and penetrations sealed with compatible tapes or sealants, to prevent the possible cross-contamination of structure components and contents. Alternatively, these areas may be cleared of contents prior to the remediation and may be included in the cleaning zone at the completion of the remediation.
 - a. The Contractor should implement appropriate decontamination and cross-contamination work practices as necessary. This includes the use of appropriate work area entry/exit procedures and the use of critical barriers, air locks, or seals to ensure proper containment during entry/exit. Mold impacted material should be properly bagged or contained while it is being removed from the remediation zone to prevent contaminating areas outside the remediation zone.
 - 5. Containment and Isolation for HVAC System Components. If the Heating, Ventilating and Air Conditioning (HVAC) systems are to remain on during remediation work, any HVAC return air grilles in the work area should be temporarily re-routed to areas outside the work area. All HVAC supply vents in the work area should be blocked or sealed shut. If the HVAC systems are to remain off during remediation work, temporary cooling and/or dehumidification should be installed to maintain the temperature and humidity within the desired ranges. The length of the remediation work will also determine and/or influence the need to maintain appropriate temperature and humidity levels within the work area. Temporary equipment for cooling and/or dehumidification should also be considered in circumstances where the HVAC system has significant contamination and/or when removal of the HVAC unit is required for remediation.

3.4 PROCEDURES

A. Cleaning of Area:

1. ALL WORKERS SHALL BE IN PPE.
2. Properly dispose of all damaged goods.

Contractors shall clean/remove items as follows:

3. All areas to be treated with remediation products if not specifically described below in the approved scope.
4. Ceramic Tile Walls: Shall be wiped using top to bottom and left to right methods. The wiping shall include any/all insets, windows, door frames, closets, but not limited to these components.
5. Gypsum Board/Drywall Removal: Shall be removed using methods that will keep mold contaminated sections from becoming airborne. This material shall be double wrapped/bagged in 6 mil polysheeting/bags and sealed. This Material is to be considered mold contaminated waste.
6. Cementitious Backing and Plaster Wall Cleaning: Shall be wiped using tip to bottom and left to right methods.
7. Cementitious Backing and Plaster Ceiling Cleaning: Shall be wiped using top to bottom and left to right methods. The wiping shall include and/all insets, windows, door frames, closets, but not limited to these components.
8. Door Sanitization: Shall be wiped using top to bottom and left to right methods. The wiping shall include any/all insets, and door hardware but not limited to these components.
9. Light Panel Sanitization: Shall be wiped clean using remediation chemicals.
10. Ductwork (Flex Duct) Removal: Shall be removed in 3'-4' sections, double sealed with 6 mil Polysheeting and adhesive tape. Materials shall be considered mold contaminated waste.
11. Ductwork (Sheet Metal) and Plenum Removal: Shall be removed in 3'-4' sections, double sealed with 6 mil Polysheeting and adhesive tape. Materials shall be considered mold contaminated waste.
12. HVAC Grilles/Diffusers Removal: Shall be removed using methods that will keep mld contaminated sections from becoming airborne. This material shall be double wrapped/bagged in 6 mil polysheeting and adhesive tape. This material shall be considered mold contaminated waste.
13. Ceiling Mounted Exhaust Fan: Shall be cleaned and sanitized using remediation chemicals.
14. HVAC Equipment (Air Handling Unit): Shall be cleaned and treated with remediation chemicals by a NADCA Certified Technician.
15. HVAC Equipment (Window Units): Shall be removed using methods that will keep mld contaminated sections from becoming airborne. This material shall be double wrapped/bagged in 6 mil polysheeting and adhesive tape. This material shall be considered mold contaminated waste.
16. Remove Remaining Contents: This material shall be double wrapped/bagged in 6 mil polysheeting and adhesive tape. This material shall be considered mold contaminated waste.
17. Plumbing Fixture: Shall be wiped using remediation chemicals.
18. Windows: Shall be cleaned and sanitized using remediation chemicals.
19. Acoustical Ceiling Tile (12"x12"): Acoustical Ceiling tile on ceiling shall be removed using methods that will keep mold contaminated sections from becoming airborne. This material shall be double wrapped/bagged in 6 mil polysheeting/bags and seal. This material shall be considered mold contaminated waste.

20. Acoustical Ceiling Tile (24"x24"): Acoustical Ceiling tile on ceiling shall be removed using methods that will keep mold contaminated sections from becoming airborne. This material shall be double wrapped/bagged in 6 mil polysheeting/bags and seal. This material shall be considered mold contaminated waste.
21. Built-in Cabinets: Shall be removed using methods that will keep mold contaminated sections from becoming airborne. This material shall be double wrapped/bagged in 6 mil polysheeting and adhesive tape. This material shall be considered mold contaminated waste.
22. Lay-in Ceiling Grid: Shall be removed using methods that will keep mold contaminated sections from becoming airborne.
23. Sub-Assemblies Attached to Walls: Including but not limited to bulletin boards, dry erase boards, smart boards, peg boards, acoustical panels, shelves, bookshelves, cabinetry, etc. Shall be detached and if restorable, cleaned.
24. VCT Flooring: Delaminated VCT flooring shall be disengaged and disposed of in accordance with all applicable regulations.
25. Carpet: Shall be removed using methods that will keep mld contaminated sections from becoming airborne. This material shall be double wrapped/bagged in 6 mil polysheeting and adhesive tape. This material shall be considered mold contaminated waste.
26. Cove Base: Wood and Vinyl cove base shall be removed and double wrapped/bagged in 6 mil polysheeting/bags and sealed. This material shall be considered mold contaminated waste.

3.5 STRUCTURE COMPONENT REMEDIATION PROCEDURES

- A. Drying. Structure components and contents that require drying shall be evaluated and dried using one or more of the procedures outlined in IICRC S500. Excess water shall be collected and removed prior to and/or during the remediation, as it is encountered. Further drying shall be conducted using a combination of air movement, dehumidification, and temperature control, as outlined in Chapters 6 and 7 of the Reference Guide in IICRC S500.
- B. Removal and Cleaning of Mold Growth. All visible molds should be removed during remediation. Unless otherwise specified, mold impacted components of the structure should be addressed using the methods outlined in IICRC S520 and EPA 402-K-01-001.
 1. Non-Porous/Solid Surface Components. Non-porous/solid surface components will only be considered for removal and replacement if they are visibly water damaged. Regardless of whether they are in Condition 1, 2 or 3, nonporous/solid surface components shall have mold removed using appropriate procedures. Wet removal methods are allowed on non-porous/solid surface components provided these methods do not affect adjacent porous or semi-porous components. Semi-porous Items. Semi porous components (e.g., wood) in Condition 3 with visible surface mold, but which are not decayed/deteriorated, should be managed as follows:
 - a. Remove loose mold using a HEPA filtered vacuum.
 - b. Remove attached mold through sanding, grinding or use of wire brushing, provided the removal will not compromise the structural or functional integrity of the component.
 - c. In lieu of removal of attached mold, semi-porous components in Condition 3 may be removed and replaced, with the permission of the

licensed EC and the Owner, if it is more economical to do so. Semi-porous components with no visible mold growth in Condition 2 or items in Condition 1 shall have mold removed using dry methods only.

- C. Porous Items. Porous components in Condition 3 should be removed and discarded. Porous components with no visible mold growth in Condition 2 or in Condition 1 shall have mold removed using dry methods only.
- D. Zones of Remediation. The zones of remediation are defined as those specific areas to be cleaned, repaired and/or replaced due to water damage and the presence of mold contaminants. These zones are based on the visual observations of water stains, visible mold growth, and moisture damage assessment. During the prosecution of the work, areas outside of the zone of remediation may be identified. Following the removal of components within the zone of remediation and before the cleaning of adjacent areas, the exposed area should be inspected to determine if there is any additional water damage and/or any further remediation required. The Contractor may be asked by the EC and the Owner to proceed with additional remediation activities through a properly executed field change.
- E. Cleaning of Structure Components. During remediation, the remediation zone should be maintained in a clean, debris-free manner throughout the remediation process using a combination of HEPA filtered vacuums and HEPA filtered air movers. Following the remediation work, the entire work zone should be cleaned using a HEPA filtered vacuum. Semi-porous and non-porous components may also be cleaned with a lightly damp cloth (clean water only; fungicides or biocides are not recommended). The area identified as the cleaning zone should also be cleaned once all repairs and remediation have been completed. During the cleaning, the HVAC system should remain off and alternative ventilation, if necessary, can be provided using HEPA filtered air movers. The walls, ceilings, and floors in the cleaning zone should be cleaned using a HEPA filtered vacuum.
- F. Cleaning of the HVAC System. If specified, the various components of the HVAC system shall be cleaned. This cleaning should be conducted following all remediation work and repairs, and prior to reinstallation. The cleaning protocol should be conducted by an experienced professional using appropriate equipment and materials for working on HVAC systems. The HVAC cleaning protocol should be consistent with applicable standards and guidelines from ASHRAE and NADCA and specifically NADCA ACR-2006.
- G. Fungicidal Coatings. As required and specified, following the removal and cleaning within the zone of remediation, apply a fungicidal coating to all exposed areas where remediation work was performed. The specific coating product shall be an EPA-registered fungicidal coating (e.g., Foster® 40-30, Fiberlock Aftershock, etc.) approved by the EC. All EPA-registered fungicidal coatings shall be used in strict compliance with labeling and manufacturer instructions. At the discretion of the EC conducting the post-remediation assessment, this coating may be applied either before or after authorization is provided to removal the containment. Areas of the structure where fungicidal coatings have been applied may not be occupied by non-remediation personnel until the coatings have properly dried.
- H. CONTENTS MANAGEMENT PROCEDURES
 - 1. Custody and Handling of Contents. All contents shall be handled in a manner that, to the maximum extent practical, protects the integrity of the contents and prevents damage to the contents or other items. Under no circumstances will the Contractor be allowed to keep, scavenge or salvage for his own use any of the contents of the structure. Prior to beginning the remediation, the Contractor shall

provide the following written notifications to all employees, subcontractors, vendors, and visitors:

"There is personal information present within the structure that is subject to all applicable federal, state and local privacy laws. The Contractor and his personnel are strictly forbidden to review and/or divulge any personal information. They are to handle all contents in a manner that, to the maximum extent practical, protects the integrity of the contents and prevents damage to the contents or other items. They are to refrain from confiscating, keeping, scavenging, salvaging or otherwise inappropriately removing any contents from the structure. Any of the Contractor's employees, agents, sub-contractors, vendors or visitors who are discovered to have inappropriately kept, scavenged, salvaged or otherwise removed any contents from the structure shall be discharged from the project and removed from the project site immediately."

2. Initial Inventory and Photo-Documentation. The Contractor shall photo-document the placement and condition of all contents, for each room in the work area (remediation zones, ingress/egress area, and cleaning zones), prior to moving. Make a general video of the entire room for every room in the work area, or Matterport Imaging.
3. Contents Manipulation. The Contractor shall set up the following contents manipulation areas:
 - a. Dirty Staging Area. A "Dirty Staging Area" (DSA) for items to be evaluated for disposal (discarding). The DSA is for holding items which the EC believes need to be discarded and disposed of.
 - b. Cleaning Area. A "Cleaning Area" (CA) for items to be cleaned. Proper engineering controls (e.g., positive pressure to prevent cross-contamination) should be incorporated into the design of the CA.
 - c. Finished Storage Area. A "Finished Storage Area" (FSA) for items that have been cleaned and are to be returned to their original room following remediation.
 - d. The preferred method is to locate the DSA, CA and FSA within the confines of the structure undergoing remediation. The Contractor shall execute and schedule his work to prepare the contents management areas (DSA, CA & FSA) as soon as possible in the process. If there is not enough space for the Contractor to establish the DSA, CA and FSA within the confines of the structure, the Contractor may establish any or all of these areas in temporary structures (trailer, portable building, etc.) on-site.
4. Handling of Contents to Remain in the Work Area. Contents which are to remain in the work area (remediation zones and cleaning zones) during the remediation and/or cleaning work shall be properly protected and isolated from the work using appropriate barriers (polyethylene sheeting, bags, etc.) and seals (ties, tape, etc.). The contents may be relocated within the room to accommodate the work. Following remediation work, the contents shall be appropriately cleaned, as outlined below.
5. Handling of Contents to be Removed from the Work Area. Every item that leaves its original room shall be tagged with a durable permanent tag that will survive the handling outlined herein. Each tag shall be clearly labeled, in permanent ink with the building designation (name and/or number), the room number, and the date and time the item was removed. Similar items or groups of items may be placed into a common container, provided the container is tagged and labeled

with the information required above. All items (whether intended to be cleaned or discarded) shall be bagged to prevent the item from being contaminated or from contaminating other contents or portions of the structure under remediation. Bags used to transport contents shall be appropriately cleaned before leaving a contained area, to prevent cross contamination. Contents which are to be cleaned shall be stored in the FSA until the remediation is completed and cleared in their originating room.

6. Contents Cleaning Procedures. The default management strategy for all contents in the work areas will be to clean them. Contents with no visible mold growth in Condition 2 or items in Condition 1 shall be vacuumed with a device whose air discharge is fitted with a HEPA filter (HEPA vacuuming). Additional cleaning for Condition 2 or 3 items shall be based on item types as specified in EPA 402-K-01-001 and/or IICRC S520 and shall be implemented alone or in combination to restore contents to Condition 1.

- a. Soft Goods. Soft goods should be professionally cleaned or washed in hot water (minimum 55°C or 131°F) with a detergent, as applicable. Clothing with deposited spores from airborne mold sources can be washed in this manner. Dry cleaning is not a requirement and may not be the most effective cleaning/removal method for washable fabrics. Usually, only soft goods with actual damage from being in contact with water and/or that have visible growth would need to be considered for replacement. Active mold growth that has penetrated the fibers of fabric items can leave stains and is more difficult to remove than spores deposited on the surface. Prior consultation with professionals engaged in the cleaning of upholstery, furniture, clothing, or other materials is recommended to identify the appropriate cleaning method and prevent damage from the cleaning procedure.
- b. Hard Goods/Other Items. All other hard goods, personal effects, etc. can be cleaned with warm, sudsy water. Photographs or paper items with mold growth can be discarded or restored using appropriate document or art restoration measures. Alternative cleaning methods shall have the prior approval of the EC. Cleaning of contents shall be conducted in the CA. The EC may review and observe the Contractor's cleaning procedures. At the EC's sole discretion, sampling and or testing may be conducted to determine the effectiveness of the contents cleaning.

7. Criteria for Identifying Items to Be Discarded. The EC shall work with the Contractor to identify items which are eligible for discarding. The Contractor shall not have any independent authority to determine that contents are to be discarded. However, this restriction shall not apply to components of the structure and associated finishes. For the Contractor's information in pre-screening contents which may be eligible to be discarded, the following criteria are provided. If the Contractor believes that the contents items meet these criteria and should be discarded and disposed of, the items should be managed as outlined in Section 10, below.

- a. Non-Porous/Solid Surface Items. Examples of non-porous/solid surface items include, but are not limited to:
 - 1) Hard furniture with no upholstery.
 - 2) Computer and electronic equipment
 - 3) Chalkboards, message boards, with solid surfacesNon-porous/solid surface items will only be considered for disposal if they are visibly water damaged. Regardless of whether they are in

- Condition 1, 2 or 3, non-porous/solid surface items shall be cleaned using appropriate procedures, as outlined in Section 9.6.
- b. Semi-porous Items, Examples of semi-porous items include, but are not limited to:
 - 1) Painted/finished wood products and furniture.
 - 2) Furniture with vinyl upholstery
 - 3) Trophies, decorations, framed/mounted pictures, etc.Semi-porous items in Condition 3 or visible deposited mold in Condition 2 will be considered for disposal. Semi-porous items no visible mold growth in Condition 2 or items in Condition 1 will be referred to the Contractor for cleaning.
 - c. Porous Items, Examples of porous items include, but are not limited to:
 - 1) Furniture with cloth upholstery
 - 2) Paper, cardboard, pictures
 - 3) Clothing, linens, draperies, etc.Porous items in Condition 3 or visible deposited mold in Condition 2 will be considered for disposal. Porous items with no visible mold growth in Condition 2 or items in Condition 1 will be referred to the Contractor for cleaning.
 - d. Incidental Food Items. All incidental food items encountered in remediation areas shall be discarded, following the procedures outlined in Section 10.

3.6 POST REMEDIATION ASSESSMENT AND CLEARANCE CRITERIA

- A. Following the remediation of the structure and contents, the EC should perform a post-remediation assessment to document the completion of the remediation work. This post-remediation assessment will consist of a combination of visual observations, moisture measurements, and sampling, as determined by the EC.
 - 1. Post-Remediation Objectives. The objective of the remediation is to remove all areas of identified and discovered mold impact. The objectives of the post-remediation assessment include verification of the following:
 - a. All mold impacted materials (including those specified and those discovered during the prosecution of the remediation work) have been removed.
 - b. The structure components and contents in the remediation area have been properly cleaned.
 - c. The remediation work area is free from visible mold growth and wood rot.
 - d. The remediation areas have been returned to Condition 1 (normal mold ecology), as outlined in IIICRC S520.
 - e. The underlying cause of the mold impact for the project has been remediated so that it is reasonably certain that mold growth will not return from that same cause.
 - f. A determination that post-remediation objectives have been met will require acceptable visual observations, moisture measurements and sampling results.
 - 2. Visual Observations. The EC shall utilize visual observations as a part of the post-remediation assessment. Visual observations are sufficient to determine that the post-remediation objectives have not been met; however, visual observations alone are not sufficient to confirm that the post-remediation objectives have been met.

3. Moisture Measurements. The EC shall utilize moisture measurements as a part of the post-remediation assessment. Moisture levels in the structure components and contents should be within the normal to low range, based on the type of material and the specific measurement device utilized.
4. Sampling. Acceptable sampling results are required to demonstrate that the post-remediation objectives have been met and that the remediation area has been returned to Condition 1. In accordance with the TMARR, at least one nationally recognized analytical method must be used to verify that each area has been remediated as outlined in the mold remediation protocol. The specific sampling to be conducted shall be selected by the licensed EC based on the post-remediation objectives and visual observations.
 - a. Air Sampling. The Air Monitoring Firm shall utilize air sampling as a part of the post-remediation assessment. Air samples shall be collected using either spore trap cassettes or impactor plates, with laboratory analysis using either direct or cultured microscopic examination, as appropriate. Indoor air samples shall be collected while containment is erected. Air scrubbing equipment must have been turned off at least two (2) hours before the air samples are collected. At least one (1) outdoor air sample shall be collected for comparison purposes, preferably at an outdoor location near the remediation zone (not immediately at the ingress/egress point, but close enough to represent the composition of the influx air near the zone).
 - b. Surface Sampling. The Air Monitoring Firm may utilize surface sampling as a part of the post-remediation assessment. Surface samples may be collected using either tape lifts or swabs. Tape lifts shall be analyzed using direct microscopic examination, while swabs may be analyzed using either direct or cultured microscopic examination.
 - c. Bulk Sampling. The Air Monitoring Firm may utilize bulk sampling as a part of the post-remediation assessment. Bulk samples may be analyzed using either direct or cultured microscopic examination.
 - d. Sample Data Interpretation. As a part of assessing normal mold ecology", water-indicator species (e.g. *Stachybotrys*, *Chaetomium*, *Fusarium*, *Memnoniella*) and significant mold growth structures should not be present; however, trace occurrences may be acceptable (at the discretion of the EC if visual conditions are adequate, hyphal fragments and particulate debris in samples are low, and the trace occurrences do not appear to be related to an identified indoor source. Airborne mold spores in the remediation area should be lower than outdoor counts collected at the same time of day, and the distribution of mold spore types should be relatively similar between indoor and outdoor samples.
5. Post-Remediation Clearance
 - a. The licensed EC will use visual observations, moisture measurements and sampling results to determine if the post-remediation assessment indicates that the remediation has achieved Post-Remediation Clearance (Clearance) by meeting the post-remediation objectives. The licensed EC may use a combination of his own visual observations and tests, along with observations and tests conducted by professionals from other disciplines to verify that the underlying cause(s) of the mold impact have been remedied.
 - b. The remediation zones may be cleared in any number or combination, as agreed between the Contractor and the EC. If the EC determines that Clearance has not been achieved, the EC shall direct the

Contractor, at the Contractors expense, to utilize additional remediation and/or cleaning procedures as outlined in the mold remediation protocol or other document referenced in the mold remediation protocol to achieve Clearance. If the EC determines that Clearance has been achieved, the EC shall notify both the Contractor and the Owner.

- c. Removal of Containment. Containment is to remain in place (including any requirement to maintain negative pressure) until authorization to remove the containment is issued by the EC.

END OF SECTION 028500

Section 14

Department of the Treasury (DOT) 31 CFR Part 35 Subpart A

1. EQUAL EMPLOYMENT OPPORTUNITY

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

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States. The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon

contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

2. DAVIS-BACON ACT, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

3. COMPLIANCE WITH THE CONTRACT WORK HOURS AND SAFETY STANDARDS ACT.

(1) *Overtime requirements.* No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less

than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) *Withholding for unpaid wages and liquidated damages.* The Parish shall upon its own action or upon written request of an authorized representative of the Department of Labor or U.S. Treasury withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

4. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT

If the Federal award meets the definition of “funding agreement” under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

5. CLEAN AIR ACT

(1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 *et seq.*

(2) The Contractor agrees to report each violation to the Parish and understands and agrees that the Parish will, in turn, report each violation as required to assure notification to the federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.

(3) The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by ARPA.

6. FEDERAL WATER POLLUTION CONTROL ACT

(1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 7401 *et seq.*

(2) The Contractor agrees to report each violation to the Parish and understands and agrees that the Parish will, in turn, report each violation as required to assure notification to the Federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.

(3) The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by ARPA.

7. SUSPENSION AND DEBARMENT

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

(2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) This certification is a material representation of fact relied upon by the Parish. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the Parish, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

8. BYRD ANTI-LOBBYING ACT

The Contractor will be expected to comply with Federal statutes required in the Anti-Lobbying Act. Contractors who apply or bid for an award of more than \$100,000 shall file the required certification. Each tier certifies to the tier above that it will not and has not used federally appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the federal awarding agency.

9. PROCUREMENT OF RECOVERED MATERIALS

In the performance of this Contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—

- i. Competitively within a timeframe providing for compliance with the Contract performance schedule;
- ii. Meeting Contract performance requirements; or
- iii. At a reasonable price.

Information about this requirement, along with the list of EPA-designate items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

10. PROHIBITION ON CONTRACTING FOR COVERED TELECOMMUNICATIONS EQUIPMENT OR SERVICES.

(a) *Definitions.* As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in Public Law 115-232, section 889, Prohibitions on Expending ARPA Award Funds for Covered Telecommunications Equipment or Services (Interim), as used in this clause—

(b) *Prohibitions.*

(1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug. 13, 2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.

(2) Unless an exception in paragraph (c) of this clause applies, the contractor and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from a federal Agency to:

- (i) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
- (ii) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
- (iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system as described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities). (a) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities). (bi) Telecommunications or video surveillance services provided by such entities or using such equipment. (c) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country; or
- (iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(3) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

(4) See Public Law 115-232, section 889 for additional information.

(5) See also § 200.471.

(c) *Exceptions.*

(1) This clause does not prohibit contractors from providing—

- (i) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (ii) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) By necessary implication and regulation, the prohibitions also do not apply to:

- (i) Covered telecommunications equipment or services that:
 - i. Are *not used* as a substantial or essential component of any system; *and*
 - ii. Are *not used* as critical technology of any system.
- (ii) Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

(d) *Reporting requirement.*

(1) In the event the contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the information in paragraph (d)(2) of this clause to the recipient or subrecipient, unless elsewhere in this contract are established procedures for reporting the information.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

- (i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.
- (e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments.

11. DOMESTIC PREFERENCES FOR PROCUREMENTS.

As appropriate, and to the extent consistent with law, the contractor should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products.

For purposes of this clause:

Produced in the United States means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

Manufactured products mean items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

12. COMPLIANCE WITH FEDERAL EXECUTIVE ORDERS

This is an acknowledgement that American Rescue Plan Act will be used to fund the Contract only. The Contractor will comply with all applicable federal law, regulations, executive orders, policies, procedures, and directives.

13. NO OBLIGATION BY THE FEDERAL GOVERNMENT

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

14. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

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

15. CONTRACTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS.

(a) Any party to this contract must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. These steps are also required for the hiring of any subcontractors under this contract.

(b) Affirmative steps must include:

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

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

16. COPYRIGHT AND DATA RIGHTS

The Contractor grants to the Parish, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this contract to reproduce, publish, or otherwise use, including prepare derivative works, distribute copies to the public, and perform publicly and display publicly such data. For data required by the contract but not first produced in the performance of this contract, the Contractor will identify such data and grant to the Parish or acquires on its behalf a license of the same scope as for data first produced in the performance of this contract. Data, as used herein, shall include any work subject to copyright under 17 U.S.C. § 102, for example, any written reports or literary works, software and/or source code, music, choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this contract, the Contractor will deliver to the Parish data first produced in the performance of this contract and data required by the contract but not first produced in the performance of this contract in formats acceptable by the Parish.

Section 15

CDBG Contract Provisions

1. **Definitions:** For purposes of this Contract, the following terms shall have the meanings set forth below:
 - (a) **"Assistance"** means the CDBG grant funds provided, or to be provided, to the Grantee by the State, pursuant to the Grant Award Agreement.
 - (b) **"CDBG"** means Community Development Block Grant.
 - (c) **"Contract"** means the contractual agreement between the Owner and the Contractor to which these Contract Special Provisions have been incorporated and made a part thereof.
 - (d) **"Contractor"** means the contractor whose services are retained pursuant to the Contract.
 - (e) **"Grantee"** means the unit of local government designated as the recipient of CDBG Assistance in a party to the Grant Award contract with St. Tammany Parish Government.
 - (f) **"HUD"** means U.S. Department of Housing and Urban Development, which is the federal agency that awards and has authority over CDBG funding to the parish.
 - (g) **"Owner"** means the Grantee or Subrecipient, as applicable.
 - (h) **"Project"** means the project for which the services of the Contractor have been retained pursuant to the Contract which are funded, in whole or in part, with CDBG funds.
 - (i) **"Parish"** means St. Tammany Parish Government which has been delegated the responsibility for administering the CDBG program.
 - (j) **"Subrecipient"** means the agent of the unit of local government as designated by an agreement.
2. **Prime Contractor Responsibilities:** The Contractor is required to assume sole responsibility for the complete effort and enforcement of laws and regulations under this Contract. The Owner will consider the Contractor to be the sole point of contact with regard to contractual matters. All contractors must be registered in the federal System for Award Management (SAM) and be eligible to receive federal contracts.
3. **Federal, State and Parish Laws:** The Contractor agrees to comply with all CDBG requirements as well as other federal laws, state laws, parish laws, regulations, or Executive Orders. The Parish reserves the right to add or delete terms and conditions of this Contract as may be required by revisions and additions or changes in the requirements, regulations, and laws governing the CDBG Program.
4. **Procurement and Contracting:** In accordance with 2 CFR Part 200, the cost plus a percentage of cost and percentage of construction cost methods of contracting shall not be used. This provision shall supersede any conflicting provision in an executed contract document or agreement funded in whole or in part with CDBG funds.

5. **Domestic Preferences for Procurements:** In the performance of this Agreement, Contractor shall, as appropriate and to the greatest extent practicable, purchase, acquire, and/or use goods, products, and materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subcontracts. For purposes of this section:
 - a. "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
 - b. "Manufactured products" means items and construction materials composed in whole or in part of nonferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.
6. **Build America, Buy America:** This agreement is for a project that is subject to the Build America, Buy America Act (BABAA) requirements under Title IX of the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. 117-58. Absent an approved waiver, all iron, steel, manufactured products, and construction materials used in this project must be produced in the United States, as further outlined by the Office of Management and Budget's Memorandum M-22-11, Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure, April 18, 2022.
7. **Rights to Inventions, Copyrights, and Rights in Data:** The contractor agrees to comply with requirements and regulations pertaining to copyrights and rights in data.
8. **Reporting Requirements:** The Contractor agrees to complete and submit all reports, in such form and according to such schedule, as may be required by the Parish or HUD. Further, the Contractor agrees to require any subcontractors to submit reports that may be required and to incorporate such language in its agreements. Failure to meet deadlines with the required information could result in sanctions.
9. **Access to Records:** The Contractor shall grant access to the Parish, State or any other passthrough entity, the Federal Agency, Inspectors General, and/or the Comptroller General of the United States, or any of their duly authorized representatives, to any books, documents, papers, and/or records of the Contractor that are pertinent to the Contract for the purpose of making audits, examinations, excerpts, and transcripts. The right also includes timely and reasonable access to the Contractor's personnel for the purpose of interview and discussion related to such documents. The rights of access in this section are not limited to the required retention period but last as long as the records are retained.
10. **Maintenance of Records:** Contractor will keep adequate records and supporting documentation, which concern or reflect its services rendered under this agreement. All records and documentation will be retained by selected firm until five years after project completion. However, if any litigation, claim, or audit is started before the expiration of the five-year period, then records must be retained for five years after the litigation, claim or audit is resolved.

11. **Confidential Information:** Any reports, information, data, etc., given to, prepared by, or assembled by the Contractor under this Contract, which the Grantee or the Parish requests to be kept confidential, shall not be made available to any individual or organization by the Contractor without prior written approval of the Grantee or the Parish, as applicable.
12. **Reporting of Fraudulent Activity:** If at any time during the term of this Contract anyone has reason to believe by whatever means that, under this or any other program administered by the Parish, a recipient of funds has improperly or fraudulently applied for or received benefits, monies or services pursuant to this Contract or any other contract, such information shall be reported immediately to the appropriate authorities.
13. **Conflicts of Interest:** Regulations at [2 CFR 200.112](#) and [24 CFR 570.489\(h\)](#) regarding conflicts of interest apply to the use and expenditure of CDBG funds by the Grantee and its subrecipients, including the Contractor.

No member, officer, or employee of the recipient, subrecipient, or its agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercise any functions or responsibilities with respect to the program during his/her tenure or for one year thereafter, shall have any financial interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the program assisted under this agreement. Immediate family members of said members, officers, employees, and officials are similarly barred from having any financial interest in the program. This provision shall be incorporated in all such contracts or subcontracts.

14. **Applicable Law:** In addition to the applicable Federal laws and regulations, this Contract is also made under and shall be construed in accordance with the laws of the Parish and State. By execution of this Contract, the Contractor agrees to submit to the jurisdiction of the Parish for all matters arising or to arise hereunder, including but not limited to performance of said Contract and payment of all licenses and taxes of whatever kind or nature applicable hereto.
15. **Debarment and Suspension:** A contract award (2 C.F.R. § 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. § 180 that implement Executive Orders 12549 (3 C.F.R. § 1986 Comp., p. 189) and 12689 (3 C.F.R. § 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

If any part of the work covered by this Contract is to be subcontracted, the Contractor is responsible for making sure subcontractor is not debarred, suspended, excluded by agencies, or declared ineligible.

16. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001. **Contracting with small and minority businesses and women's business enterprises:** Federal regulations require Contractors to take all necessary affirmative steps to assure that minority businesses and women's business enterprises are used when possible. Accordingly, affirmative steps must be taken to assure that MBEs and WBEs are utilized when possible as sources of supplies, equipment, construction and services. Affirmative steps shall include the following:
- a. Including qualified MBEs and WBEs on solicitation lists;
 - b. Assuring that MBEs and WBEs are solicited whenever they are potential sources;
 - c. Whenever economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum participation by MBEs and WBEs;
 - d. Where the requirement permits, establishing delivery schedules which will encourage participation by MBEs and WBEs;
 - e. Requiring the subcontractor, if any, to take the affirmative actions outlined in (a) – (d) above.
17. **Federal Lobbying Restrictions:** The Contractor certifies, to the best of its knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, it will complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," (which is available on the HUD website or here: <https://www.hudexchange.info/resources/documents/HUD-Form-Sflll.pdf>) in accordance with its instructions; and
 - c. It will require that the language of this Section be included in the award documents for all subcontracts at all tiers.
 - d. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

18. **Equal Employment Opportunity**: The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Parish.

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

- a. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without discrimination based on their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- b. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without discrimination based on race, color, religion, sex, sexual orientation, gender identity, or national origin.
- c. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- d. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- e. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- f. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- g. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with

procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- h. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance.

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

19. Copeland Anti-Kickback Act

The Contractor agrees to comply with the Copeland “Anti-Kickback” Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3). These regulations are herein incorporated by reference in this contract.

20. Davis-Bacon and Related Acts

The Contractor agrees to comply with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor regulations (29 CFR Part 5). These regulations are herein incorporated by reference in this contract. (Construction contracts in excess of \$2,000 awarded by grantees and subgrantees when required by Federal grant program legislation). Please see HUD 4010 below.

21. Contract Work Hours and Safety Standards Act

The contract agrees to comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5). These regulations are herein incorporated by reference in this contract.

- 22. Drug Free Workplace:** By signing this agreement, the contractor hereby certifies that it shall provide a drug-free workplace in compliance with the Drug-Free Workplace Act of 1988, as amended. This requirement is applicable to all Contracts and Subcontracts of \$100,000 or more.

- 23. Non-Discrimination:** The Contractor shall conform with requirements of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) and HUD regulations issued pursuant thereto contained in 24 CFR Part 1. No person in the United States shall, on the basis of race, color, national origin, sex or religion or religious affiliation, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available through this Contract. Any prohibition against discrimination on the basis of age under the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.) or with respect to an otherwise qualified individual with a disability as provided in the Americans with Disabilities Act, as applicable, (P.L. 101-336, 42 U.S.C. 12101-12213) or Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. Section 794) shall also apply to any such program or Project

- 24. Certification of Nonsegregated Facilities:** The contractor certifies that the entity does not maintain or provide for employees any segregated facility at any of its establishments, and those under the

contractors control. Contractor further certifies that they will not maintain or provide for employment segregated facilities at any of the Contractor's establishments, and Contractor will not permit employees to perform their services at any location under its control where segregated facilities are maintained. The contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause of the contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and washrooms, restaurants and other eating areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or in fact segregated on the basis of race, color, religion or national origin because of habit, local custom, or otherwise. Contractor further agrees they will obtain identical certification from proposed subcontractors prior to the awards of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause; that Contractor will retain such certification in their files; and that they will forward this notice to such proposed subcontractors.

25. **Architectural Barriers Act and Americans with Disabilities Act:** The Architectural Barriers Act of 1968 (42 U.S.C. 4151-4157) requires certain Federal and Federally funded buildings and other facilities to be designed, constructed, or altered in accordance with standards that ensure accessibility to, and use by, people with physical disabilities. A building or facility designed, constructed, or altered with funds allocated or reallocated under this subpart after November 21, 1996, and that meets the definition of residential structure as defined in 24 CFR 40.2, or the definition of building as defined in 41 CFR 101-19.602(a), is subject to the requirements of the Architectural Barriers Act of 1968 and shall comply with the Uniform Federal Accessibility Standards. For general type buildings, these standards are in appendix A to 41 CFR part 101-19.6. For residential structures, these standards are available from the Department of Housing and Urban Development, Office of Fair Housing and Equal Opportunity, Disability Rights Division, Room 5240, 451 Seventh Street, SW, Washington, DC 20410; telephone (202) 708-2333 (voice) or (202) 708-1734 (TTY).
26. **Section 109 of the Housing and Community Development Act of 1974:** No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under the CDBG program of the Parish.
27. **Section 504 of the Rehabilitation Act of 1973, as amended:** The Contractor agrees that no otherwise qualified individual with disabilities shall, solely by reason of his disability, be denied the benefits, or be subjected to discrimination including discrimination in employment, any program or activity that receives the benefits from the Assistance.
28. **Section 3, Compliance and Provision of Training, Employment and Business Opportunities:** The work to be performed under this Contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, (12 USC § 1701u). Contractors and subcontractors must address the Section 3 employment work hours benchmarks for Section 3 Workers and Targeted Section 3 Workers as established by the U.S. Department of Housing and Urban Development at 24 CFR Part 75.
 - a. Section 3 projects mean housing rehabilitation, housing construction, and other public construction projects assisted under HUD programs that provide housing and community development financial assistance when the total amount of assistance to the project exceeds \$200,000. The project is the site or sites together with any building(s) and improvements located on the site(s) that are under common ownership, management, and financing.
 - b. The work to be performed under this contract is subject to the requirements of Section 3 of the

Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by the U.S. Department of Housing and Urban Development (HUD) assistance or HUD assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

- c. The parties to this contract will comply with HUD's regulations as set forth in 24 CFR Part 75, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 75 regulations.
 - d. The Section 3 requirements apply to all contractors and subcontractors performing work in connection with a Section 3 covered project. Contractor means any entity entering into a contract with (a) a recipient to perform work in connection with work in connection with a Section 3 project; or (b) a subrecipient for work in connection with a Section 3 project. Subcontractor means any entity that has a contract with a Contractor to undertake a portion of the contractor's obligation to perform work in connection with a Section 3 project.
 - e. The contractor agrees to include this Section 3 Clause in every subcontract subject to compliance with regulations in 24 CFR Part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 Clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of regulations under 24 CFR Part 75.
 - f. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected, but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 75 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 75.
 - g. Noncompliance with HUD's regulations in 24 CFR Part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
29. **Lead-Based Paint:** Contractor shall carry out all work within the procedures established by the Grantee with respect to CDBG assistance that fulfill the objectives and requirements of the Lead-Based Paint Poisoning Prevention Act ([42 U.S.C. 4821-4846](#)), the Residential Lead-Based Paint Hazard Reduction Act of 1992 ([42 U.S.C. 4851- 4856](#)), and implementing regulations at [24 CFR Part 35](#).
30. **Energy and Environmental Conversion**
The contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.
31. **Compliance with Clean Air and Water Acts:**
During the performance of this contract, the contractor and all subcontractors shall comply with the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended.

In addition to the foregoing requirements, all nonexempt contractors and subcontractors shall furnish to the owner, the following:

- a. A stipulation by the contractor or subcontractors, that any facility to be utilized in the performance of any non-exempt contract or subcontract, is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.
- b. Agreement by the contractor to comply with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1847(h), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency Regulations (40 CFR Part 15).
- c. A stipulation that as a condition for the award of the contract, prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized, or to be utilized for the contract, is under consideration to be listed on the EPA List of Violating Facilities.
- d. Agreement by the contractor that they will include, or cause to be included, the criteria and requirements in paragraph (1) through (4) of this section in every nonexempt subcontract and requiring that the contractor will take such action as the government may direct as a means of enforcing such provisions.

In no event shall any amount of the Assistance be utilized with respect to a facility which has given rise to a conviction under section 113(c)(1) of the Clean Air Act or Section 309(c) of the Federal Water Pollution Control Act.

32. Legal Remedies

Contracts must include administrative, contractual, and legal remedies for use in cases in which contractors violate or breach contract terms. The contract must also make clear the remedial actions which you may take.

33. Termination

Contracts in excess of \$10,000 must explain the conditions under which you may terminate them for cause or your convenience, including the process for bringing about the termination and the basis for settlement.

A. APPLICABILITY

The Project or Program to which the construction work covered by this Contract pertains is being assisted by the United States of America, and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

1. Minimum wages and fringe benefits

- i. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in 29 CFR 5.5(d) and (e), the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(v) of these contract clauses; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under 29 CFR 5.5(a)(1)(iii)) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

ii. Frequently recurring classifications

A. In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to 29 CFR 5.5(a)(1)(iii), provided that:

1. The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;
 2. The classification is used in the area by the construction industry; and
 3. The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
- B.** The Administrator will establish wage rates for such classifications in accordance with 29 CFR 5.5(a)(1)(iii)(A)(3). Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

iii. Conformance

A. The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be

classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

1. The work to be performed by the classification requested is not performed by a classification in the wage determination; and
2. The classification is used in the area by the construction industry; and
3. The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- B. The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- C. If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- D. In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- E. The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under 29 CFR 5.5 (a)(1)(iii)(C) and (D). The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to 29 CFR 5.5 (a)(1)(iii)(C) or (D) must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

iv. Fringe benefits not expressed as an hourly rate

Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

v. Unfunded plans

If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in 29 CFR 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

- vi. Interest** In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding

i. Withholding requirements

The U. S. Department of Housing and Urban Development may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in 29 CFR 5.5(a) for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in 29 CFR 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in 29 CFR 5.5(a)(3)(iv), HUD may on its own initiative and after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

ii. Priority to withheld funds

The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or (b)(3)(i), or both, over claims to those funds by:

- A.** A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- B.** A contracting agency for its procurement costs;
- C.** A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- D.** A contractor's assignee(s);
- E.** A contractor's successor(s); or
- F.** A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

3. Records and certified payrolls

i. Basic record requirements

- A. Length of record retention.** All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
- B. Information required** Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- C. Additional records relating to fringe benefits.** Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(v) that the wages of any laborer or mechanic include the amount of any

costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

D. Additional records relating to apprenticeship Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

ii. Certified payroll requirements

A. Frequency and method of submission The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to HUD if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the certified payrolls to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to HUD. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system

B. Information required The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i)(B), except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the sponsoring government agency (or the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records).

C. Statement of Compliance Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

1. That the certified payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information and basic records are being maintained under 29 CFR 5.5 (a)(3)(i), and such information and records are correct and complete;
2. That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly

from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

3. That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
 - D. **Use of Optional Form WH-347** The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the “Statement of Compliance” required by 29 CFR 5.5(a)(3)(ii)(C).
 - E. **Signature** The signature by the contractor, subcontractor, or the contractor’s or subcontractor’s agent must be an original handwritten signature or a legally valid electronic signature.
 - F. **Falsification** The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
 - G. **Length of certified payroll retention** The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- iii. **Contracts, subcontracts, and related documents** The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- iv **Required disclosures and access**
- A. **Required record disclosures and access to workers** The contractor or subcontractor must make the records required under 29 CFR 5.5(a)(3)(i)–(iii), and any other documents that HUD or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by 29 CFR 5.1, available for inspection, copying, or transcription by authorized representatives of HUD or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
 - B. **Sanctions for non-compliance with records and worker access requirements** If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to 29 CFR 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
 - C. **Required information disclosures** Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to HUD if the agency is a party to

the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the contract, the contractor, subcontractor, or both, must, upon request, provide the full Social Security number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to HUD, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity

i. Apprentices

- A. Rate of pay** Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- B. Fringe benefits** Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.
- C. Apprenticeship ratio** The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to 29 CFR 5.5(a)(4)(i)(D). Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in 29 CFR 5.5(a)(4)(i)(A), must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- D. Reciprocity of ratios and wage rates** Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

- ii Equal employment opportunity** The use of apprentices and journeymen under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

5 Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6 Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (11), along with the applicable wage determination(s) and such other clauses or contract modifications as the U.S. Department of Housing and Urban Development may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate.

7 Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8 Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9 Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

i. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

ii. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

iii. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11 Anti-retaliation It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

i. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, or 29 CFR parts 1, 3, or 5;

ii. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, or 29 CFR parts 1, 3, or 5;

iii. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, or 29 CFR parts 1, 3, or 5; or

iv. Informing any other person about their rights under the DBA, Related Acts, or 29 CFR parts 1, 3, or 5.

B. Contract Work Hours and Safety Standards Act (CWHSSA)

The Agency Head must cause or require the contracting officer to insert the following clauses set forth in 29 CFR 5.5(b)(1), (2), (3), (4), and (5) in full, or (for contracts covered by the Federal Acquisition Regulation) by reference, in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses must

be inserted in addition to the clauses required by 29 CFR 5.5(a) or 4.6. As used in this paragraph, the terms “laborers and mechanics” include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in 29 CFR 5.5(b)(1) the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in 29 CFR 5.5(b)(1), in the sum of \$31 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in 29 CFR 5.5(b)(1).

3. Withholding for unpaid wages and liquidated damages

i. Withholding process The U.S Department of Housing and Urban Development or the recipient of Federal assistance may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in 29 CFR 5.5(b) on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in 29 CFR 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

ii Priority to withheld funds The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or (b)(3)(i), or both, over claims to those funds by:

- A.** A contractor’s surety(ies), including without limitation performance bond sureties and payment bond sureties;
- B.** A contracting agency for its procurement costs;
- C.** A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor’s bankruptcy estate;
- D.** A contractor’s assignee(s);
- E.** A contractor’s successor(s); or
- F.** A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in 29 CFR 5.5(b)(1) through (5) and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in 29 CFR 5.5(b)(1) through (5). In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss,

due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

- 5 Anti-retaliation** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- i. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in 29 CFR part 5;
 - ii. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or 29 CFR part 5;
 - iii. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or 29 CFR part 5; or
 - iv. Informing any other person about their rights under CWHSSA or 29 CFR part 5.
- C. CWHSSA required records clause** In addition to the clauses contained in 29 CFR 5.5(b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other laws referenced by 29 CFR 5.1, the Agency Head must cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor must maintain regular payrolls and other basic records during the course of the work and must preserve them for a period of 3 years after all the work on the prime contract is completed for all laborers and mechanics, including guards and watchpersons, working on the contract. Such records must contain the name; last known address, telephone number, and email address; and social security number of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid; daily and weekly number of hours actually worked; deductions made and actual wages paid. Further, the Agency Head must cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph must be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview workers during working hours on the job.
- D. Incorporation of contract clauses and wage determinations by reference** Although agencies are required to insert the contract clauses set forth in this section, along with appropriate wage determinations, in full into covered contracts, and contractors and subcontractors are required to insert them in any lower-tier subcontracts, the incorporation by reference of the required contract clauses and appropriate wage determinations will be given the same force and effect as if they were inserted in full text.
- E. Incorporation by operation of law** The contract clauses set forth in this section (or their equivalent under the Federal Acquisition Regulation), along with the correct wage determinations, will be considered to be a part of every prime contract required by the applicable statutes referenced by 29 CFR 5.1 to include such clauses, and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Administrator grants a variance, tolerance, or exemption from the application of this paragraph. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

F. HEALTH AND SAFETY

The provisions of this paragraph (F) are applicable where the amount of the prime contract exceeds **\$100,000**.

- 1.** No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his or her health and safety, as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.
- 2.** The contractor shall comply with all regulations issued by the Secretary of Labor pursuant to 29 CFR Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96), 40 U.S.C. § 3701 et seq.
- 3.** The contractor shall include the provisions of this paragraph in every subcontract, so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

Project: _____

**CERTIFICATION OF COMPLIANCE
WITH FEDERAL LABOR STANDARDS PROVISIONS**

I, the undersigned _____, the duly authorized representative of _____ (Hereinafter referred to as the contractor), do hereby certify that I have examined the Federal Labor Standards Provisions (HUD-4010) with related certificates and documents, and all of the conditions surrounding these provisions. The contractor understands that:

1. The contractor is responsible for employing only eligible subcontractors who have certified eligibility in written contracts containing Federal Labor Standards Provisions.
2. The contractor is responsible for the payment of Federal Prevailing Wage Rates by its subcontractors while performing work under this contract. If the subcontractor fails to pay the prevailing wages as specified in this contract, the prime contractor may be required to make appropriate restitution to the underpaid workers.
3. The contractor is responsible for collecting weekly certified payrolls from its subcontractors, review said payrolls for compliance with the federal wage rates, and forward same to the local government contract authority.
4. The contractor also understands that only those classifications listed in the original bid documents are applicable to this job, and no special classifications may be incorporated after contract award.

The contractor hereby agrees to perform all of its responsibilities in conformance with the Federal Labor Standards Provisions both diligently and effectively.

BY: _____

TITLE: _____

DATE: _____

**CERTIFICATION OF COMPLIANCE
WITH SECTION 3 REQUIREMENTS**
(To be returned with all submitted bids)

Section 3 of the Housing and Urban Development (HUD) Act of 1968 (12 U.S.C. 1701u) ensures that employment and other economic opportunities generated by certain HUD financial assistance shall, to the greatest extent feasible, be directed to low- and very low-income persons and to business concerns which provide economic opportunities to low- and very low-income persons. Contractors and subcontractors are required to demonstrate good faith efforts to comply with the Section 3 regulations.

A Section 3 Worker means:

Any worker who currently fits or when hired within the past five years fit at least one of the following categories, as documented:

- (1) The worker's income for the previous or annualized calendar year is below the income limit established by HUD.
- (2) The worker is employed by a Section 3 business concern.
- (3) The worker is a YouthBuild participant.

A Targeted Section 3 Worker means:

Any worker who currently fits, or when hired within the past five years fit, at least one of the following categories, as documented

- (1) A worker employed by a Section 3 business concern; or
- (2) Currently fits or when hired fit at least one of the following categories, as documented within the past five years:
 - (i) Low- or very low-income workers residing within service area or neighborhood of project.
 - (ii) A YouthBuild participant.

A Section 3 Business means:

A business that meeting at least one of the following criteria, documented within the last six-month period:

- (1) It is at least 51 percent owned and controlled by low- or very low-income persons;
- (2) Over 75 percent of the labor hours performed for the business over the prior three-month period are performed by Section 3 workers; or
- (3) It is a business at least 51 percent owned and controlled by current public housing residents or residents who currently live in Section 8-assisted housing.

NOTE: If your business meets the definition of a Section 3 business, you must register as a Section 3 Business through HUD's website here: <https://portalapps.hud.gov/Sec3BusReg/BRegistry/RegisterBusiness>

Businesses who self-certify that they meet one of the regulatory definitions of a Section 3 business will be included in a searchable online database. The database can be used by agencies that receive HUD funds, developers, contractors, and others to facilitate the award of covered construction and non-construction contracts to Section 3 businesses.

Please complete the following:

1. If awarded a contract, do you agree to insert the HUD Section 3 Clause into all Section 3 covered sub-contracts? Yes ☐ No ☐

2. If awarded a contract for this CDBG funded project, do you anticipate hiring new employees to complete the project? (Hiring would be specific to this project)

Yes ☐ No ☐

If yes, please estimate the number of employees to be hired: _____

3. Is your business a Section 3 Business? Yes ☐ No ☐

4. Is the bidder willing to consider hiring Section 3 residents for future employment opportunities that are a direct result of this CDBG funded project?

Yes ☐ No ☐

5. Is the bidder willing to consider subcontracting with Section 3 Businesses for this project?

Yes ☐ No ☐

To demonstrate compliance with Section 3, contractors and subcontractors are required to meet or exceed the applicable benchmarks below:

- (1) Twenty-five (25) percent or more of the total number of labor hours worked by all workers on a Section 3 project must be done by Section 3 workers.
- (2) Five (5) percent or more of the total number of labor hours worked by all workers on a Section 3 project must be done by Targeted Section 3 workers

Contractor Responsibilities

- (1) Provide documentation to St. Tammany Parish Government including Section 3 Worker Self-Certification (HUD FORM 47362), Section 3 Labor Hours Verification, Labor Hours Summary Report, Subcontracting Plan.
- (2) If contractor is unable to meet benchmarks, the contractor must provide an explanation and submit documented evidence of good faith efforts. Documented evidence of the contractor's good faith efforts (e.g. copies of advertisements, pictures of flyers or posters, letter or email correspondence with Section 3 businesses, etc.) will be monitored throughout the project.

Indicate the efforts that will be made to direct any employment and other economic opportunities generated by this CDBG funded project, to the greatest extent feasible, to low-and very low-income persons.

(Check all that apply.)

- ☐ Engage in outreach efforts to generate job applicants who are Section 3 workers. Attempt to recruit from the project area through local advertising media, community-based organizations, and public/private agencies operating within or serving the project area.
- ☐ Post job opportunities at the project site and in the project area.
- ☐ Provide training or apprenticeship opportunities.
- ☐ Provide assistance to apply for/or attend community college, a four-year educational institution, or vocational/technical training.
- ☐ Engage in outreach efforts to identify and secure bids from Section 3 business concerns.
- ☐ Provide technical assistance to help Section 3 business concerns understand and bid on contracts.
- ☐ Divide contracts into smaller jobs to facilitate participation by Section 3 business concerns.
- ☐ Other: (Explain)

I understand that this contracting opportunity is subject to HUD Section 3 requirements (24 CFR Part 75). I have read and understand the Section 3 requirements as generally described above and presented in the Section 3 contract language included in the procurement documents for this project. If awarded a contract, the business commits to following Section 3 requirements, as they apply to this project. If awarded a contract for this project, the business agrees to provide reports to St. Tammany Parish Department of Grants on Section 3 efforts and accomplishments.

Contractor/Subcontract

Address

Print Name

Title

Signature

Date

"General Decision Number: LA20250044 04/04/2025

Superseded General Decision Number: LA20240044

State: Louisiana

Construction Type: Building

County: St Tammany County in Louisiana.

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

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/03/2025
1	02/28/2025

2 03/14/2025
3 04/04/2025

ASBE0053-001 09/02/2024

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 32.66	9.86

* ELEC0130-013 12/02/2024

	Rates	Fringes
ELECTRICIAN (Communication Technician and Low Voltage Wiring Only).....	\$ 35.00	16.03

ELEC1077-009 05/27/2024

	Rates	Fringes
ELECTRICIAN (Excluding Communication Technician and Low Voltage Wiring).....	\$ 28.75	3%+11.55

ELEV0016-001 01/01/2025

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 51.11	38.435+a+b

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day and Christmas Day.

b. VACATION: Employer contributes 8% of basic hourly rate for 5 years or more of service; 6% of basic hourly rate for under 5 years of service as vacation pay credit.

ENGI0406-002 07/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Crane).....	\$ 23.46	8.35

CRANE PREMIUMS:
50-150 Tons \$1.75
Over 150 Tons \$2.25

IRON0623-021 07/01/2024

	Rates	Fringes
IRONWORKER (REINFORCING AND STRUCTURAL).....	\$ 34.75	13.86

* PAIN1244-006 09/01/2024

	Rates	Fringes
GLAZIER.....	\$ 25.44	12.20

PAIN1244-012 12/01/2021

	Rates	Fringes
PAINTER (SPRAY, Excluding Drywall Finishing/Taping).....	\$ 18.83	9.48

PLAS0567-001 08/01/2022

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 30.47	7.97

PLUM0060-009 06/03/2024

	Rates	Fringes
PIPEFITTER (Including HVAC Pipe and Unit Installation; Excluding Installation of HVAC Temperature Controls).....	\$ 33.30	14.98
PLUMBER (Installation of HVAC Temperature Controls; Excluding HVAC Pipe and Unit Installation).....	\$ 33.30	14.98

SHEE0214-009 09/01/2013

	Rates	Fringes
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 26.71	11.93

* SULA2012-029 09/22/2014

	Rates	Fringes
BRICKLAYER.....	\$ 18.88	0.00
CARPENTER (Form Work Only).....	\$ 15.00 **	0.00
CARPENTER, Excludes Drywall Hanging and Metal Stud Installation, and Form Work.....	\$ 19.36	2.13
DRYWALL HANGER AND METAL STUD INSTALLER.....	\$ 18.35	4.33
LABORER: Common or General.....	\$ 13.41 **	0.00
LABORER: Mason Tender - Brick...	\$ 12.39 **	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 21.03	0.00
PAINTER (BRUSH AND ROLLER), Excludes Drywall Finishing/Taping.....	\$ 18.95	8.91
PAINTER: Drywall Finishing/Taping.....	\$ 18.63	3.43
ROOFER.....	\$ 16.77 **	5.66

SHEET METAL WORKER, Excludes HVAC Duct Installation.....	\$ 20.66	0.00
SPRINKLER FITTER (Fire Sprinklers).....	\$ 20.98	5.46
TILE SETTER.....	\$ 20.00	0.00
TRUCK DRIVER: Dump Truck.....	\$ 15.00 **	0.00

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

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.75) or 13658 (\$13.30). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

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

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

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was

prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which

the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

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

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

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

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

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

Washington, DC 20210.

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END OF GENERAL DECISION"

"General Decision Number: LA20250044 04/04/2025

Superseded General Decision Number: LA20240044

State: Louisiana

Construction Type: Building

County: St Tammany County in Louisiana.

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

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/03/2025
1	02/28/2025

2 03/14/2025
3 04/04/2025

ASBE0053-001 09/02/2024

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 32.66	9.86

* ELEC0130-013 12/02/2024

	Rates	Fringes
ELECTRICIAN (Communication Technician and Low Voltage Wiring Only).....	\$ 35.00	16.03

ELEC1077-009 05/27/2024

	Rates	Fringes
ELECTRICIAN (Excluding Communication Technician and Low Voltage Wiring).....	\$ 28.75	3%+11.55

ELEV0016-001 01/01/2025

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 51.11	38.435+a+b

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day and Christmas Day.

b. VACATION: Employer contributes 8% of basic hourly rate for 5 years or more of service; 6% of basic hourly rate for under 5 years of service as vacation pay credit.

ENGI0406-002 07/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Crane).....	\$ 23.46	8.35

CRANE PREMIUMS:
50-150 Tons \$1.75
Over 150 Tons \$2.25

IRON0623-021 07/01/2024

	Rates	Fringes
IRONWORKER (REINFORCING AND STRUCTURAL).....	\$ 34.75	13.86

* PAIN1244-006 09/01/2024

	Rates	Fringes
GLAZIER.....	\$ 25.44	12.20

PAIN1244-012 12/01/2021

	Rates	Fringes
PAINTER (SPRAY, Excluding Drywall Finishing/Taping).....	\$ 18.83	9.48

PLAS0567-001 08/01/2022

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 30.47	7.97

PLUM0060-009 06/03/2024

	Rates	Fringes
PIPEFITTER (Including HVAC Pipe and Unit Installation; Excluding Installation of HVAC Temperature Controls).....	\$ 33.30	14.98
PLUMBER (Installation of HVAC Temperature Controls; Excluding HVAC Pipe and Unit Installation).....	\$ 33.30	14.98

SHEE0214-009 09/01/2013

	Rates	Fringes
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 26.71	11.93

* SULA2012-029 09/22/2014

	Rates	Fringes
BRICKLAYER.....	\$ 18.88	0.00
CARPENTER (Form Work Only).....	\$ 15.00 **	0.00
CARPENTER, Excludes Drywall Hanging and Metal Stud Installation, and Form Work.....	\$ 19.36	2.13
DRYWALL HANGER AND METAL STUD INSTALLER.....	\$ 18.35	4.33
LABORER: Common or General.....	\$ 13.41 **	0.00
LABORER: Mason Tender - Brick...	\$ 12.39 **	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 21.03	0.00
PAINTER (BRUSH AND ROLLER), Excludes Drywall Finishing/Taping.....	\$ 18.95	8.91
PAINTER: Drywall Finishing/Taping.....	\$ 18.63	3.43
ROOFER.....	\$ 16.77 **	5.66

SHEET METAL WORKER, Excludes HVAC Duct Installation.....	\$ 20.66	0.00
SPRINKLER FITTER (Fire Sprinklers).....	\$ 20.98	5.46
TILE SETTER.....	\$ 20.00	0.00
TRUCK DRIVER: Dump Truck.....	\$ 15.00 **	0.00

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

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U.S. Department of Labor
200 Constitution Avenue, N.W.

Washington, DC 20210.

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END OF GENERAL DECISION"



Bid Documents	Issue date
	04.17.2025

Revisions

Job no. 2252.1

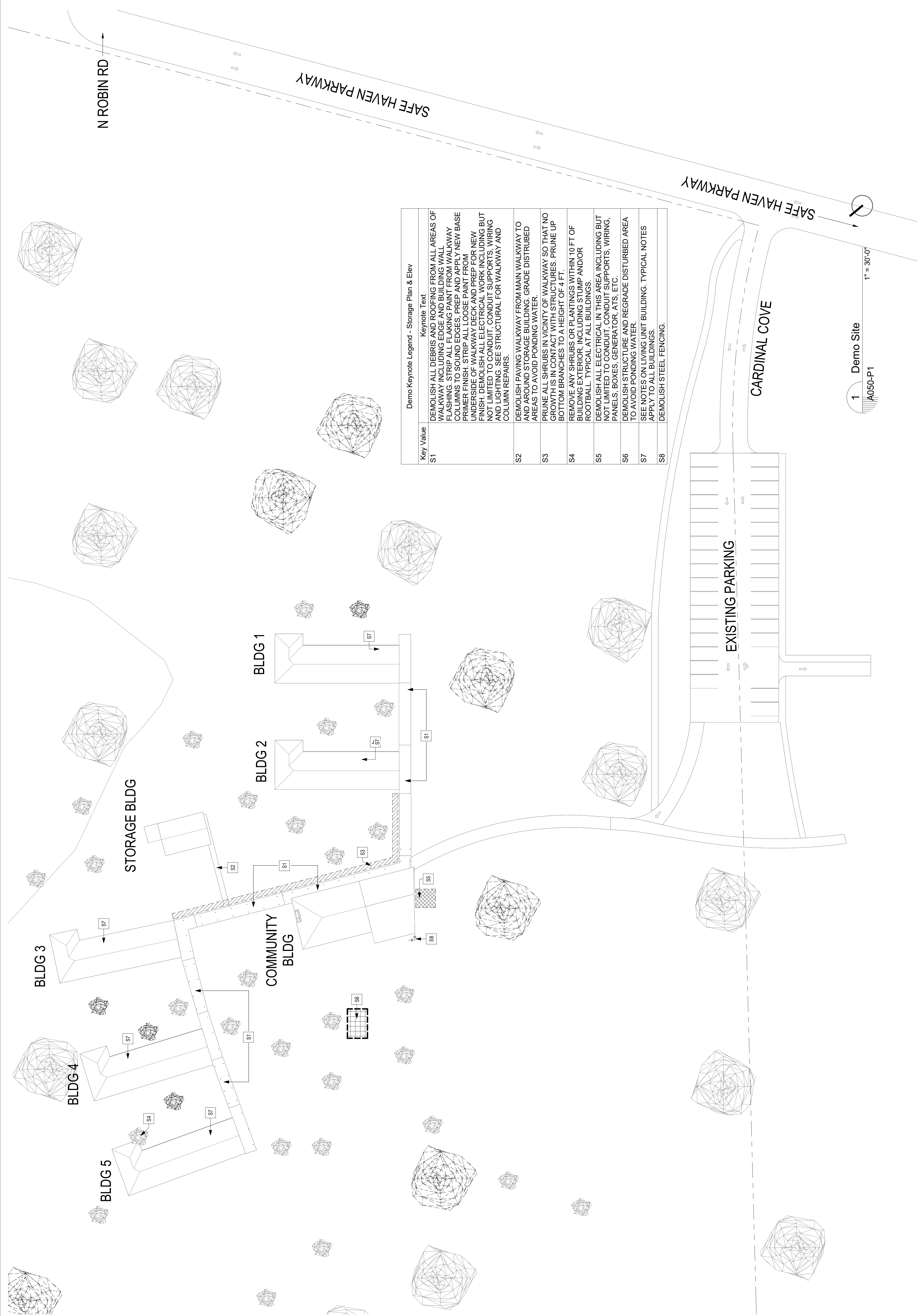
sheet title

Demo Site Plan

sheet no.

A050-P1

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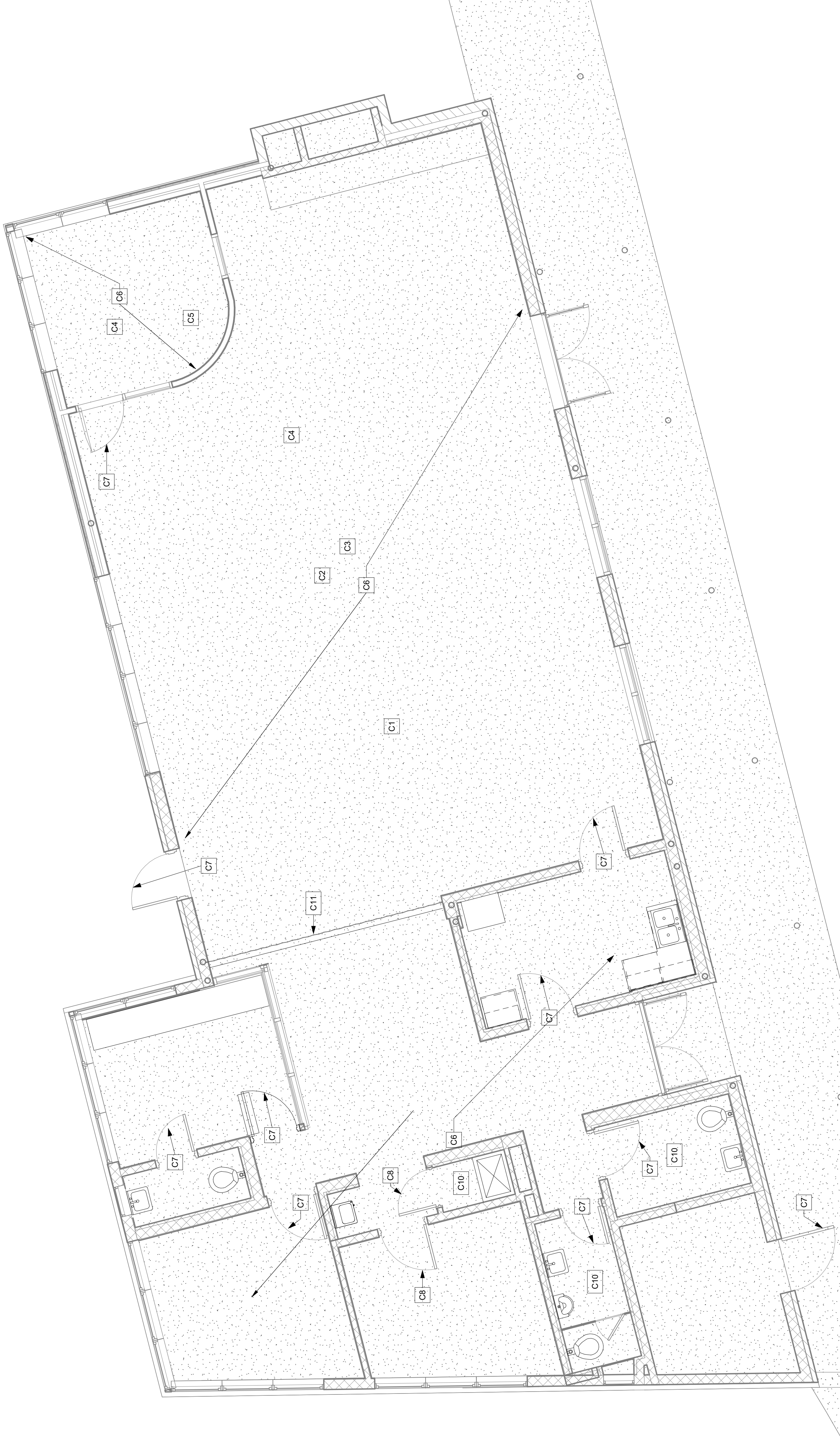




Bid Documents
issue date
04.17.2025
revisions
job no.
2252.1
sheet title
Demo Plan - Community
sheet no.

Demo Keynote Legend - Community Plan

Key Value	Keynote Text
C1	TYPICAL. DEMOLISH ALL ELECTRICAL ITEMS THROUGHOUT BUILDING, INCLUDING BUT NOT LIMITED TO RECEPTACLES, RACEWAYS, LIGHTING, WIRING, SPECIAL SYSTEMS DEVICES AND PANELS, EQUIPMENT SHUTOFF DEVICES AND ELECTRICAL SERVICE PANEL. THIS APPLIES TO ALL THE INTERIOR, EXTERIOR AND ATTIC SPACES. THE INTENTION IS TO REMOVE ALL EXISTING ELECTRICAL ITEMS COMPLETELY. ANY UNDERGROUND CONDUIT MAY BE ABANDONED BUT WIRE SHALL BE REMOVED IF POSSIBLE.
C2	DEMOLISH ALL MECHANICAL EQUIPMENT AND SYSTEMS INCLUDING BUT NOT LIMITED TO AIR HANDLERS, BOILERS, CONDENSORS, DUCTWORK, PIPING, INSULATION AND REGISTERS THROUGHOUT ENTIRE BUILDING INTERIOR, EXTERIOR AND ATTIC. THE INTENTION IS TO REMOVE ALL MECHANICAL EQUIPMENT AND SYSTEM COMPLETELY.
C3	DEMOLISH ALL PLUMBING FIXTURES AND CAP ALL LINES TO MAKE WATER TIGHT AND SAFE THROUGHOUT ENTIRE BUILDING.
C4	DEMOLISH ALL CEILING TILE, GRID, AND INSULATION IN THIS ROOM. CLEAN ABOVE CEILING. DEMOLISH WINDOW SHADES AND HARDWARE.
C5	DEMOLISH CARPET AND RUBBER BASE IN THIS ROOM.
C6	DEMOLISH ALL CEILING TILE, GRID, AND INSULATION IN THESE ROOMS. DEMOLISH ALL LOOSE PLASTER FINISH TO SOUND EDGES. DEMOLISH ALL CABINETS AND MILLWORK. DEMOLISH CARPET AND RUBBER BASE. DEMOLISH ALL GYPSUM BOARD AND FURRING IN ROOMS.
C7	DEMOLISH DOOR AND HARDWARE; FRAME TO REMAIN.
C8	DEMOLISH DOOR, HARDWARE, AND FRAME.
C10	DEMOLISH CERAMIC TILE FLOORING AND GROUT BED.
C11	DEMOLISH ACCORDIAN PARTITION.



1 Demolition Plan Community Building

1/4" = 1'-0"

Safe Haven Cardinal Cove Renovations

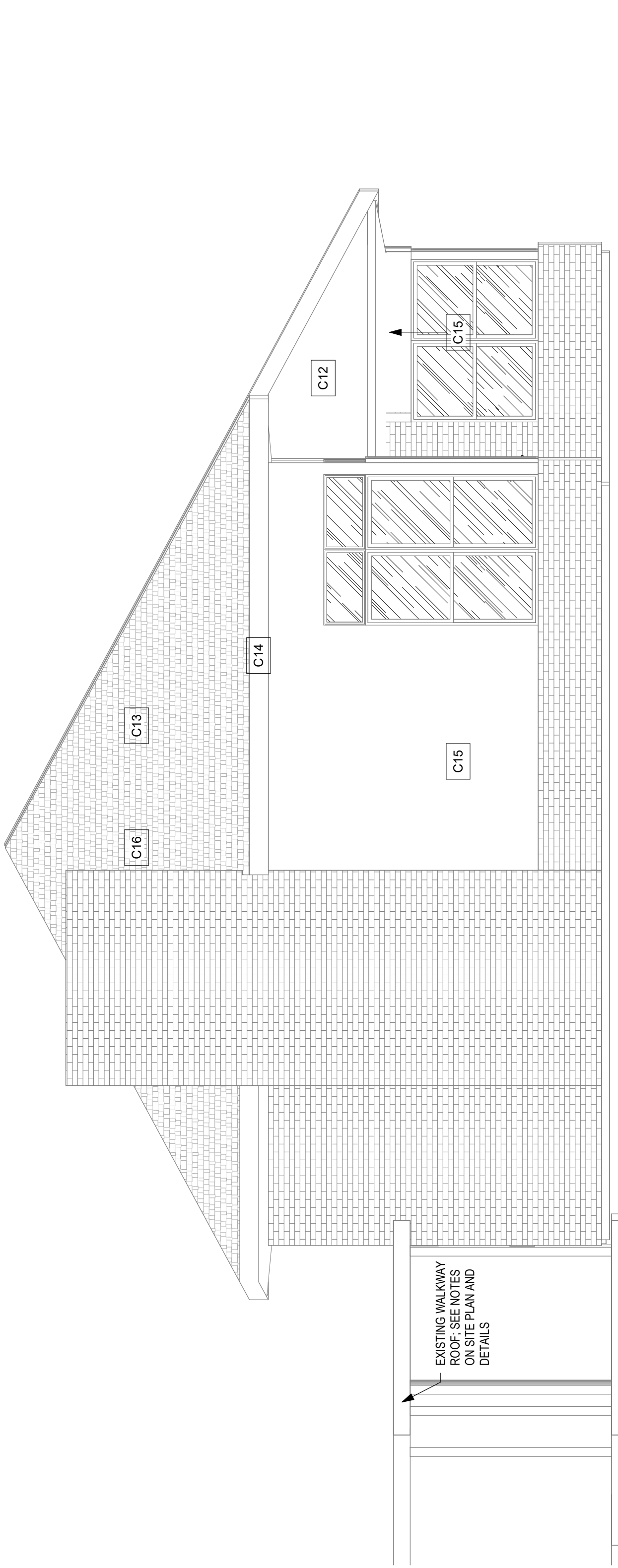
Safe Haven Campus, 23929 Cardinal Cove

Mandeville LA 70448

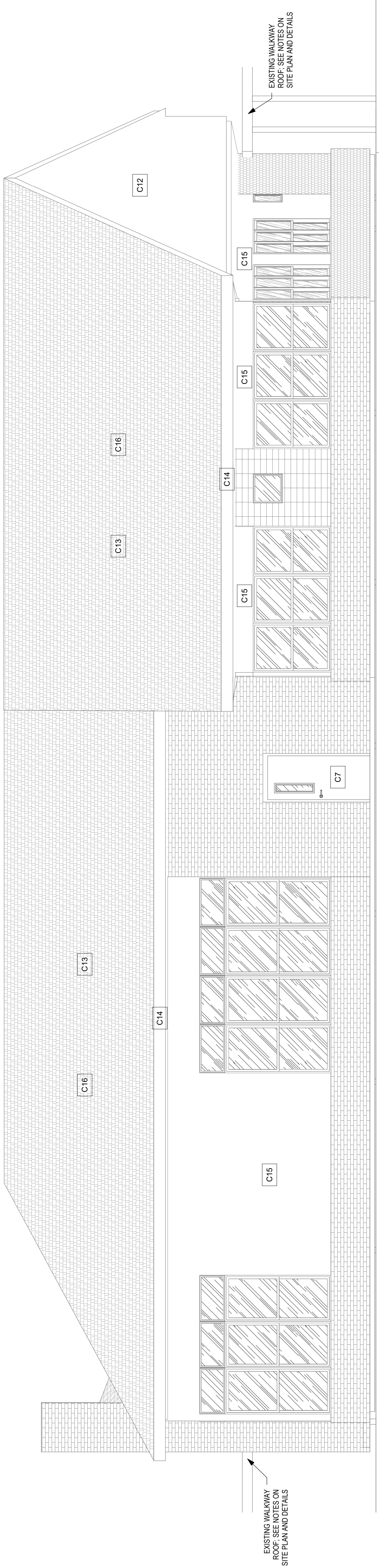


Bid Documents
issue date
04.17.2025
revisions
job no.
2252.1
sheet title
Demo Elev. Community
sheet no.
A065-P1

Demo Keynote Legend - Community Elev 2	
Key Value	Keynote Text
C7	DEMOLISH DOOR AND HARDWARE; FRAME TO REMAIN.
C12	DEMOLISH PLYWOOD WALL PANELS AND ANY SHEATHING BEHIND; AND DEMOLISH TRIM.
C13	DEMOLISH ALL SHINGLE ROOFING MATERIAL INCLUDING UNDERLAYMENT AND FLASHING. PREP FOR NEW WORK THAT IS PART OF THIS SCOPE.
C14	DEMOLISH ALL WOOD FASCIA, SOFFIT, AND TRIM THROUGHOUT ROOF AREA.
C15	DEMOLISH EIFS AND BACKING / FURRING MATERIALS TO FACE OF BACKUP WALL OR BEAM.
C16	DEMOLISH ALL INSULATION IN ATTIC SPACE. DEMOLISH ALL VISIBLE AND ACCESSIBLE ROOFING MATERIALS ON LOWER CONCRETE DECK ROOF. REMOVE AND DISPOSE OF ALL DEBRIS, DIRT, AND DETRITUS IN ALL AREAS OF ATTIC SPACE TO LEAVE CLEAN.



2 Demo East Community
A065-P1
1/4" = 1'-0"

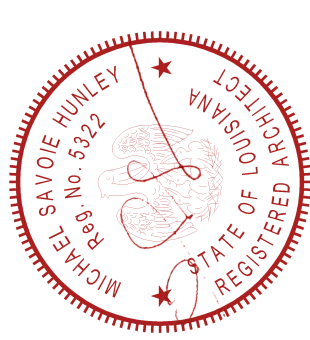


1 Demo North Community
A065-P1
1/4" = 1'-0"

Safe Haven Cardinal Cove Renovations

Safe Haven Campus, 23929 Cardinal Cove

Mandeville LA 70448



Bid Documents

Issue date

04.17.2025

revisions

job no.

2252.1

sheet title

Demo Elev.

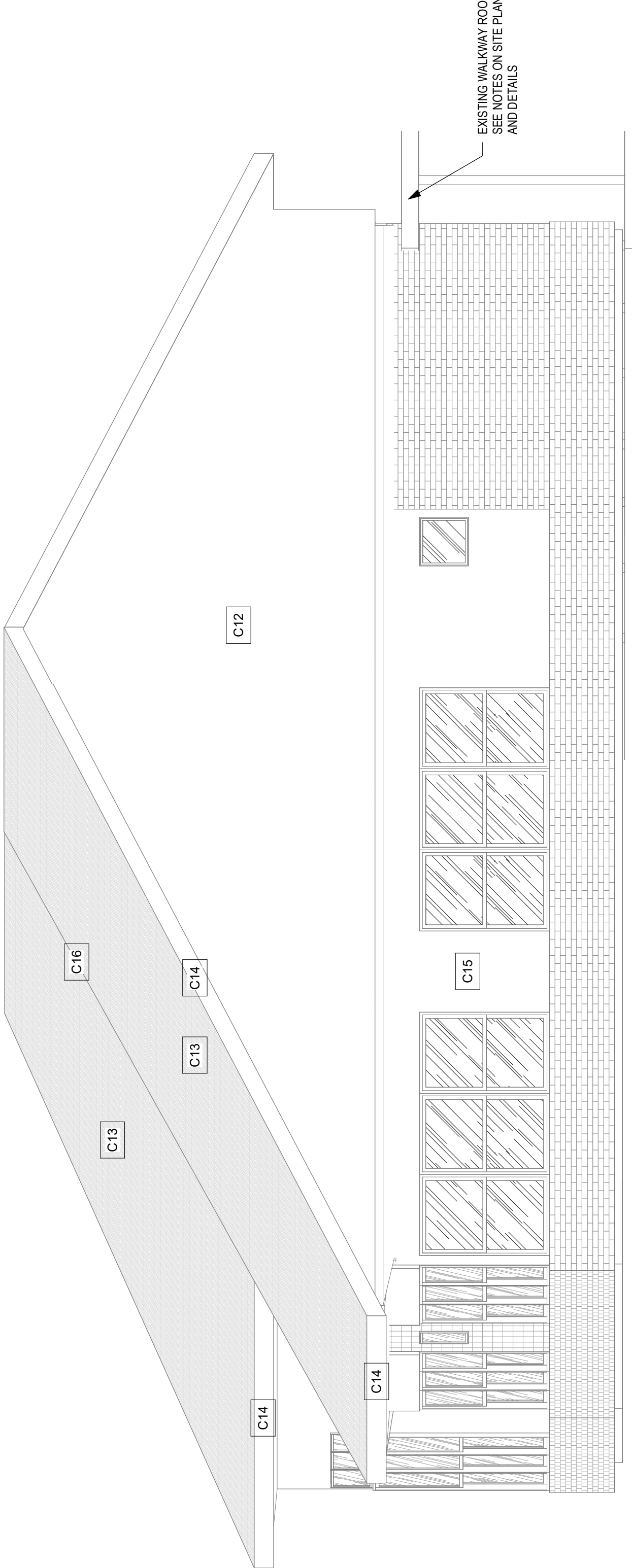
Community

sheet no.

A066-P1

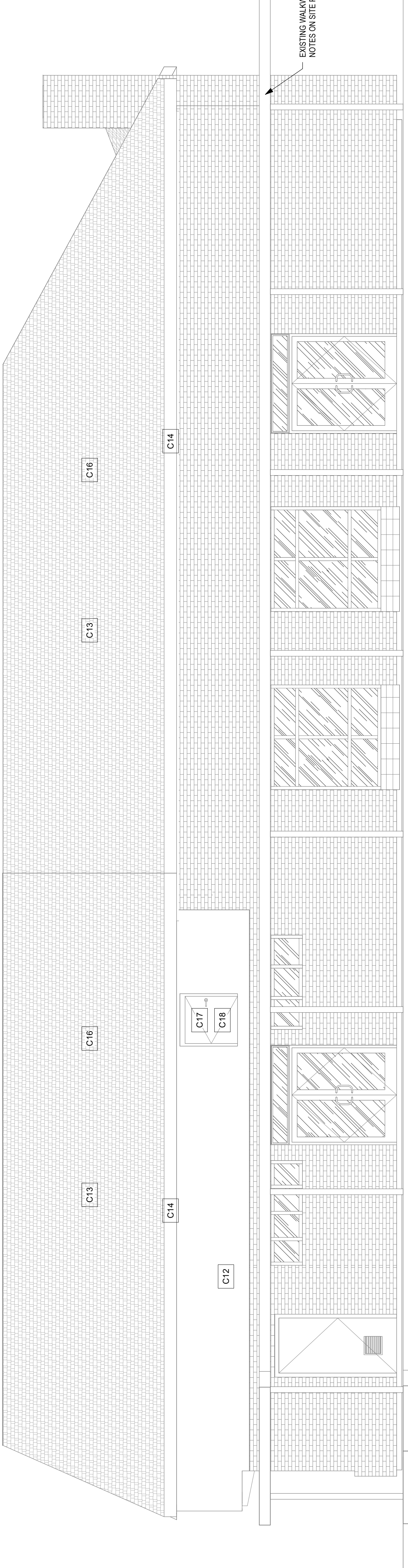
© 2025 msht architects llc

Demo Keynote Legend - Community Elev 1	
Key Value	Keynote Text
C12	DEMOLISH PLYWOOD WALL PANELS AND ANY SHEATHING BEHIND; AND DEMOLISH TRIM
C13	DEMOLISH ALL SHINGLE ROOFING MATERIAL INCLUDING UNDERLAYMENT AND FLASHING. PREP FOR NEW WORK THAT IS PART OF THIS SCOPE.
C14	DEMOLISH ALL WOOD FASCIA, SOFFIT, AND TRIM THROUGHOUT ROOF AREA.
C15	DEMOLISH EIFS AND BACKING / FURRING MATERIALS TO FACE OF BACKUP WALL OR BEAM.
C16	DEMOLISH ALL INSULATION IN ATTIC SPACE. DEMOLISH ALL VISIBLE AND ACCESSIBLE ROOFING MATERIALS ON LOWER CONCRETE DECK ROOF. REMOVE AND DISPOSE OF ALL DEBRIS, DIRT, AND DETRITUS IN ALL AREAS OF ATTIC SPACE TO LEAVE CLEAN.
C17	DEMOLISH EXISTING DOOR, FRAMING, TRIM AND HARDWARE AT COMMUNITY BUILDING PANEL WALL.
C18	MODIFY ROUGH FRAMING AS REQUIRED. PROVIDE NEW INSULATED HOLLOW METAL DOOR AND FRAME SIZED TO MATCH EXISTING. PROVIDE NEW HARDWARE INCLUDING: THRESHOLD, WEATHERSTRIPPING, HINGES, AND CYLINDRICAL OFFICE LOCKSET ALWAYS EGRESSABLE FROM INTERIOR.



2 Demo West Community

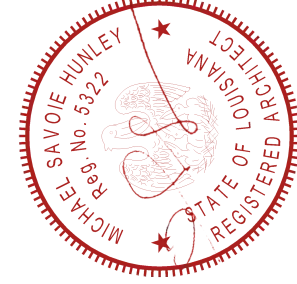
1/4" = 1'-0"



1 Demo South Community

1/4" = 1'-0"

Safe Haven Cardinal Cove Renovations
Safe Haven Campus, 23929 Cardinal Cove
Mandeville LA 70448



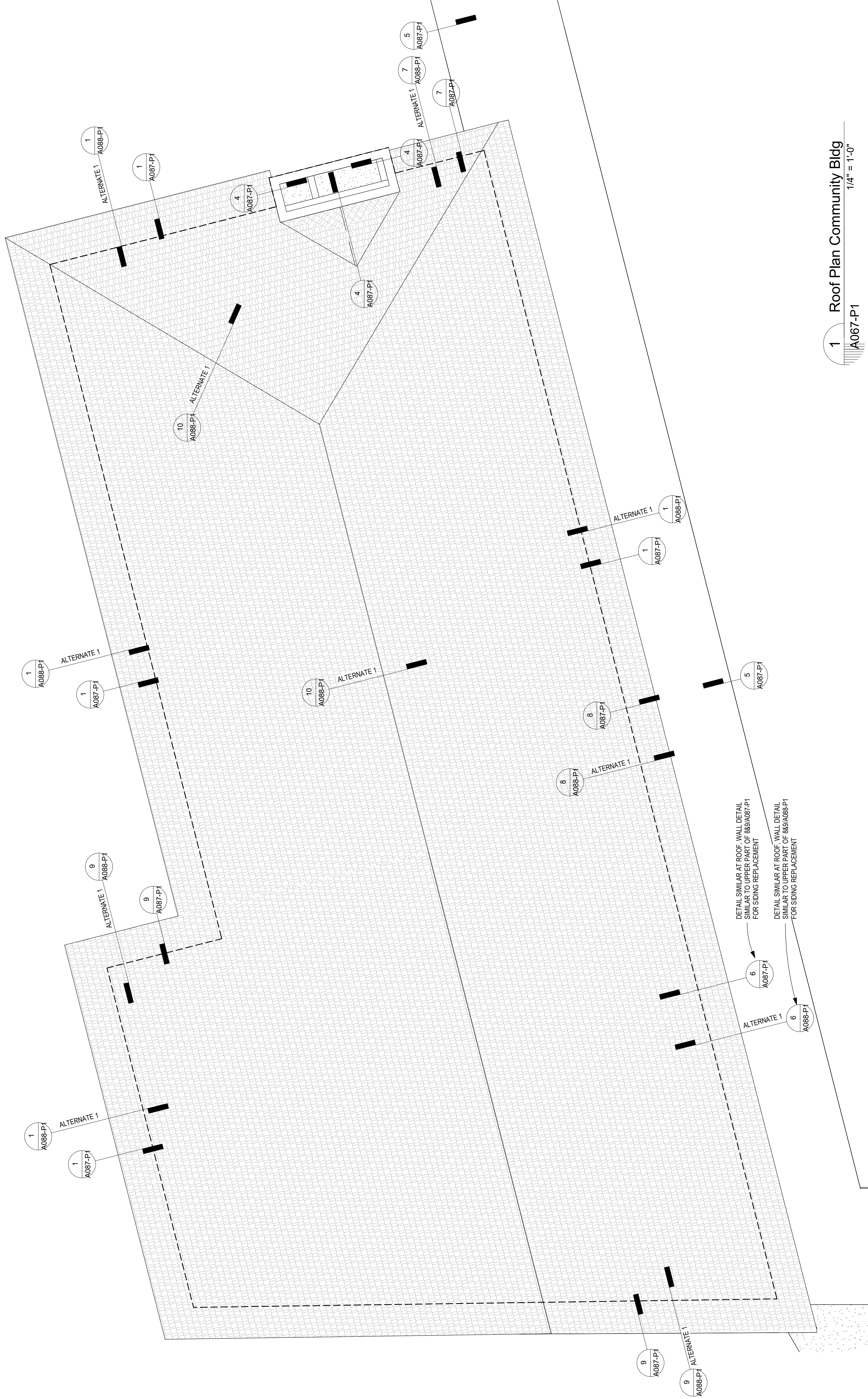
issue date	04.17.2025
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1 Roof Plan Community Bldg
A067-P1
1/4" = 1'-0"

A067-P1

$$\frac{1}{4}'' = 1'-0''$$

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Safe Haven Cardinal Cove Renovations

Safe Haven Campus, 23929 Cardinal Cove

Mandeville LA 70448



Bid Documents
issue date
04.17.2025
revisions

job no.
2252.1
sheet title
Demo Plan - Living Unit
sheet no.

A070-P1

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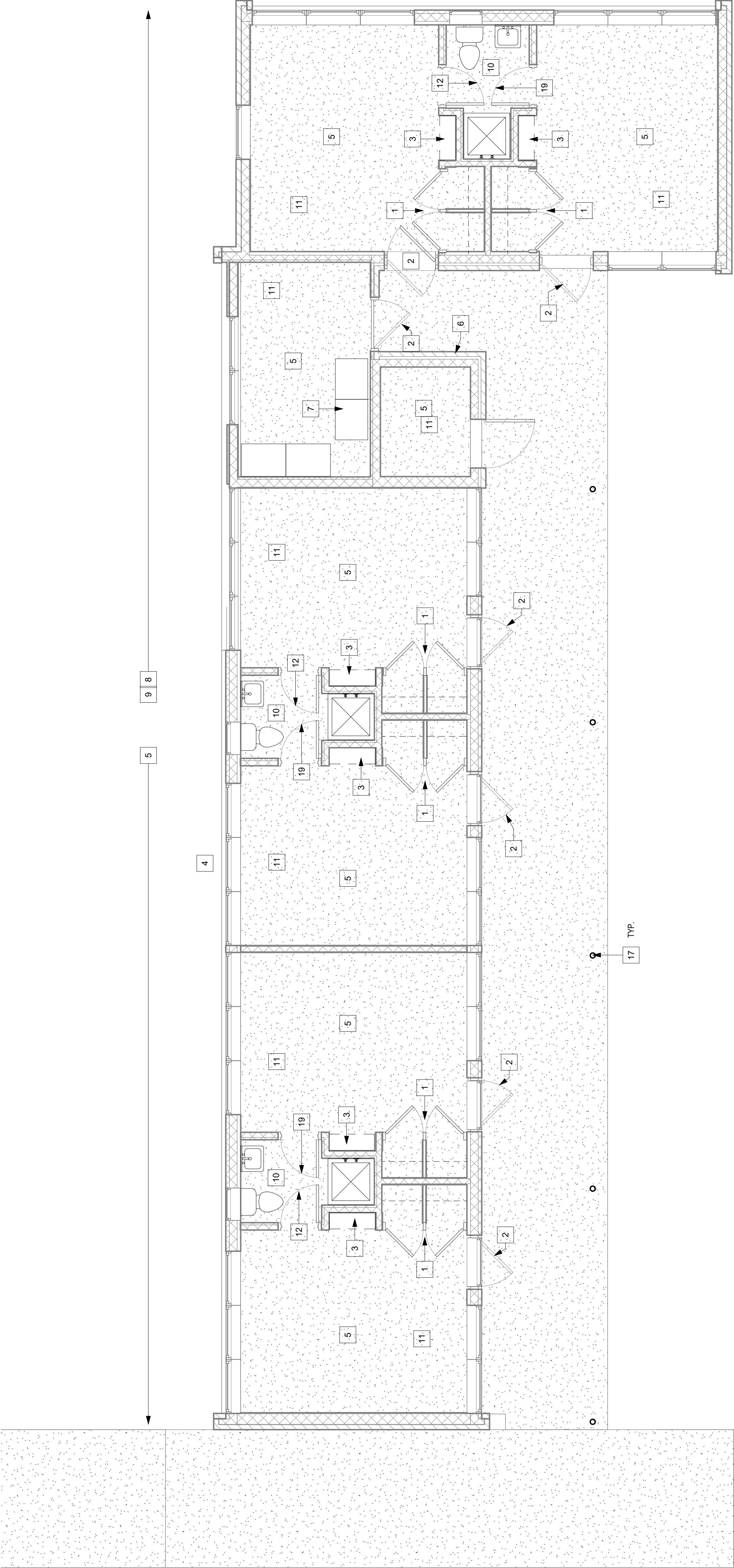
Key Value	Demo Keynote Legend - LU Plan
Keynote Text	
1	DEMOLISH DOORS, HARDWARE, HOLLOW METAL FRAME, DIVIDING PARTITION, SHELVING AND RODS.
2	DEMOLISH DOOR, HARDWARE, AND SCREEN DOOR. DOOR FRAME TO REMAIN.
3	DEMOLISH MILLWORK.
4	NOT USED
5	TYPICAL, DEMOLISH ALL ELECTRICAL ITEMS THROUGHOUT BUILDING, INCLUDING BUT NOT LIMITED TO RECEPTACLES, RACEWAYS, LIGHTING, WIRING, SPECIAL SYSTEMS DEVICES AND PANELS. EQUIPMENT SHUTOFF DEVICES AND ELECTRICAL SERVICE PANEL. THIS APPLIES TO ALL THE INTERIOR, EXTERIOR AND ATTIC SPACES. THE INTENTION IS TO REMOVE ALL EXISTING ELECTRICAL ITEMS COMPLETELY. ANY UNDERGROUND CONDUIT MAY BE ABANDONED BUT WIRE SHALL BE REMOVED IF POSSIBLE.
6	CAREFULLY REMOVE FIRE EXTINGUISHER CABINET, STRIP PAINT AND REFINISH. MAKE DOOR OPERABLE. REPLACE LATCH IF NECESSARY. REINSTALL.
7	DEMOLISH CABINETS OR MILLWORK. THEY MAY NOT BE IN EVERY BUILDING.
8	DEMOLISH ALL MECHANICAL EQUIPMENT AND SYSTEMS INCLUDING BUT NOT LIMITED TO AIR HANDLERS, BOILERS, CONDENSORS, DUCTWORK, PIPING, INSULATION AND REGISTERS THROUGHOUT ENTIRE BUILDING INTERIOR, EXTERIOR AND ATTIC. THE INTENTION IS TO REMOVE ALL MECHANICAL EQUIPMENT AND SYSTEM COMPLETELY.
9	DEMOLISH ALL PLUMBING FIXTURES AND CAP ALL LINES TO MAKE WATER TIGHT AND SAFE THROUGHOUT ENTIRE BUILDING.
10	DEMOLISH TILE FINISHES IN BATHROOMS. DEMOLISH ANY LOOSE PLASTER FINISH TO SOUND EDGES. LEAVE WALLS PREPPED FOR NEW FINISHES.
11	DEMOLISH ANY LOOSE PLASTER FINISH TO SOUND EDGES. DEMOLISH ALL OTHER FINISHES INCLUDING FLOORING. DEMOLISH ALL DOORS AND HARDWARE. FRAMES TO REMAIN UNLESS NOTED OTHERWISE. CLAY TILE BASE TO REMAIN.
12	DEMOLISH DOOR, HARDWARE AND FRAME.
17	STRIP ALL FLAKING PAINT FROM WALKWAY COLUMNS TO SOUND EDGES, PREP AND APPLY NEW BASE PRIMER FINISH.
19	DEMOLISH DOOR AND HARDWARE. FRAME TO REMAIN.

- GENERAL NOTES APPLICABLE TO ALL BUILDINGS AND SITE
- THOROUGHLY CLEAN ALL EXTERIOR SURFACES TO REMAIN INCLUDING BUT NOT LIMITED TO BRICK, CONCRETE, WINDOWS, ETC.

- THOROUGHLY CLEAN ALL INTERIOR SURFACES TO REMAIN.

- STRIP ALL PAINT FROM ALL METAL DOOR FRAMES TO REMAIN IN ALL AREAS.

- COORDINATE ALL DEMOLITION WORK WITH HAZARDOUS MATERIAL ABATEMENT CONTRACTOR. SEE ABATEMENT PROTOCOL SPECIFICATIONS AND DRAWINGS FOR MORE INFORMATION.



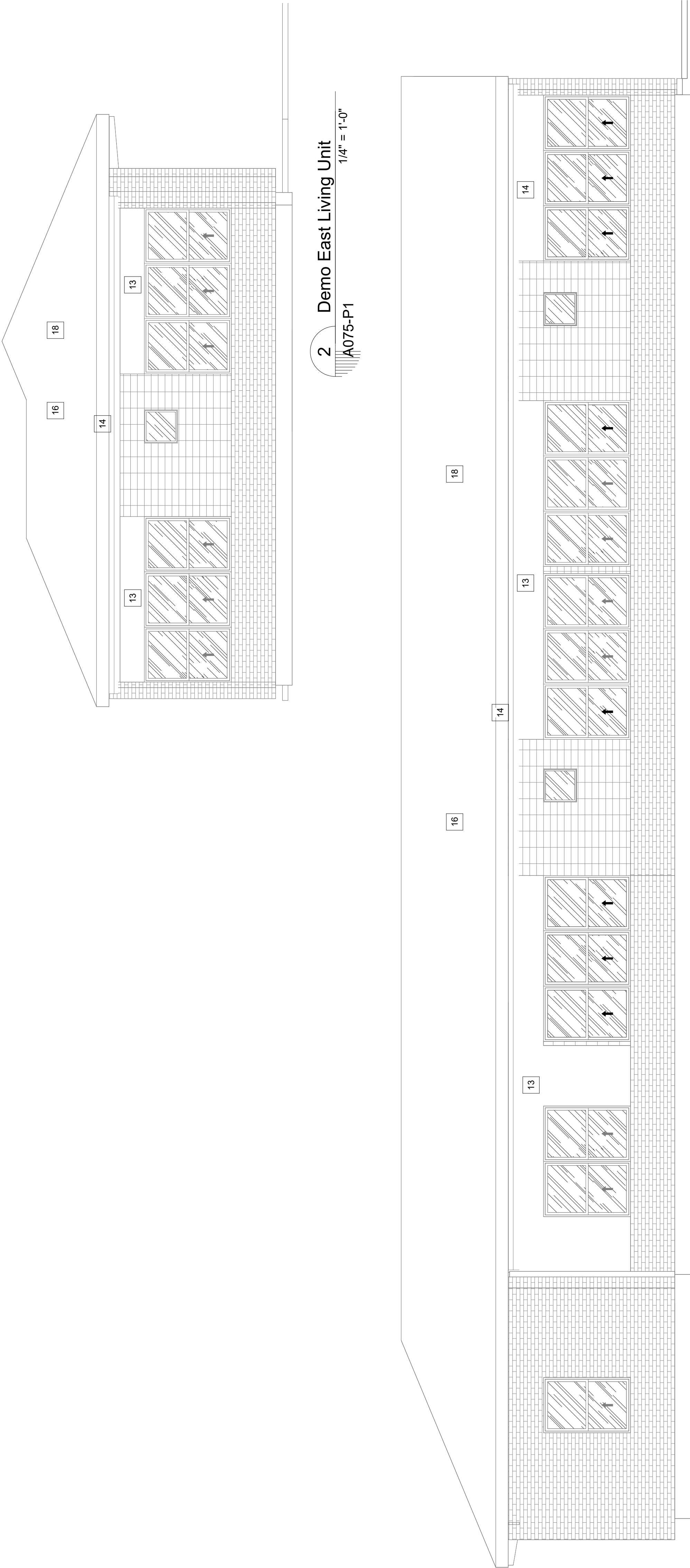
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Demolition Plan Living Unit

1/4" = 1'-0"

A070-P1

Demo Keynote Legend - LU Elev 2	
Key Value	Keynote Text
13	DEMOLISH EIFS AND BACKING / FURRING MATERIALS TO FACE OF BACKUP WALL OR BEAM.
14	DEMOLISH ALL WOOD FASCIA, SOFFIT, AND TRIM THROUGHOUT ROOF AREA.
16	DEMOLISH ALL SHINGLE ROOFING MATERIAL INCLUDING UNDERLAYMENT AND FLASHING. PREP FOR NEW WORK THAT IS PART OF THIS SCOPE.
18	DEMOLISH ALL INSULATION IN ATTIC SPACE. DEMOLISH ALL VISIBLE AND ACCESSIBLE ROOFING MATERIALS ON LOWER CONCRETE DECK ROOF. REMOVE AND DISPOSE OF ALL DEBRIS, DIRT, AND DETRITUS IN ALL AREAS OF ATTIC SPACE TO LEAVE CLEAN.



2 Demo East Living Unit
1/4" = 1'-0"

1 Demo North Living Unit
1/4" = 1'-0"

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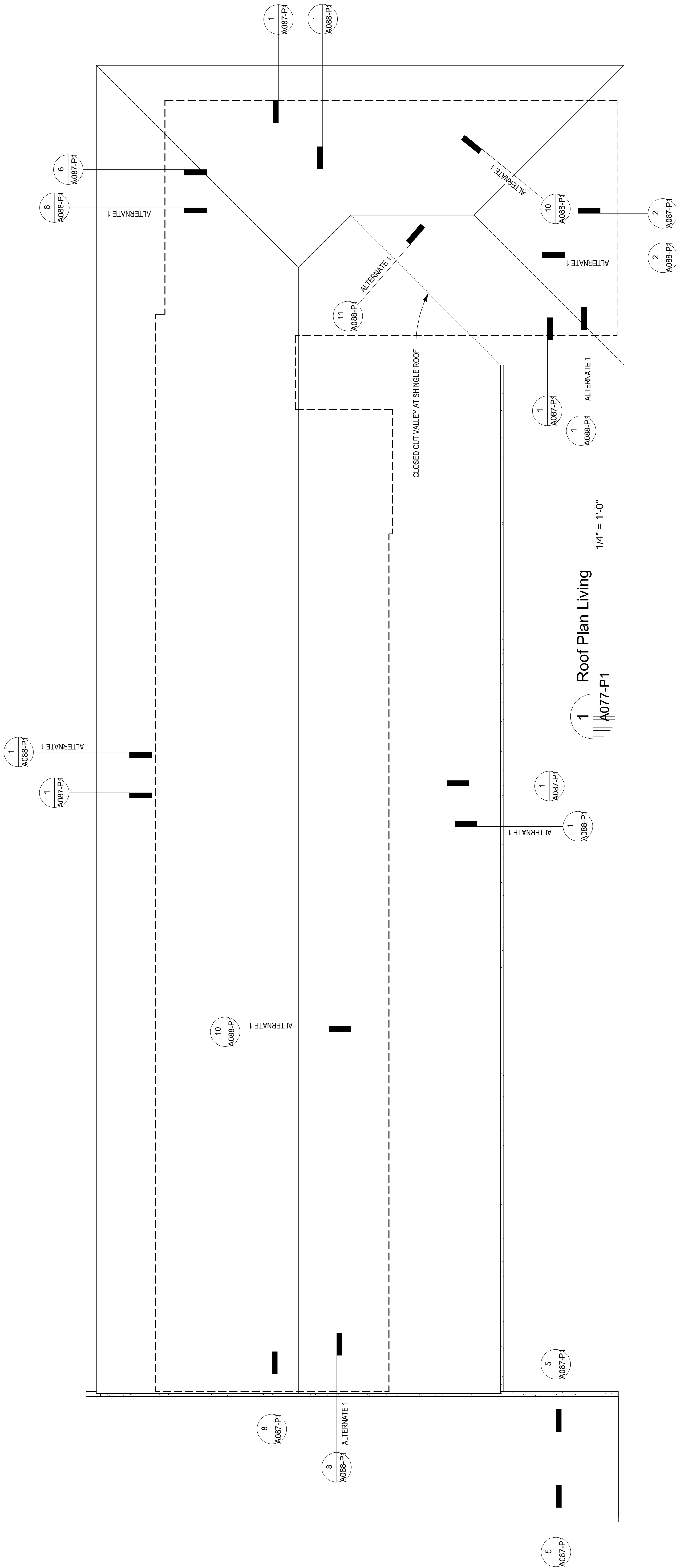
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2252.1

sheet title
Demo Elev.
Living Unit

sheet no.
A075-P1
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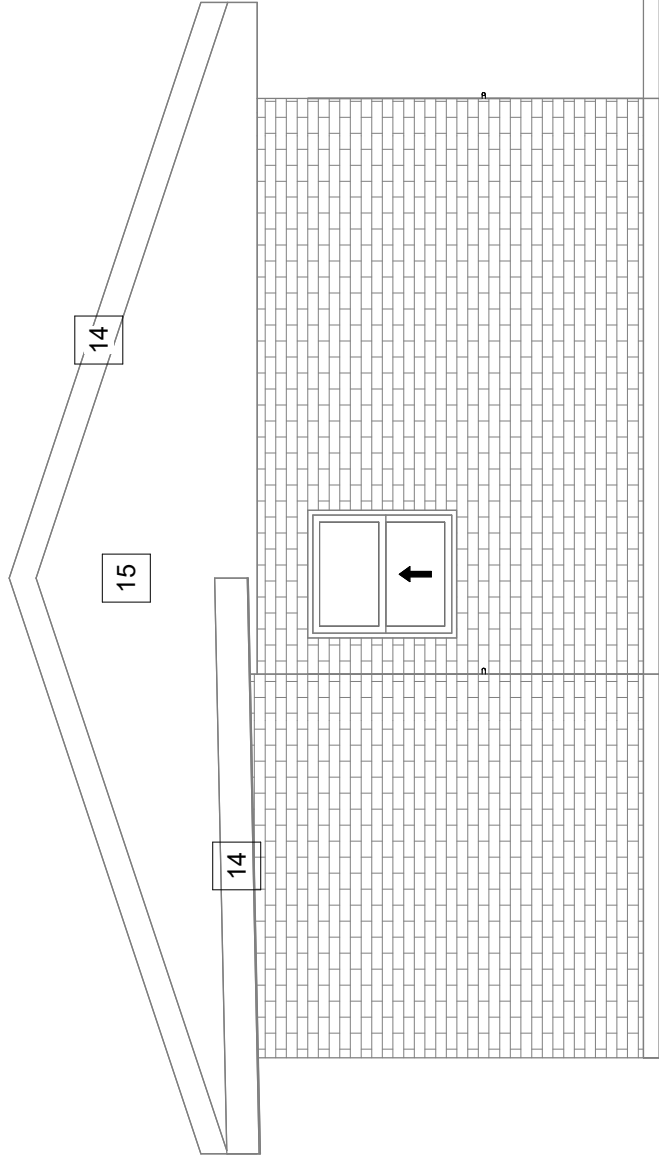
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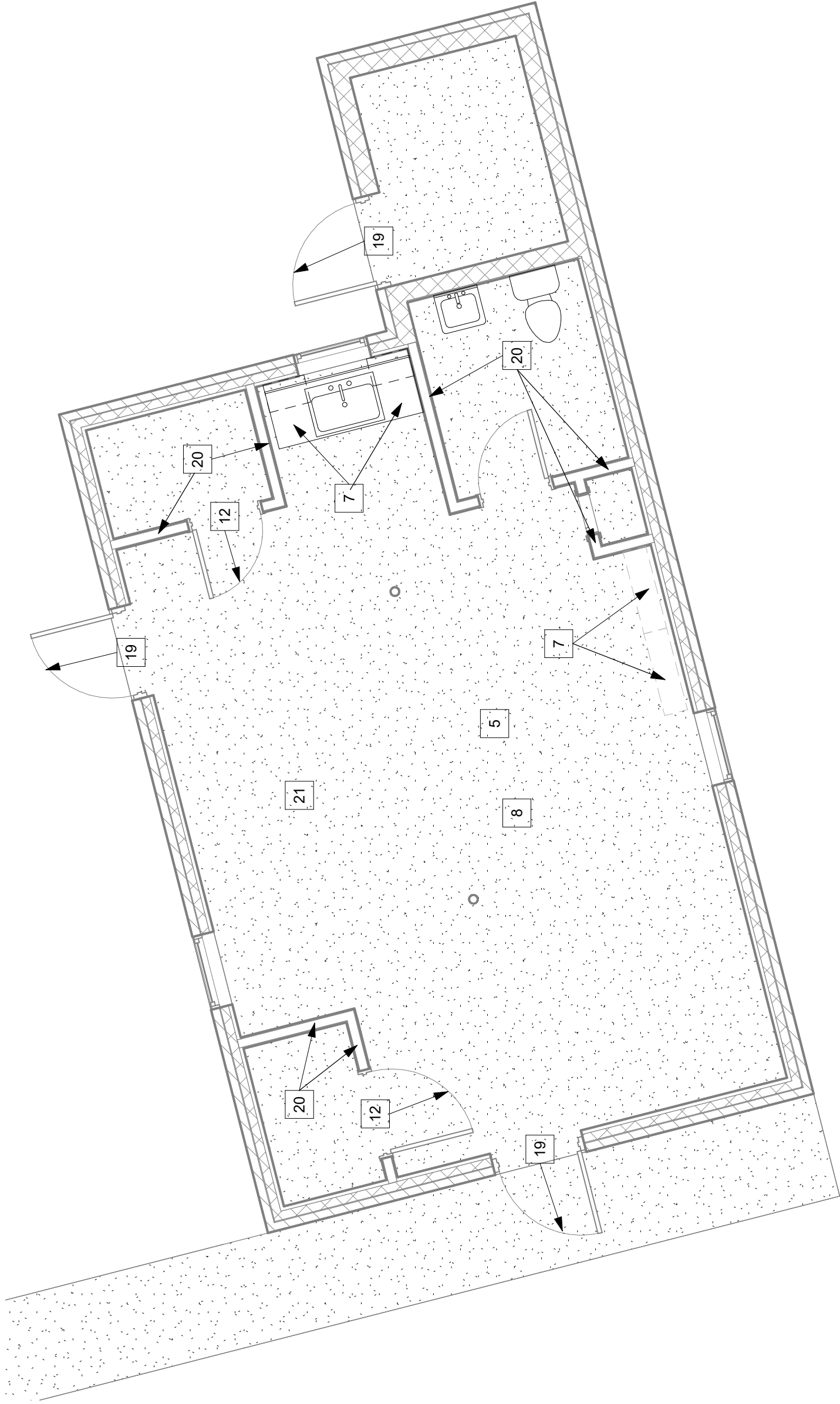


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issue date
04.17.2025
revisions
job no.
2252.1
sheet title
Demo Plans & Elev - Storage
sheet no.
A080-P1

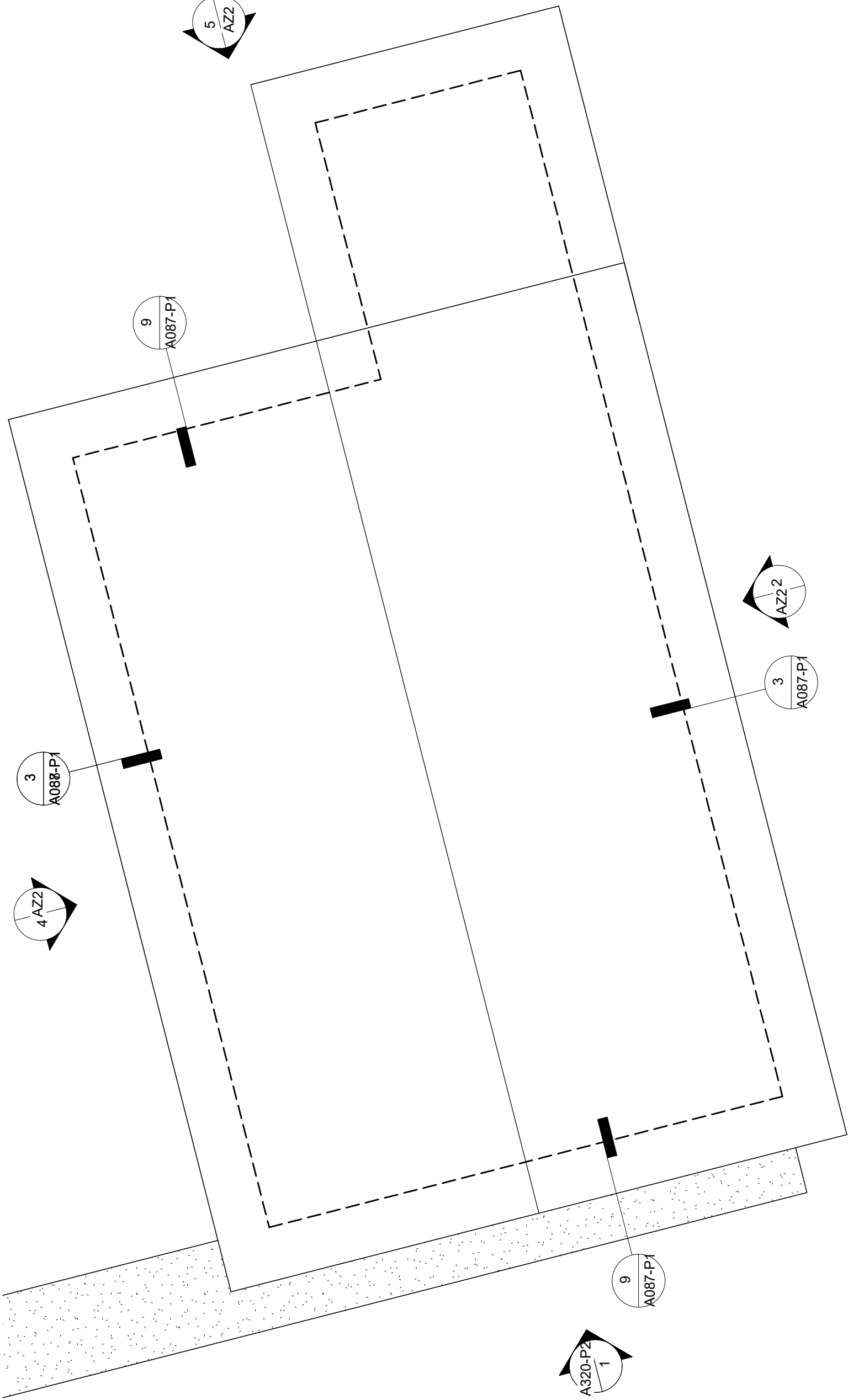
Key Value	Demo Keynote Legend - Storage Plan & Elev
Keynote Text	
5	TYPICAL, DEMOLISH ALL ELECTRICAL ITEMS THROUGHOUT BUILDING, INCLUDING BUT NOT LIMITED TO RECEPTACLES, RACEWAYS, LIGHTING, WIRING, SPECIAL SYSTEMS DEVICES AND PANELS, EQUIPMENT SHUTOFF DEVICES AND ELECTRICAL SERVICE PANEL. THIS APPLIES TO ALL THE INTERIOR, EXTERIOR AND ATTIC SPACES. THE INTENTION IS TO REMOVE ALL EXISTING ELECTRICAL ITEMS COMPLETELY. ANY UNDERGROUND CONDUIT MAY BE ABANDONED BUT WIRE SHALL BE REMOVED IF POSSIBLE.
7	DEMOLISH CABINETS OR MILLWORK. THEY MAY NOT BE IN EVERY BUILDING.
8	DEMOLISH ALL MECHANICAL EQUIPMENT AND SYSTEMS INCLUDING BUT NOT LIMITED TO AIR HANDLERS, BOILERS, CONDENSORS, DUCTWORK, PIPING, INSULATION AND REGISTERS THROUGHOUT ENTIRE BUILDING INTERIOR, EXTERIOR AND ATTIC. THE INTENTION IS TO REMOVE ALL MECHANICAL EQUIPMENT AND SYSTEM COMPLETELY.
9	DEMOLISH ALL PLUMBING FIXTURES AND CAP ALL LINES TO MAKE WATER TIGHT AND SAFE THROUGHOUT ENTIRE BUILDING.
12	DEMOLISH DOOR, HARDWARE AND FRAME
14	DEMOLISH ALL WOOD FASCIA, SOFFIT, AND TRIM THROUGHOUT ROOF AREA.
15	DEMOLISH PLYWOOD WALL PANELS AND ANY SHEATHING BEHIND; AND DEMOLISH TRIM.
16	DEMOLISH ALL SHINGLE ROOFING MATERIAL INCLUDING UNDERLAYMENT AND FLASHING. PREP FOR NEW WORK THAT IS PART OF THIS SCOPE.
18	DEMOLISH ALL INSULATION IN ATTIC SPACE. DEMOLISH ALL VISIBLE AND ACCESSIBLE ROOFING MATERIALS ON LOWER CONCRETE DECK ROOF. REMOVE AND DISPOSE OF ALL DEBRIS, DIRT, AND DETRITUS IN ALL AREAS OF ATTIC SPACE TO LEAVE CLEAN.
19	DEMOLISH DOOR AND HARDWARE. FRAME TO REMAIN.
20	DEMOLISH PARTITION.
21	DEMOLISH ALL FINISHES THROUGHOUT INCLUDING CEILING FINISH. DEMOLISH ALL LOOSE MATERIAL IN BUILDING.



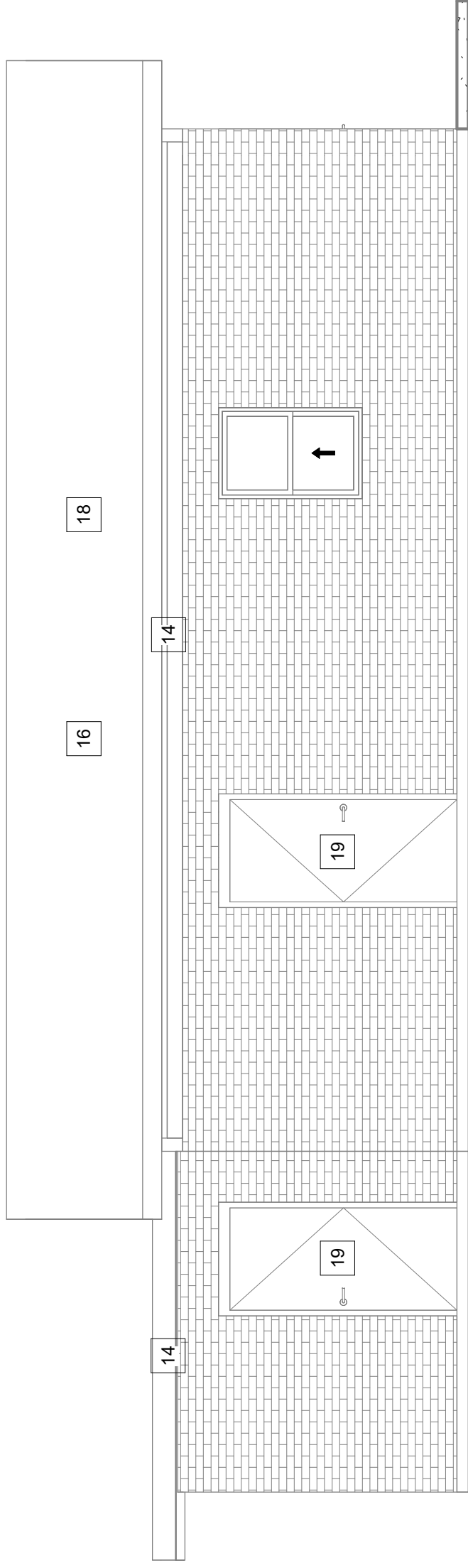
5 Demo East Storage
1/4" = 1'-0"



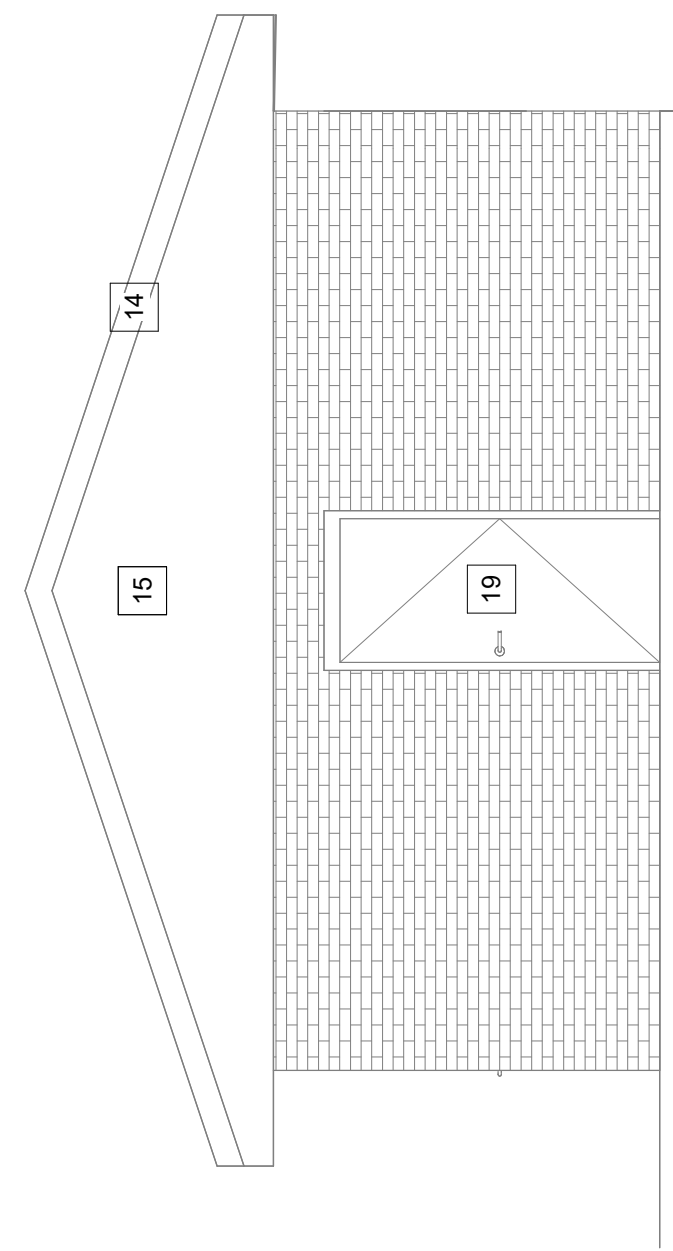
1 Demolition Plan Storage Building
1/4" = 1'-0"



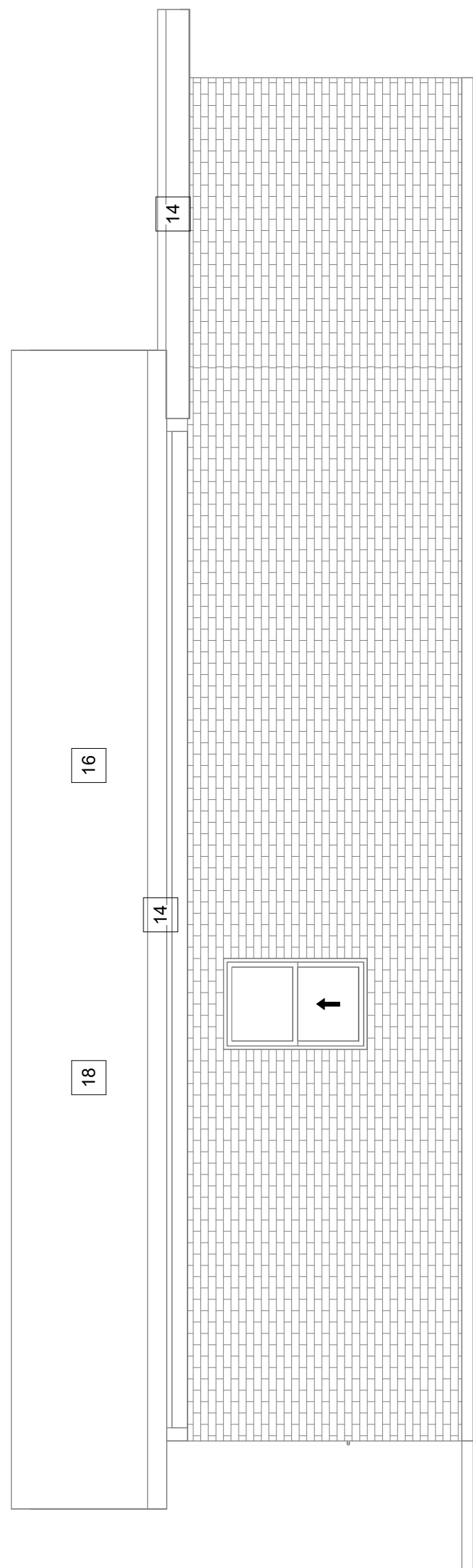
6 Roof Plan Storage Bldg
1/4" = 1'-0"



4 Demo North Storage
1/4" = 1'-0"



3 Demo West Storage
1/4" = 1'-0"



2 Demo South Storage
1/4" = 1'-0"

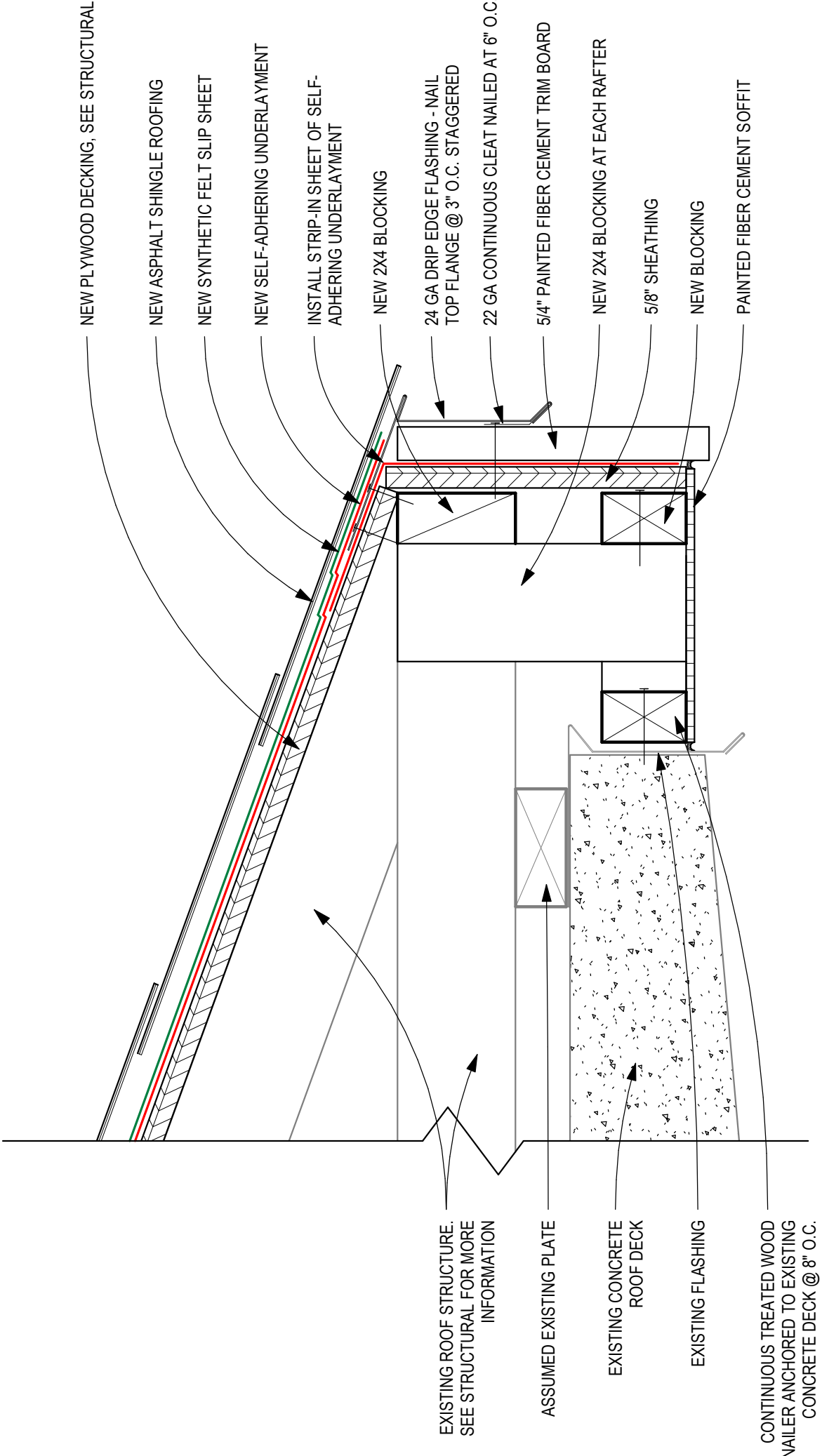
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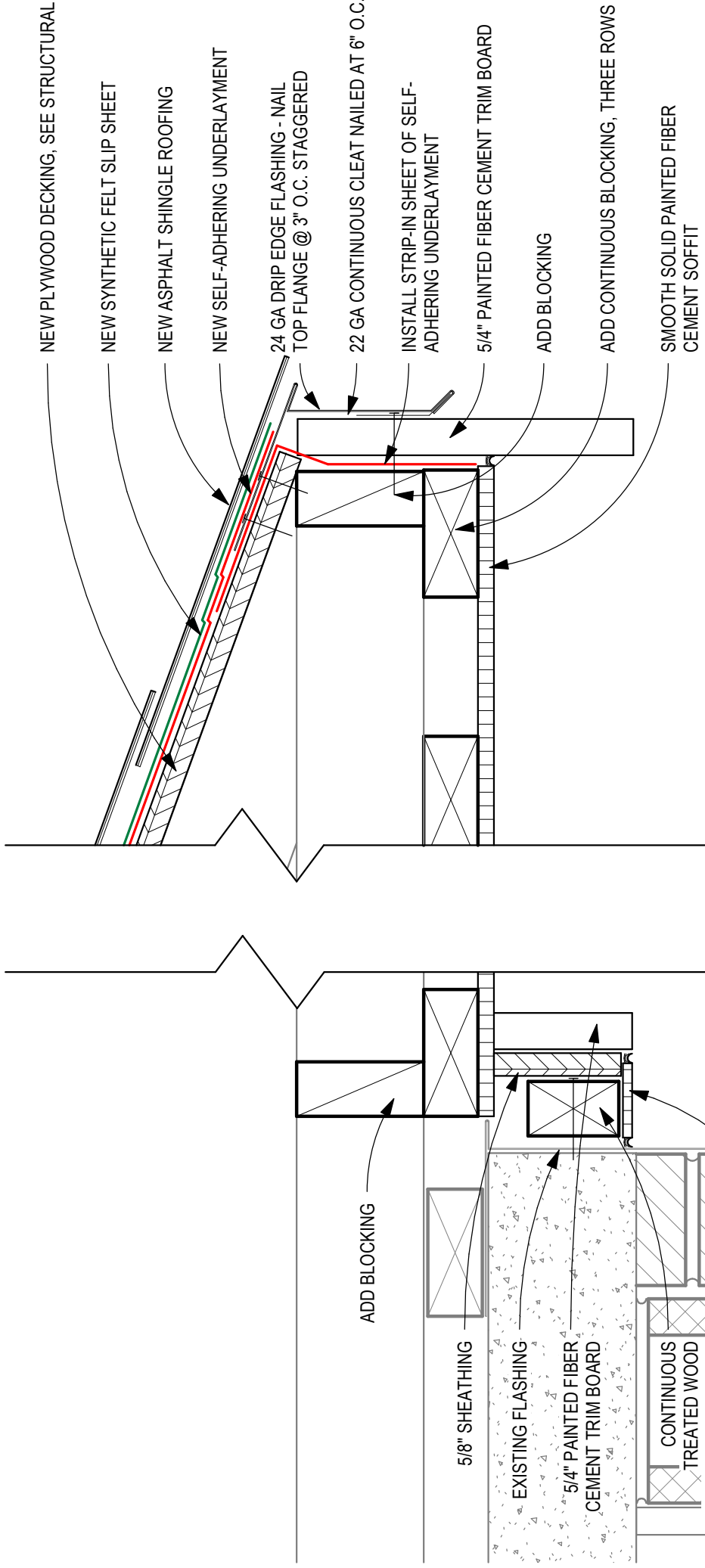
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revisions	
job no.	2252.1
sheet title	Roof Details
sheet no.	A087-P1
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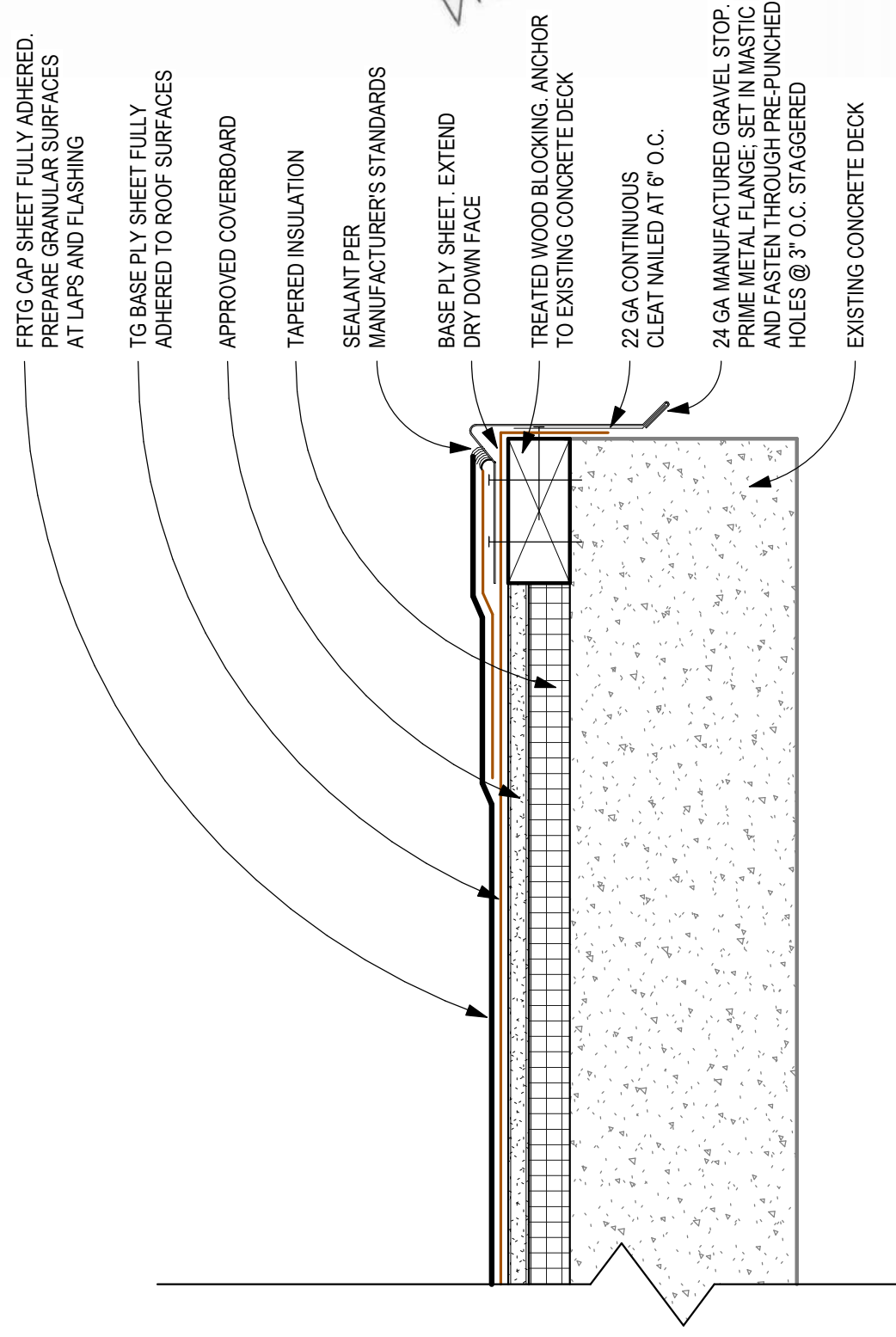


7 Community Building Roof Eave w/ Deeper Soffit
A087-P1
3" = 1'-0"



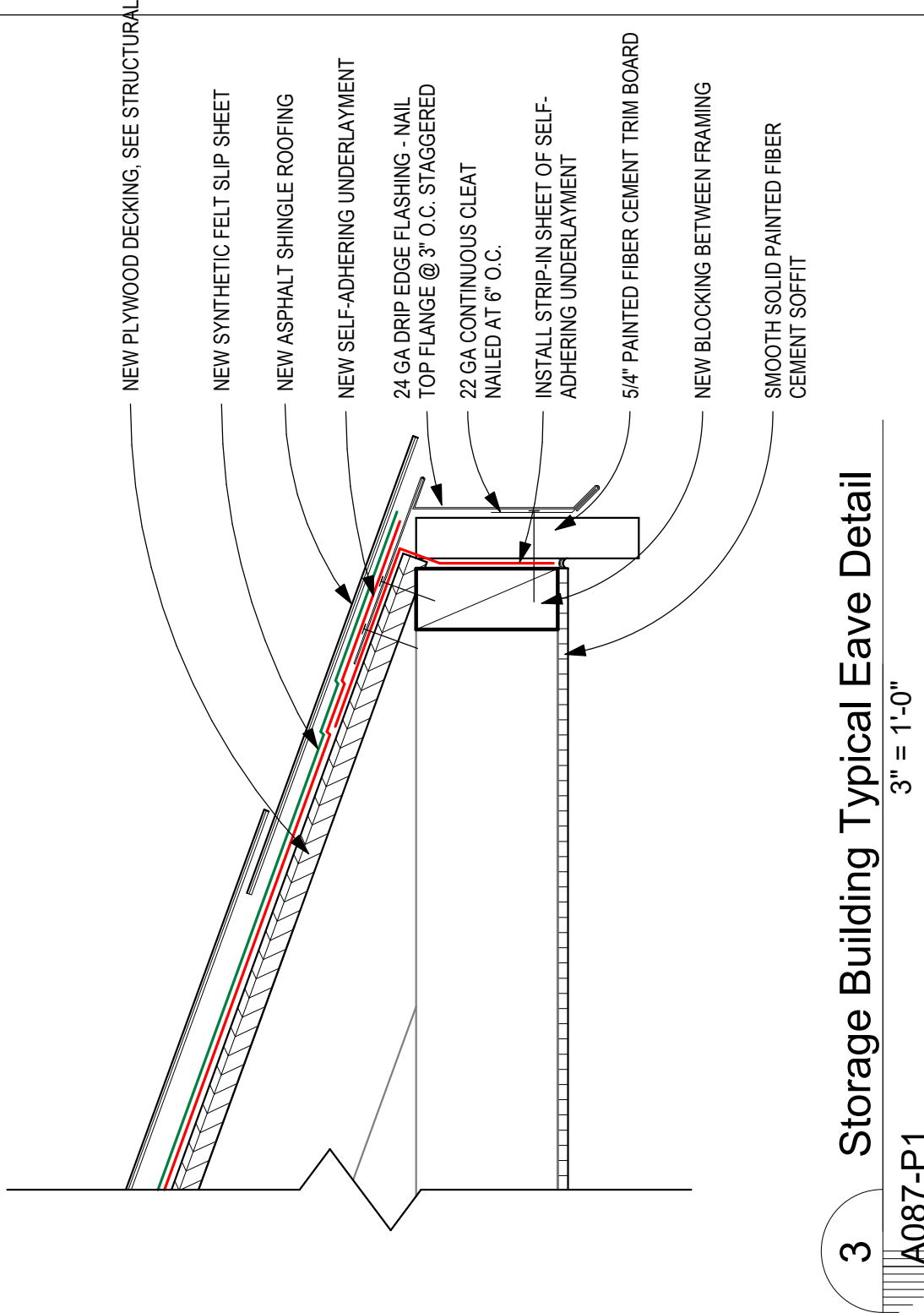
9 Rake Detail
A087-P1
3" = 1'-0"

6 Roof Detail @ Eave to Wall Connection
A087-P1
3" = 1'-0"

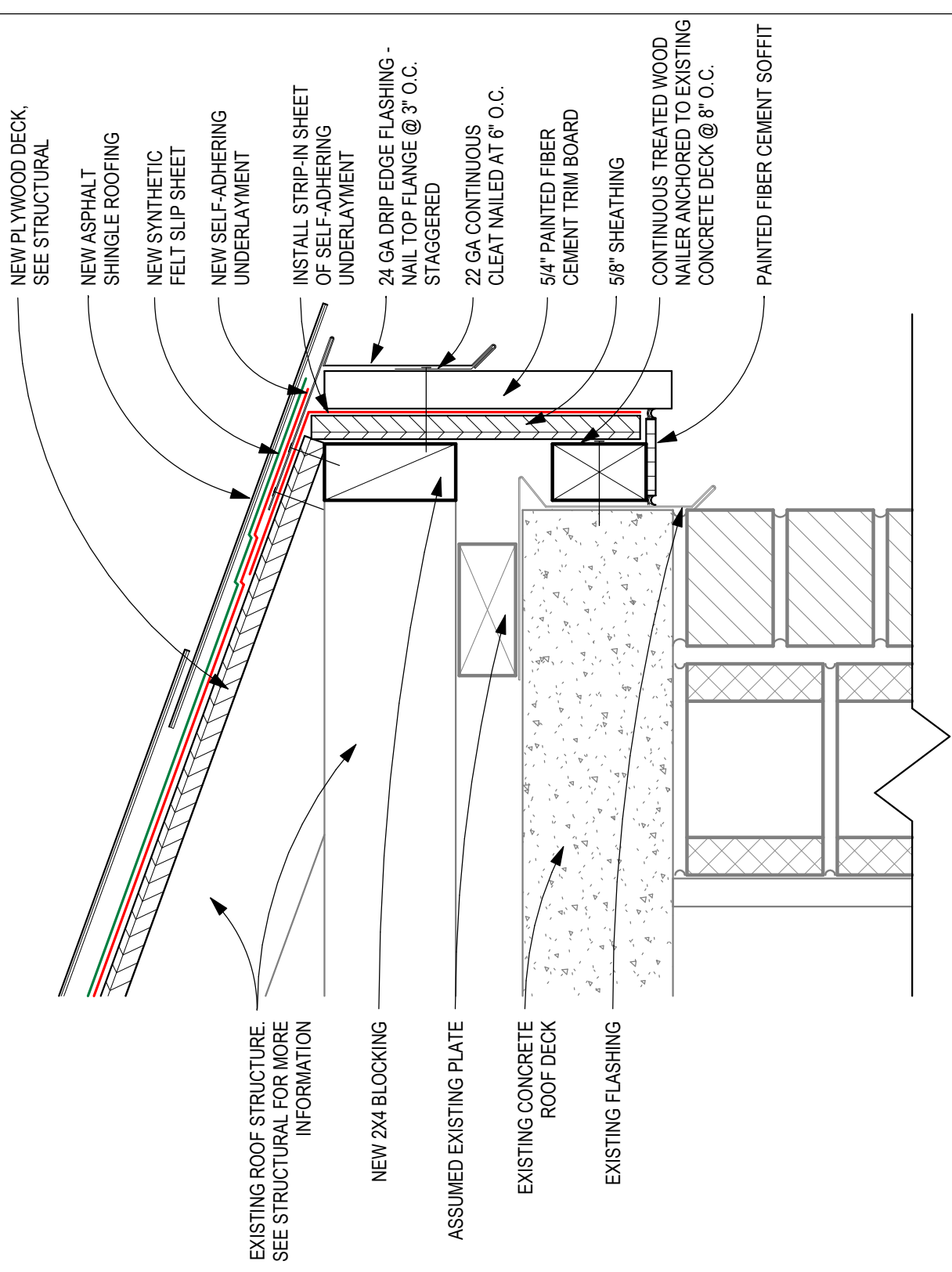


5 Typical Lower Level Walkway Detail
A087-P1
3" = 1'-0"

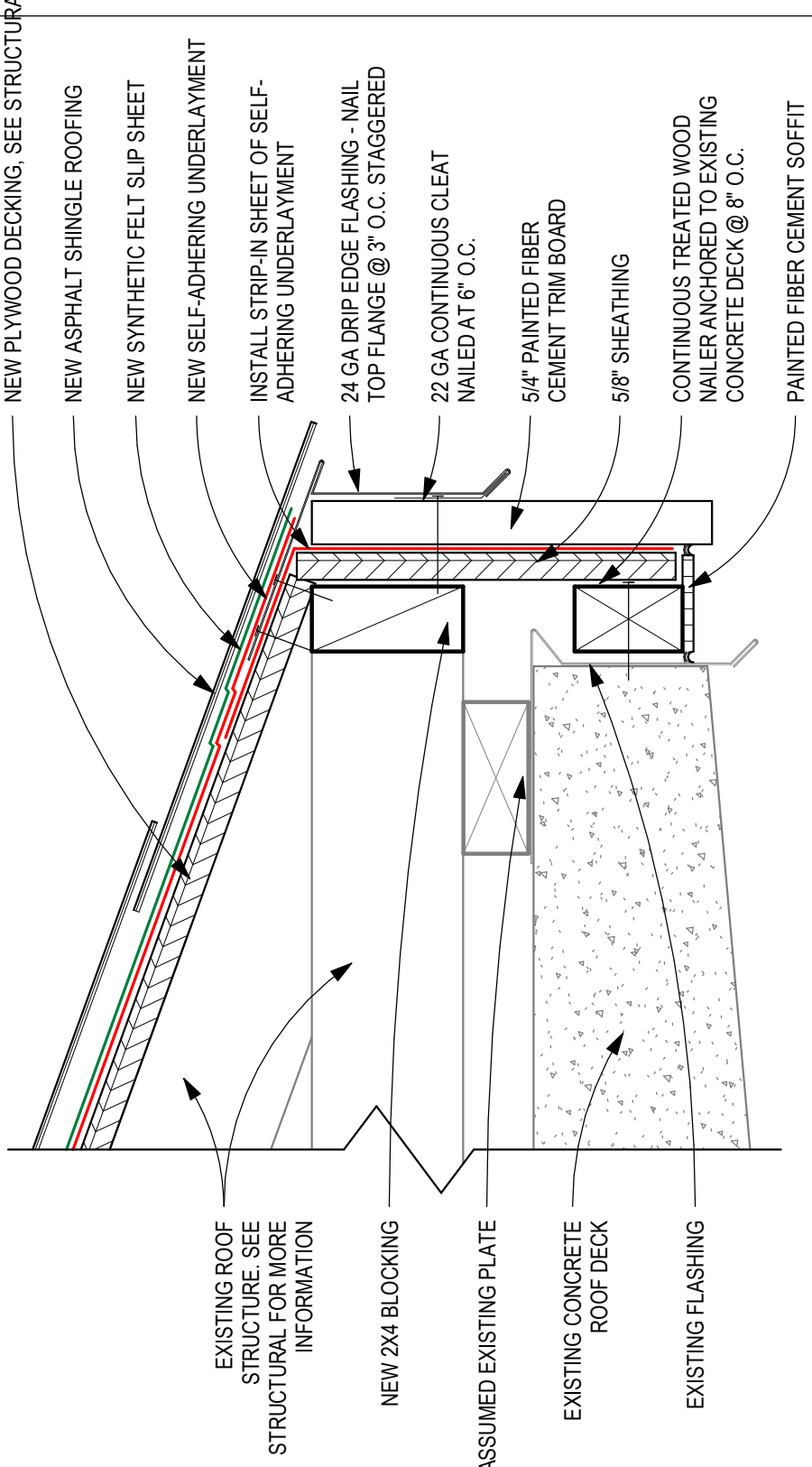
8 Typical Rake, Paneling and Walkway to Building Connection Detail
A087-P1
3" = 1'-0"



3 Storage Building Typical Eave Detail
A087-P1
3" = 1'-0"

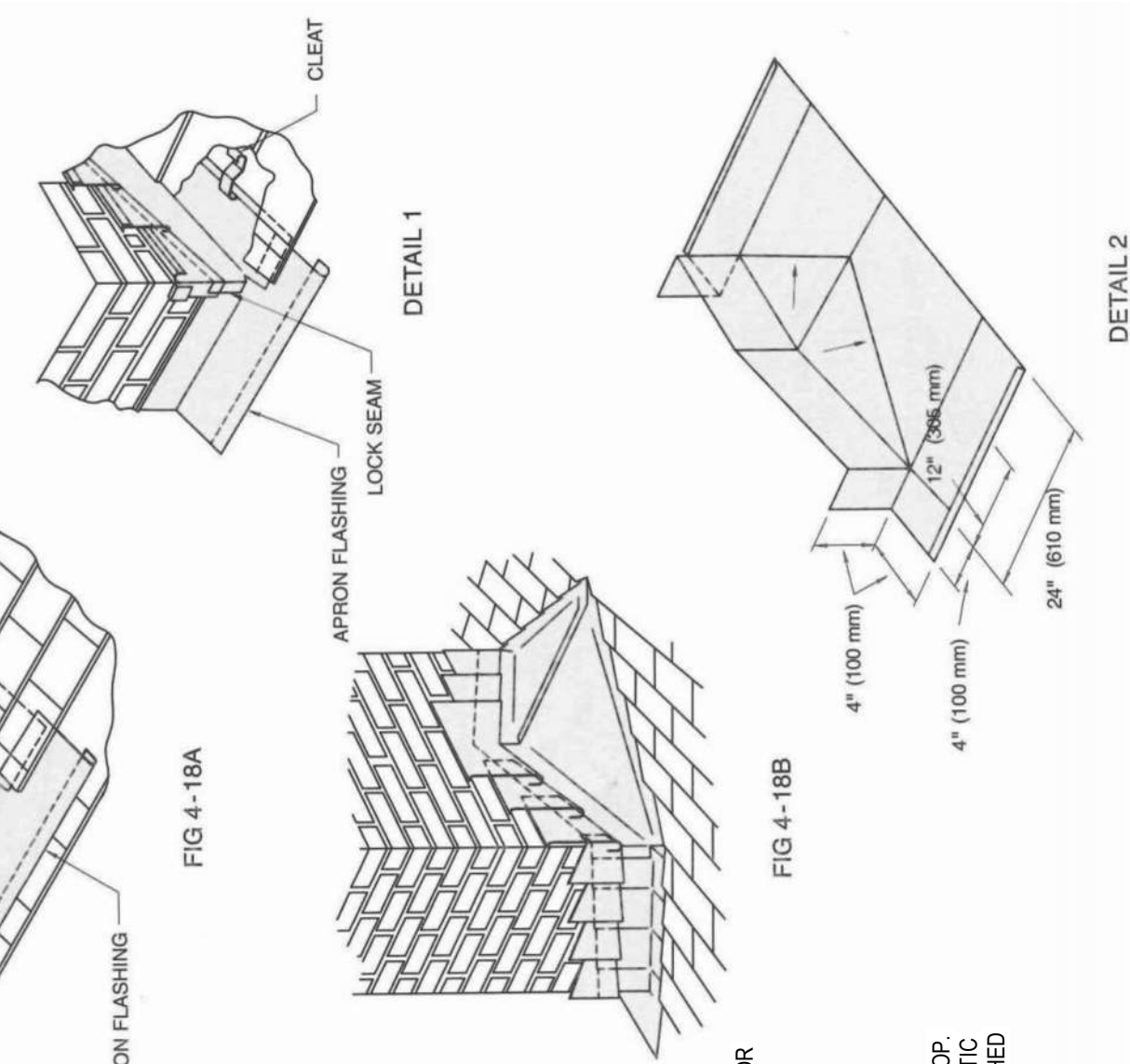


2 Living Unit Roof Detail
A087-P1
3" = 1'-0"



1 Typical Roof Eave Detail
A087-P1
3" = 1'-0"

4 Community Chimney Roof Details per SMACNA
A087-P1
3" = 1'-0"



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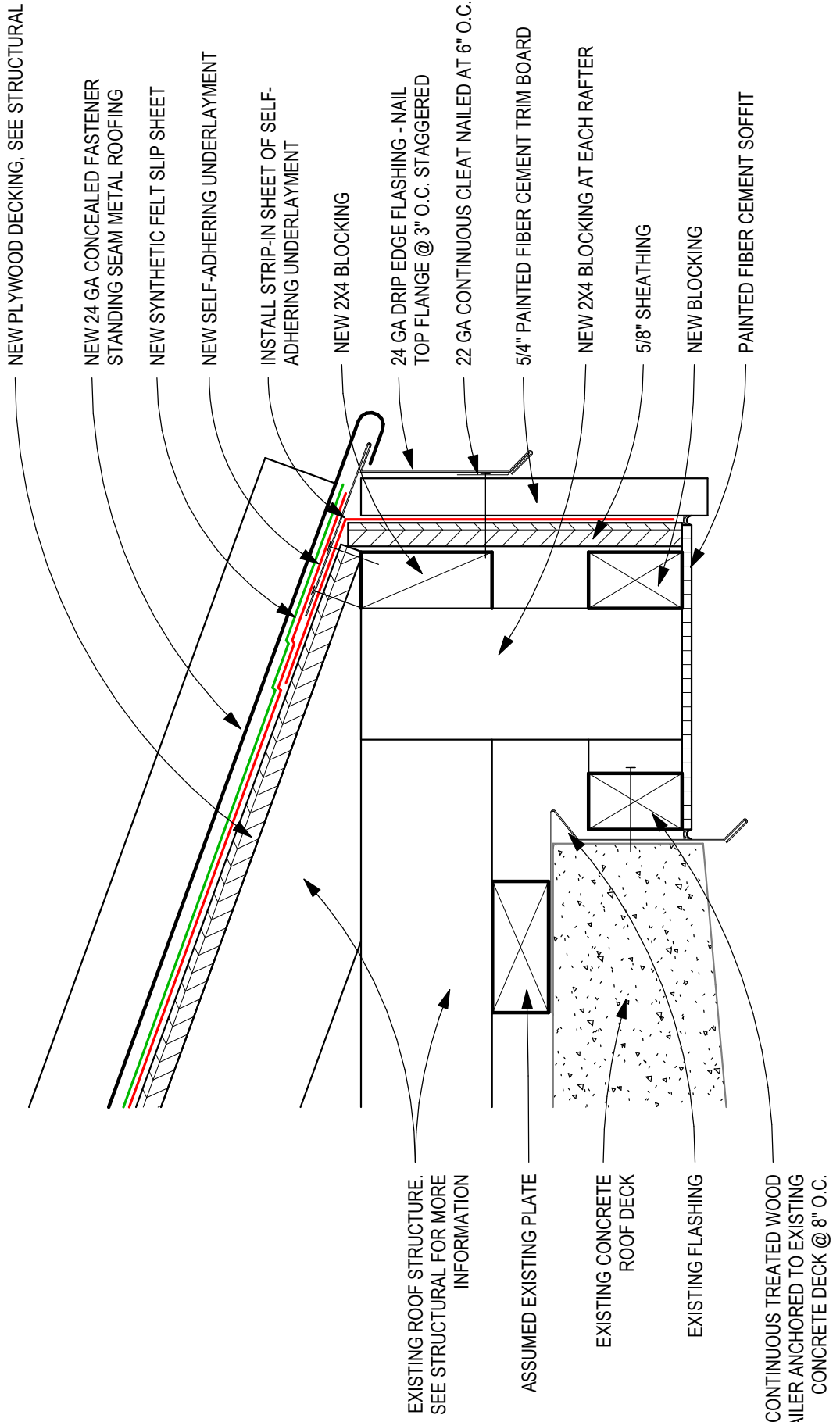
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04.17.2025
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2252.1
sheet title
Alternate 1
Roof Details
sheet no.
A088-P1
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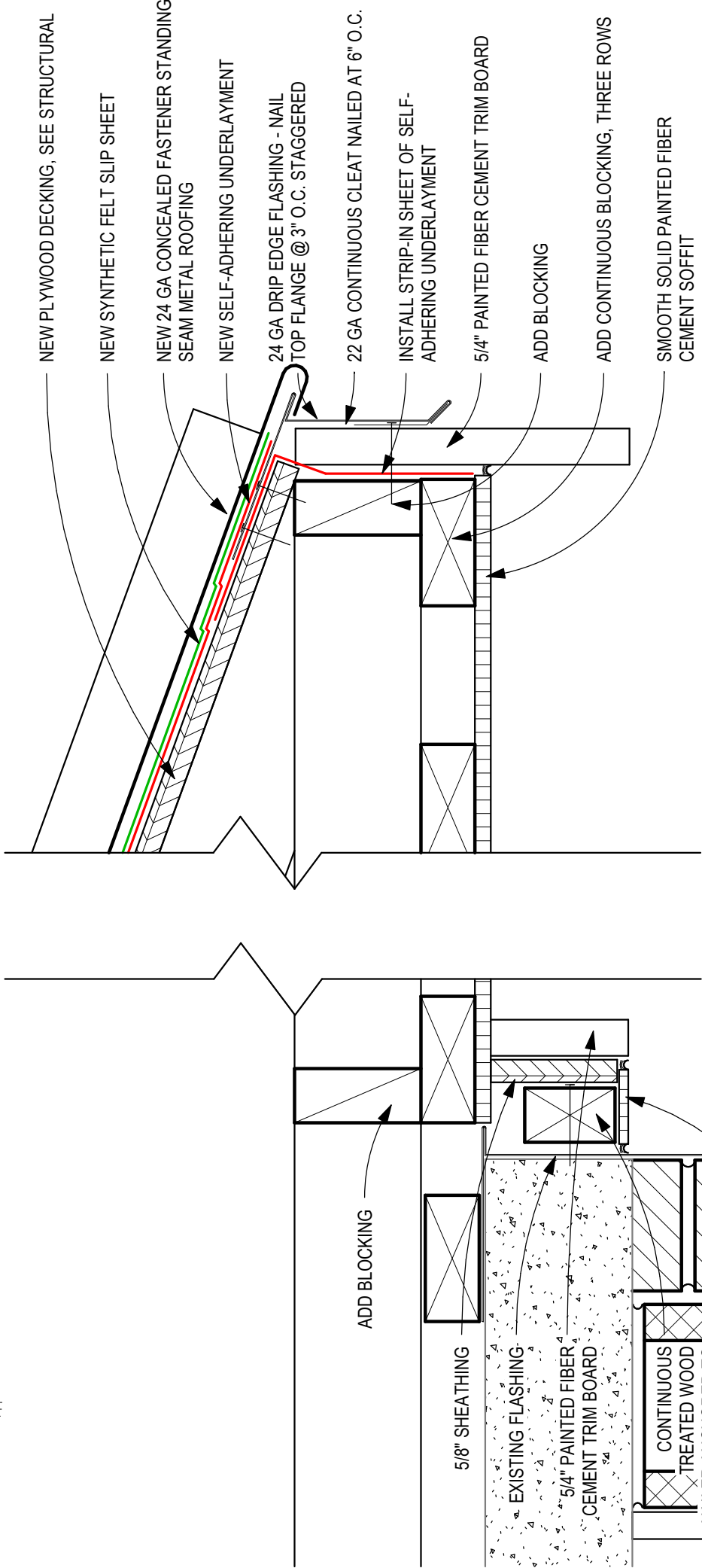
ALL DETAILS ON THIS SHEET FOR ALTERNATE 1



7 Community Building Roof Eave w/ Deeper Soffit METAL ALT

A088-P1

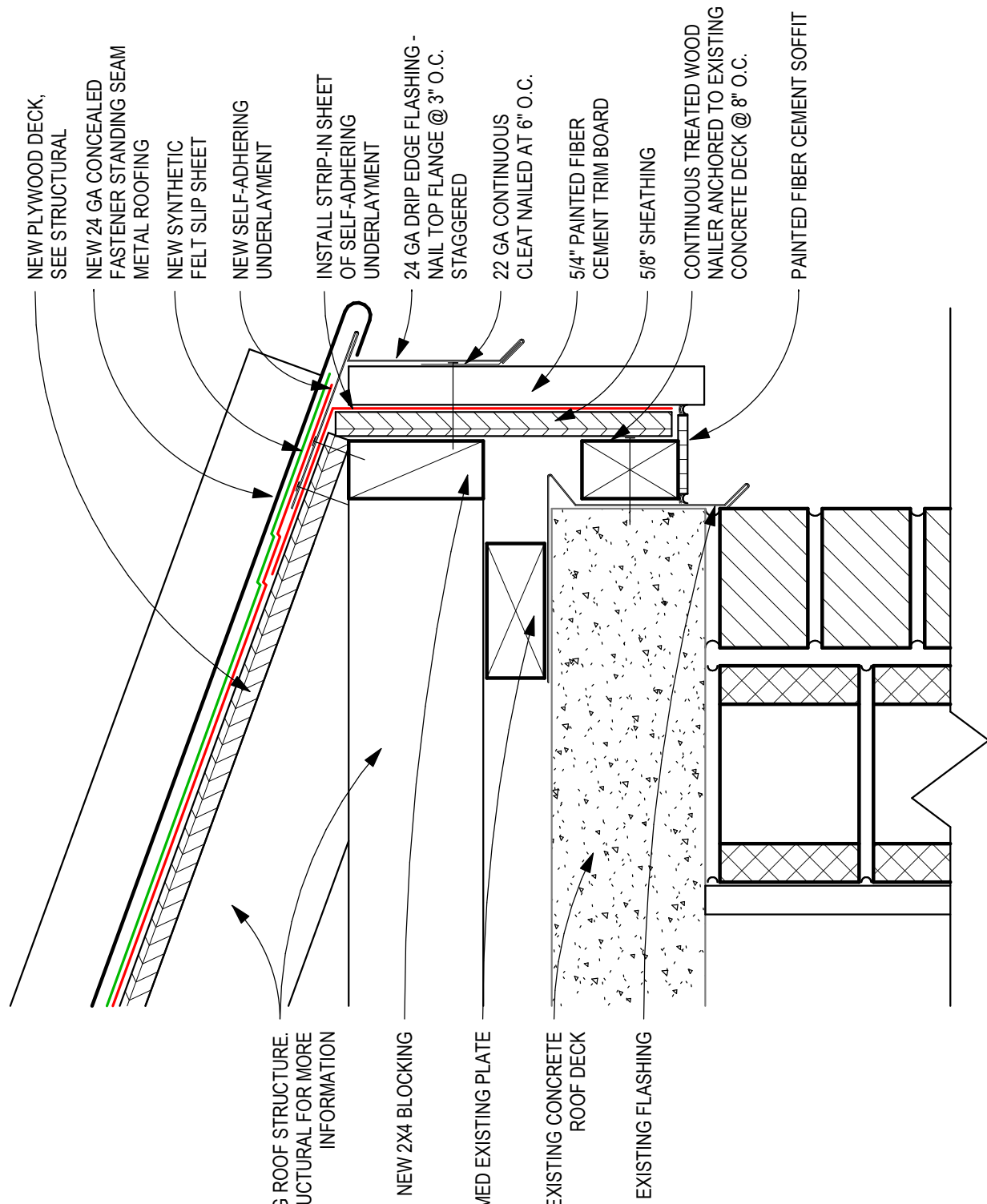
3" = 1'-0"



3 Storage Building Typical Eave Detail METAL ALT

A088-P1

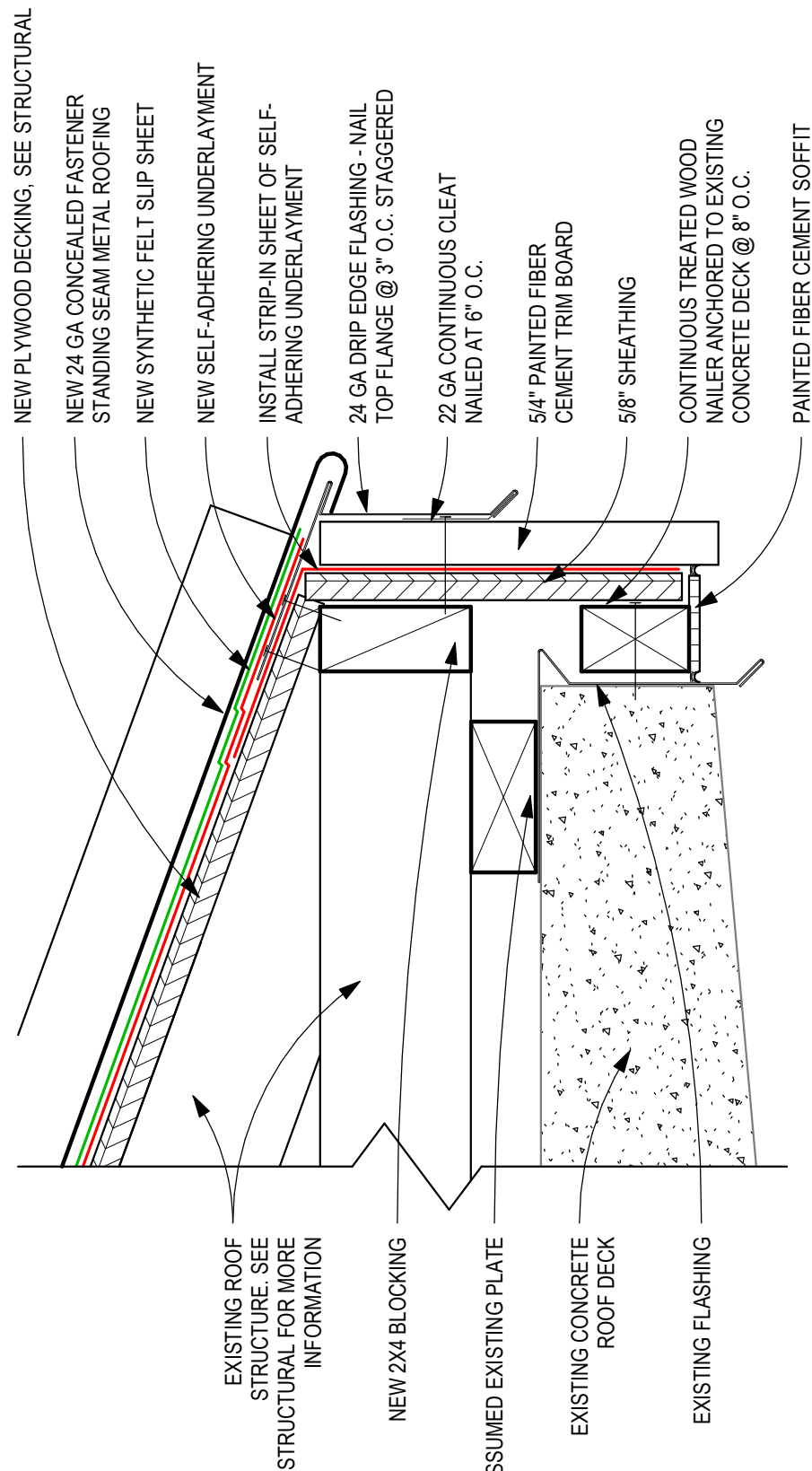
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2 Living Unit Roof Detail METAL ALT

A088-P1

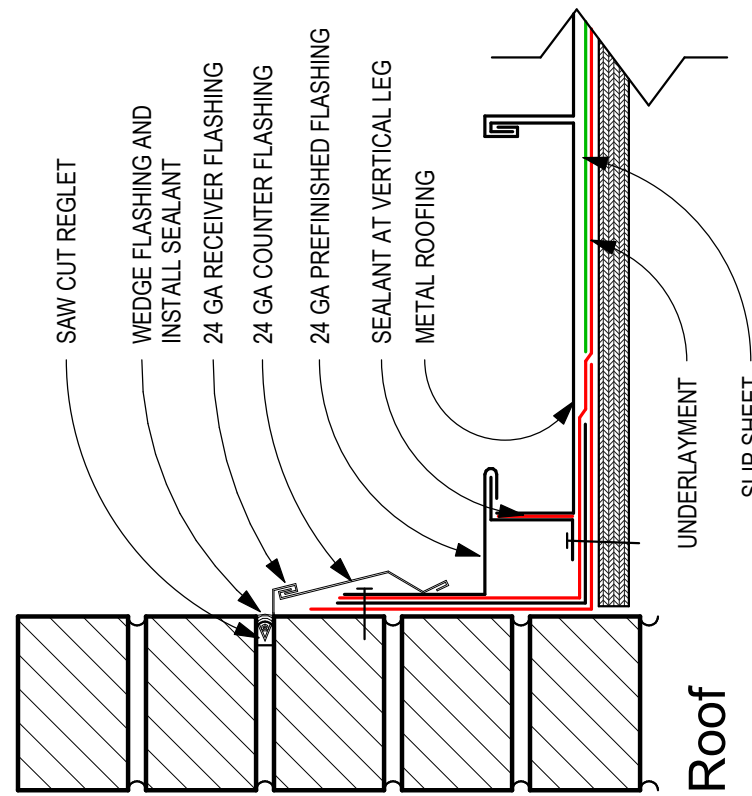
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1 Typical Roof Eave Detail METAL ALT

A088-P1

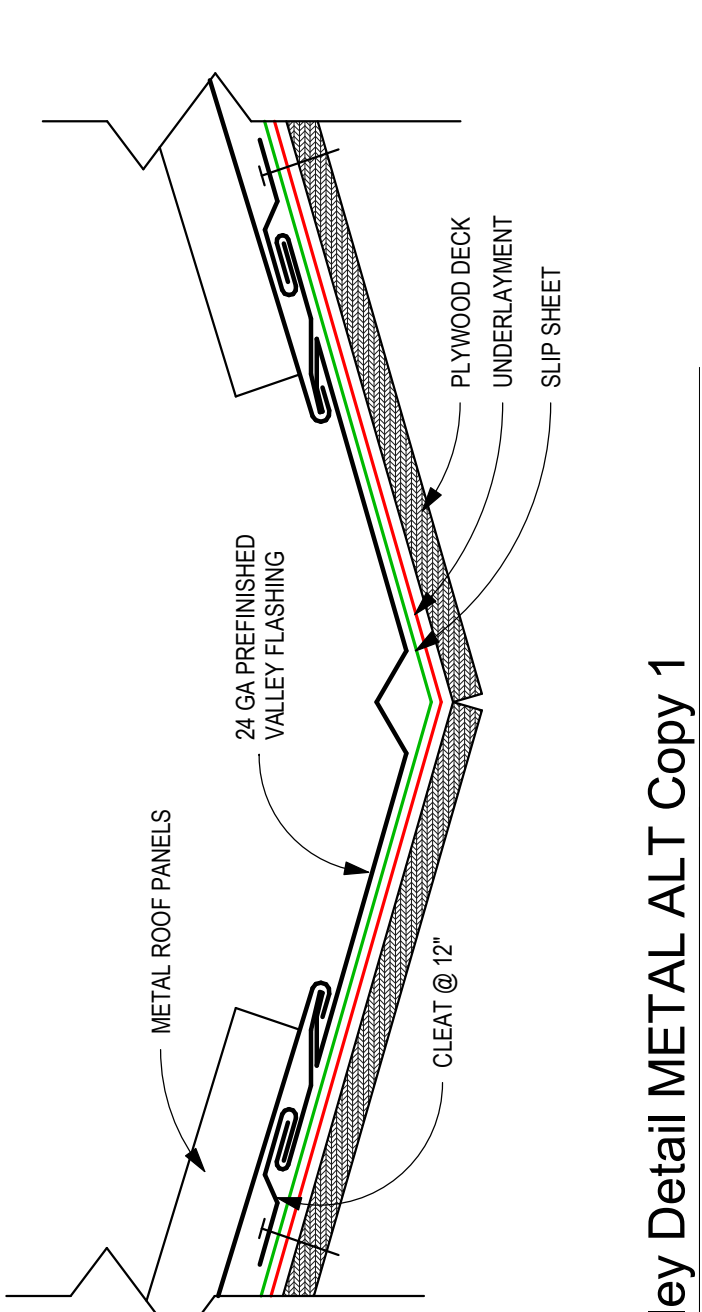
3" = 1'-0"



4 Community Chimney Roof Details METAL ALT

A088-P1

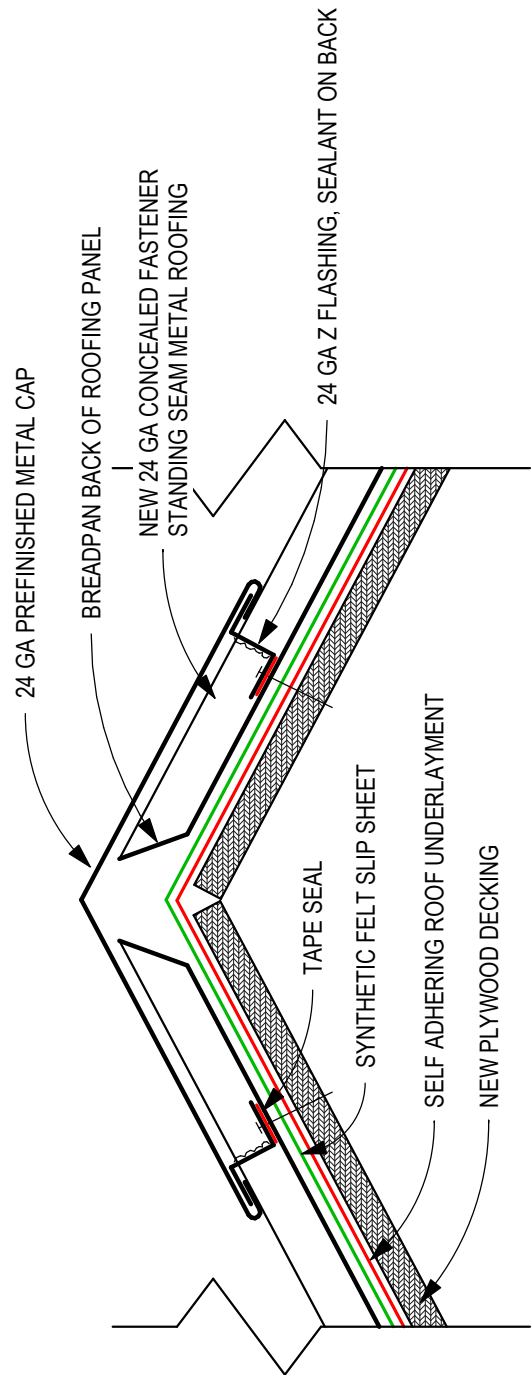
3" = 1'-0"



11 Valley Detail METAL ALT Copy 1

A088-P1

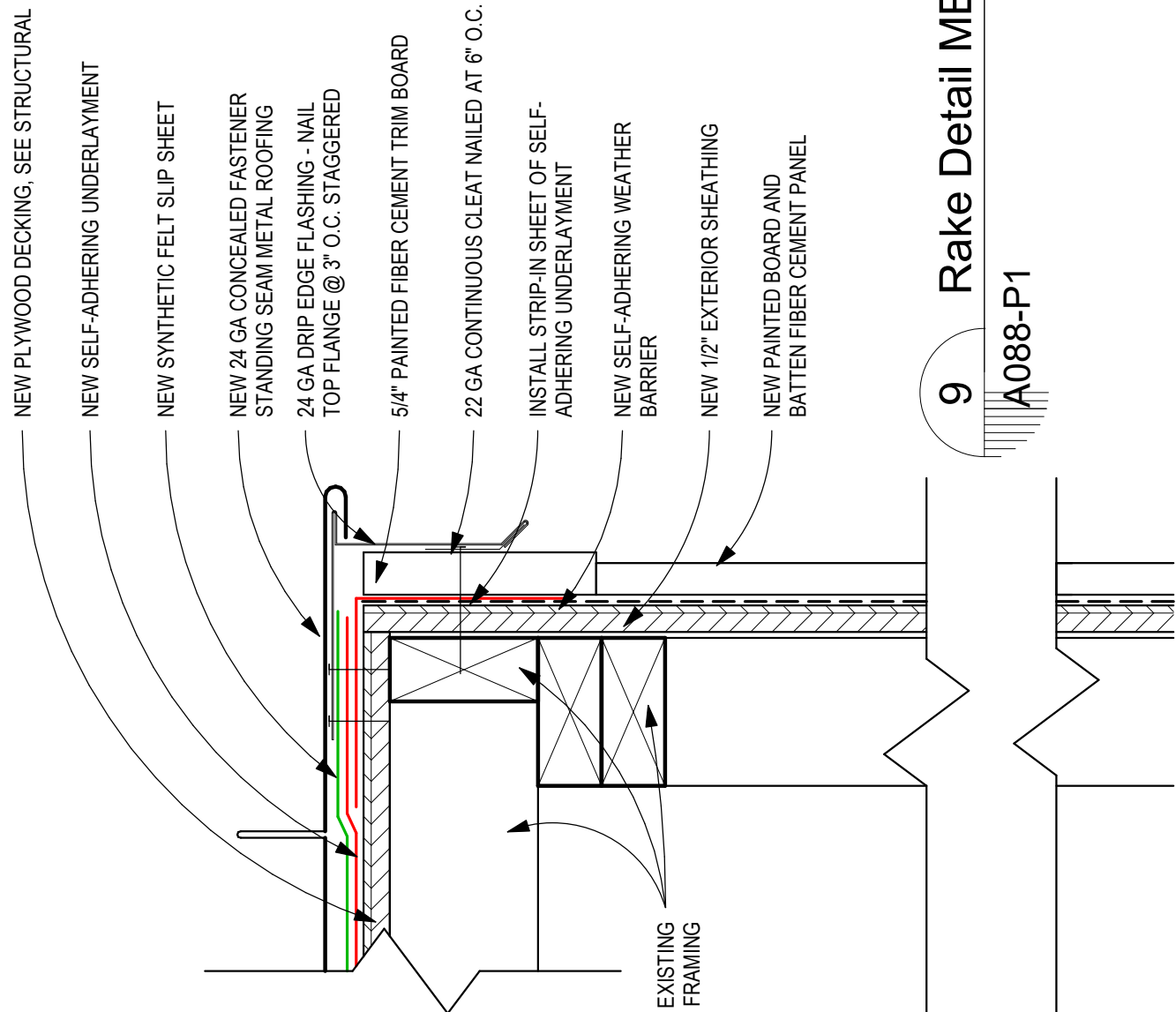
3" = 1'-0"



10 Ridge Detail METAL ALT

A088-P1

3" = 1'-0"



9 Rake Detail METAL ALT

A088-P1

3" = 1'-0"

DETAIL SAME FOR ALTERNATE 1

8 Typical Rake, Paneling and Walkway to Building Connection Detail METAL ALT

A088-P1

3" = 1'-0"

5 Typical Lower Level Walkway Detail METAL ALT

A088-P1

3" = 1'-0"

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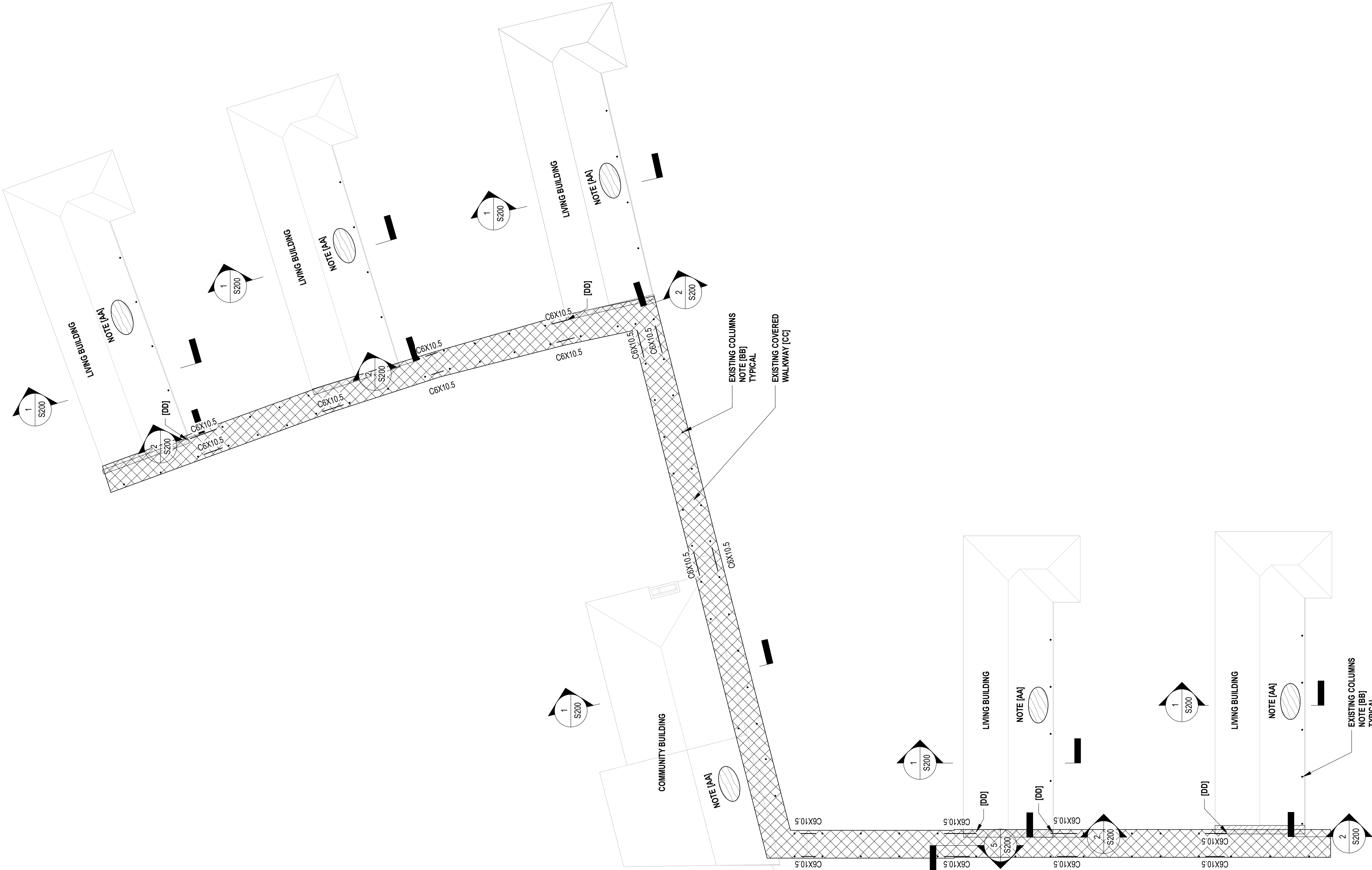


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SITE PLAN
sheet no.
S100
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1 STRUCTURAL SITE PLAN
1" = 20'-0"



GENERAL NOTES:
THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL SCOPE INFORMATION.
NOTE [AA]: REMOVE EXISTING ROOF COVERING AND ROOF DECK. INSTALL NEW 5/8" PLYWOOD ROOF DECK IN ACCORDANCE WITH THE DECK SCHEDULE.
NOTE [BB]: PROVIDE SURFACE PREPARATION AND CLEANING OF ALL EXISTING STEEL JOIST PRIOR TO NEW COATING IN ACCORDANCE WITH THE GENERAL NOTES. RE S3.0.
NOTE [CC]: REMOVE EXISTING WALKWAY CANOPY ROOF COVERING DOWN TO CONCRETE ROOF STRUCTURE. INSTALL TAPERED INSULATION AND THOSBS ROOF FLASHING. PROVIDE NEW 5/8" PLYWOOD ROOF DECK. REMOVE EXISTING CANOPY FLASHINGS IN ACCORDANCE WITH THE ARCHITECTURAL PLANS.
NOTE [DD]: ASSUMED STEEL COLUMN EMBEDDED IN BRICK WALL. DEMOLISH TO CONFIRM COLUMN LOCATION AND SECURE CONCRETE ROOF JOINT REINFORCEMENT. PROVIDE NEW 5/8" PLYWOOD ROOF DECK. REMOVE EXISTING CANOPY FLASHINGS IN ACCORDANCE WITH THE ARCHITECTURAL PLANS. OBSERVED, COORDINATE WITH ENGINEER OF RECORD FOR POST-INSTALLED END PLATE CONNECTION TO BRICK/STRUCTURAL CONCRETE WALL.

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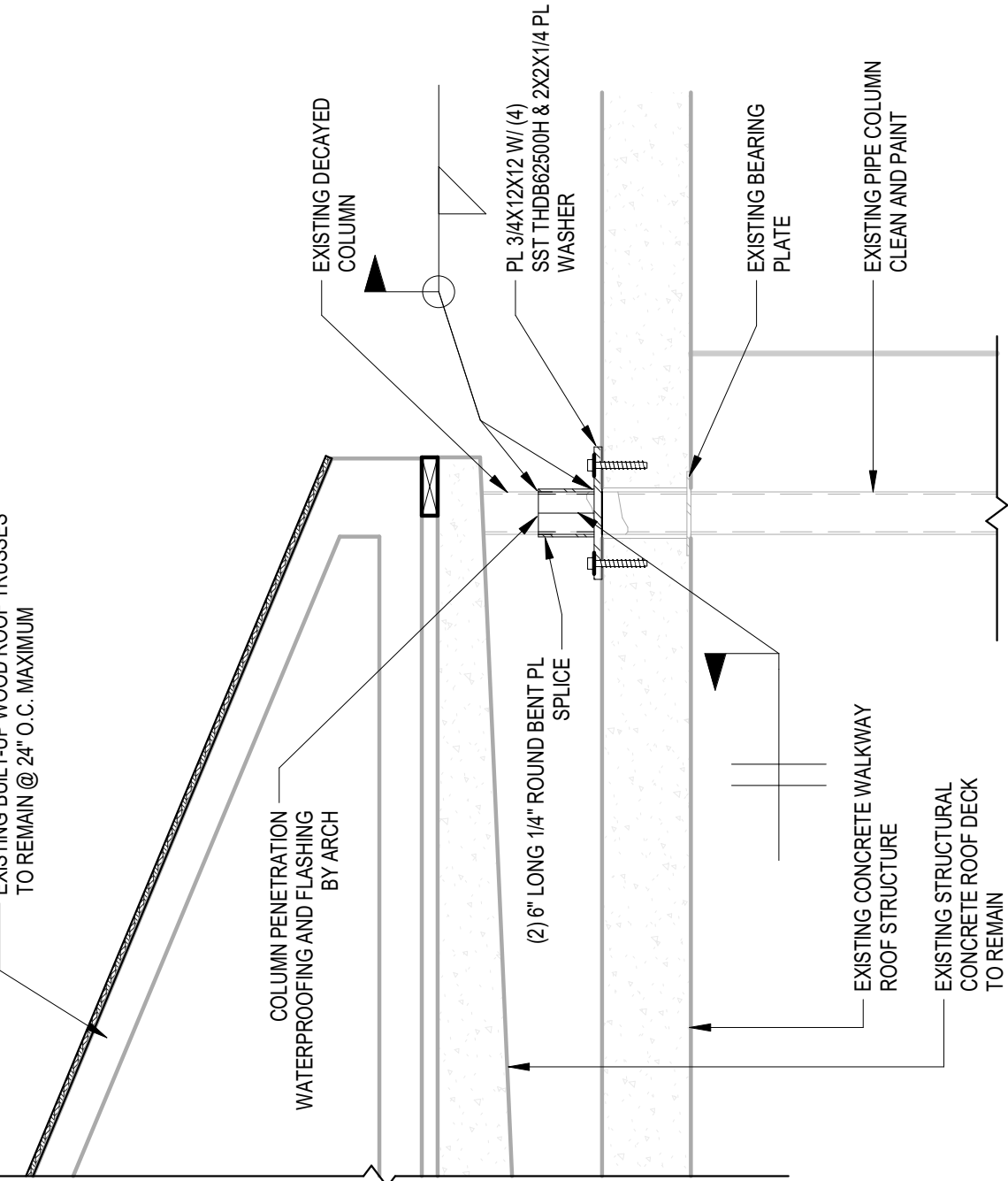
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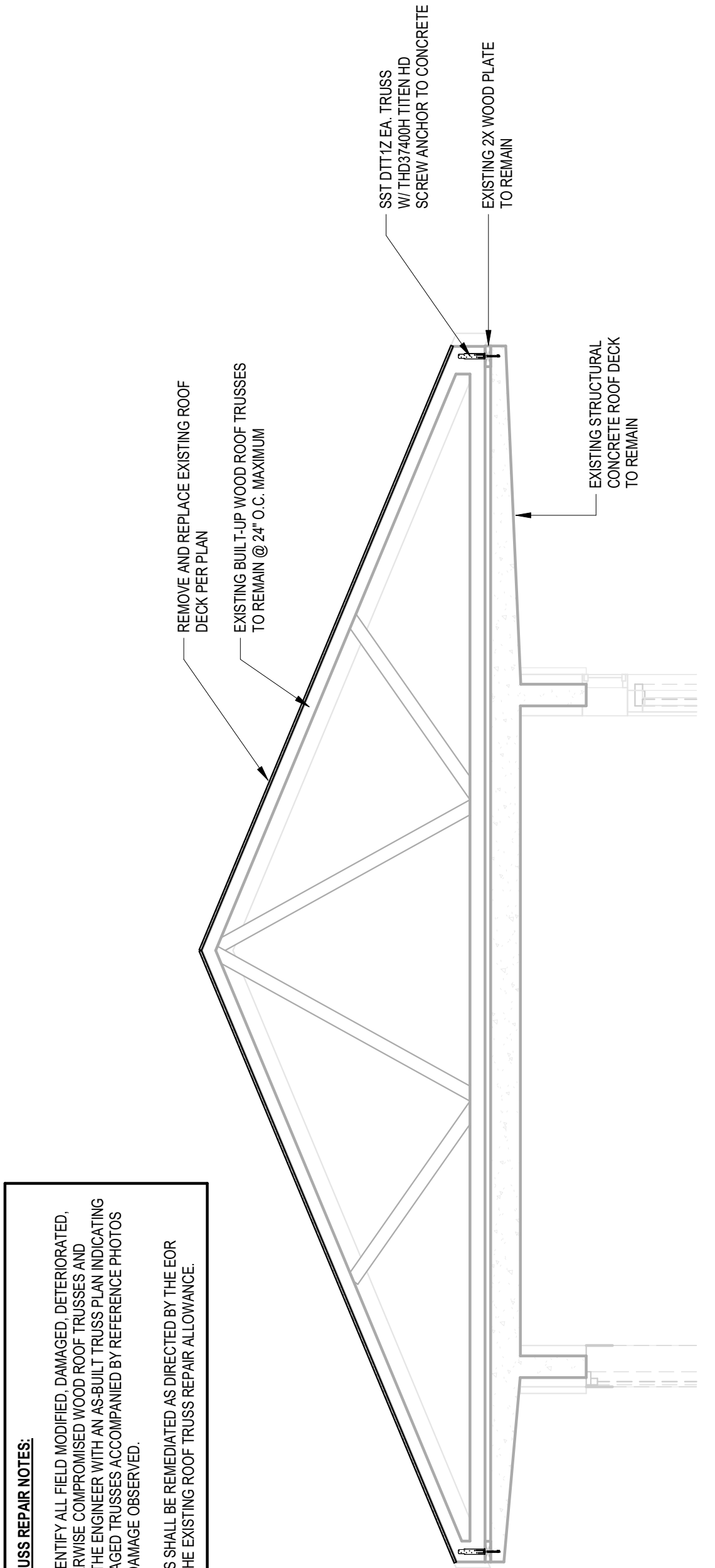


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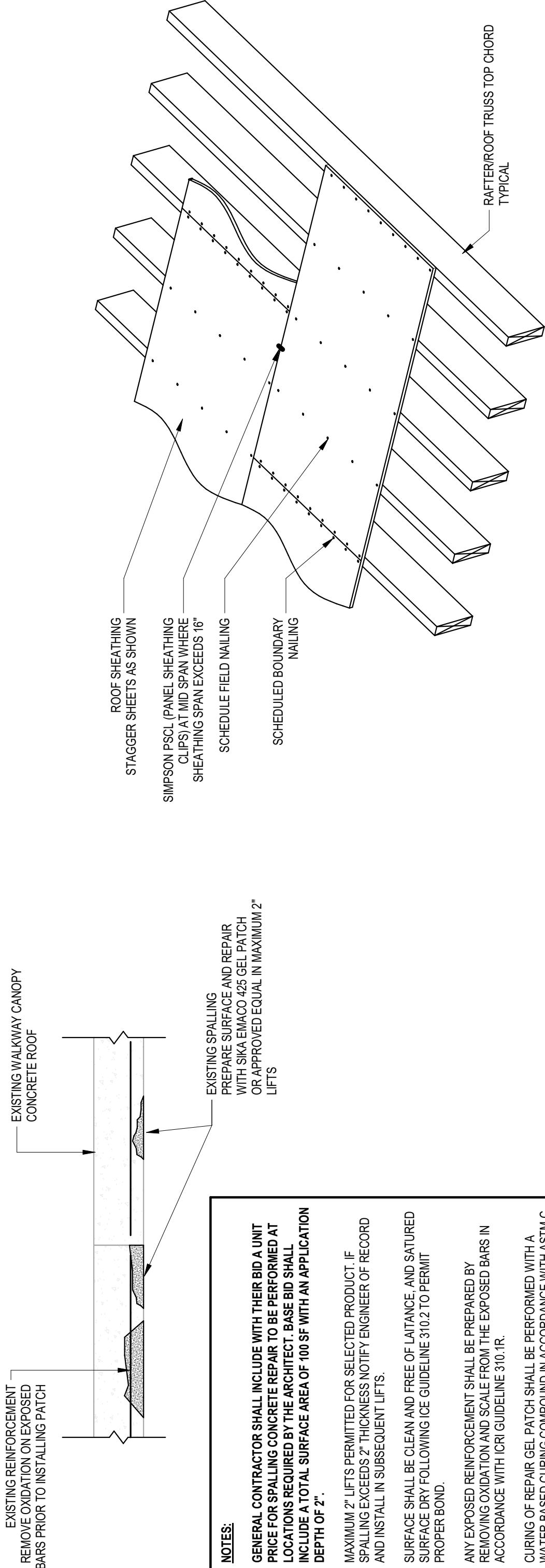
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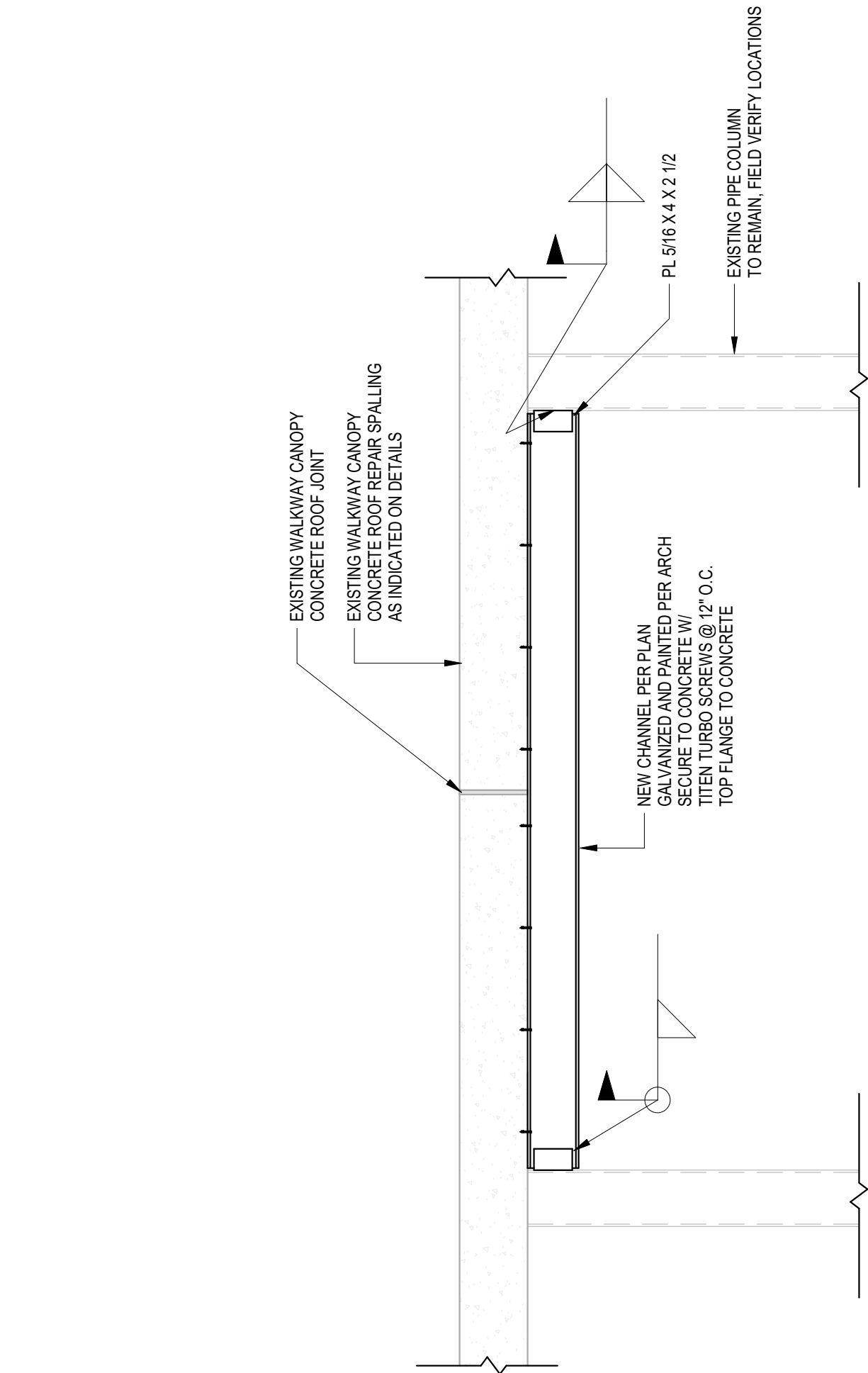
2 TYPICAL STUB COLUMN REPAIR
3/8\"/>



1 TYPICAL BUILT-UP ROOF TRUSS REMEDIATION
3/8\"/>



4 TYPICAL ROOF SHEATHING
3/4\"/>



5 TYPICAL ROOF JOINT BEAM REINFORCEMENT
3/4\"/>

ROOF TRUSS REPAIR NOTES:
GC TO IDENTIFY ALL FIELD MODIFIED, DAMAGED, DETERIORATED, OR OTHERWISE COMPROMISED WOOD ROOF TRUSSES AND SUPPLY THE ENGINEER WITH AN AS-BUILT TRUSS PLAN INDICATING ALL MODIFIED TRUSSES ACCOMPANIED BY REFERENCE PHOTOS OF THE DAMAGE OBSERVED.
DAMAGES SHALL BE REMEDIATED AS DIRECTED BY THE EOR UNDER THE EXISTING ROOF TRUSS REPAIR ALLOWANCE

NOTES:
GENERAL CONTRACTOR SHALL INCLUDE WITH THEIR BID A UNIT PRICE FOR SPALLING CONCRETE REPAIR TO BE PERFORMED AT LOCATIONS REQUIRED BY THE ARCHITECT BASE BID SHALL INCLUDE A TOTAL SURFACE AREA OF 100 SF WITH AN APPLICATION DEPTH OF 2\"/>
MAXIMUM 2\" LIFTS PERMITTED FOR SELECTED PRODUCT IF SPALLING EXCEEDS 2\" THICKNESS NOTIFY ENGINEER OF RECORD AND INSTALL IN SUBSEQUENT LIFTS.
SURFACE SHALL BE CLEAN AND FREE OF LANTANCE AND SATURED SURFACE DRY FOLLOWING ICE GUIDELINE 910.2 TO PERMIT PROPER BOND.
ANY EXPOSED REINFORCEMENT SHALL BE PREPARED BY CONCRETE REPAIR MIXTURE PER THE EXPOSED BARS IN ACCORDANCE WITH GRI GUIDELINE 310.1R.
CURING OF REPAIR GEL PATCH SHALL BE PERFORMED WITH A WATER BASED CURING COMPOUND IN ACCORDANCE WITH ASTM C 1516.
SPECIFIED PRODUCT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

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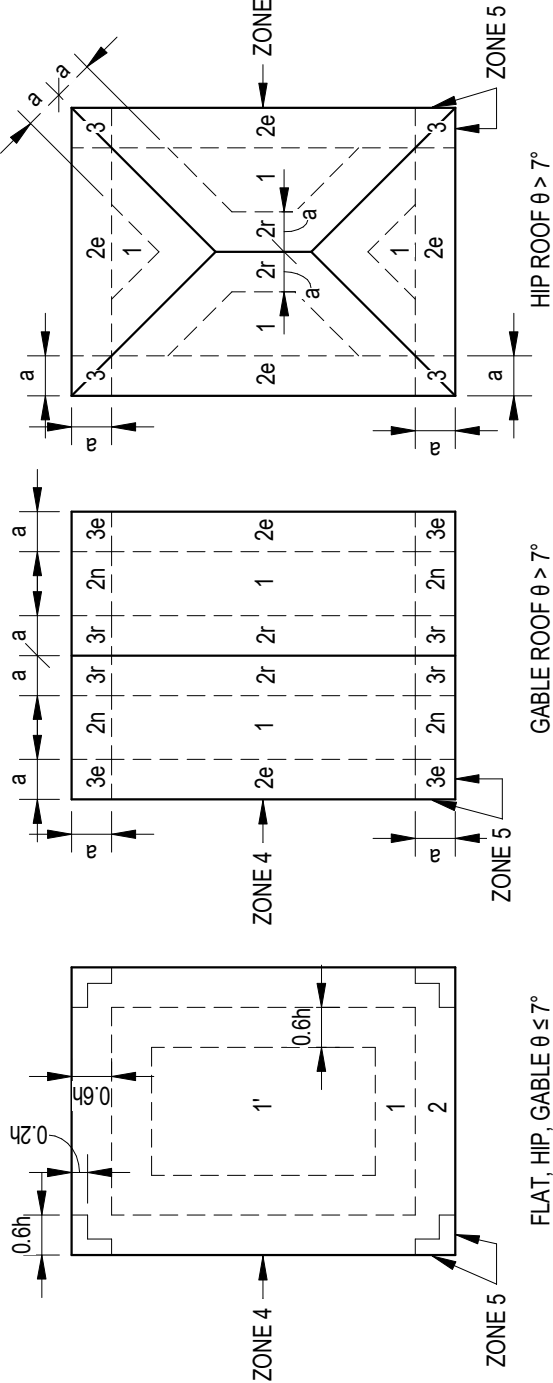


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GENERAL NOTES
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COMPONENTS AND CLADDING DESIGN PRESSURES					
		ROOF (PSF)			
ZONE		10 SF	25 SF	50 SF	100 SF
1	16 / -38	16 / -36	16 / -32	16 / -28	16 / -28
2	16 / -56	16 / -51	16 / -47	16 / -44	16 / -44
3	16 / -76	16 / -66	16 / -59	16 / -52	16 / -52
1'	16 / -24	16 / -24	16 / -24	16 / -24	16 / -24
2a	16 / -38	16 / -36	16 / -32	16 / -28	16 / -28
2i	16 / -40	16 / -50	16 / -43	16 / -35	16 / -35
3a	16 / -60	16 / -50	16 / -43	16 / -35	16 / -35
3'	16 / -70	16 / -56	16 / -44	16 / -44	16 / -44
		WALLS (PSF)			
ZONE		10 SF	25 SF	50 SF	100 SF
4	18 / -29	17 / -27	16 / -26	16 / -25	16 / -25
5	18 / -35	17 / -32	16 / -30	16 / -28	16 / -28



GENERAL NOTES:

- PRESSURES SHOWN IN THE SCHEDULE ARE ULTIMATE LEVEL (FACTORED) LOADS PER ASCE 7-16 AND IBC 2021, WHERE SERVICE LEVEL (UNFACTORED) WIND PRESSURES ARE NEEDED FOR DESIGN. THE SCHEDULE PROVIDES BOTH SERVICE AND ULTIMATE PRESSURES FOR EACH COMPONENT AND CLADDING AREA. TABLE PRESSURES ARE FOR THE EFFECTIVE AREA OF COMPONENTS SHOWN. FOR OTHER EFFECTIVE AREAS, LINEAR INTERPOLATE BETWEEN THE TABULATED VALUES.
- POSITIVE PRESSURE INDICATES PRESSURE ACTING TOWARDS THE BUILDING. NEGATIVE PRESSURES ACT AWAY FROM THE BUILDING.
- A MINIMUM DEAD LOAD EQUAL TO 5 PSF MAY BE INCLUDED FOR NET ROOF UP/LIFT PRESSURES.
- h = MEAN ROOF HEIGHT
a = 10% OF THE LEAST HORIZONTAL DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4% OF THE LEAST HORIZONTAL DIMENSION OR 3 FT.

FLOOR AND ROOF DECK SCHEDULE					
TYPE	THICKNESS AND GRADE	NAIL TYPE	BOUNDARY NAILING	BLOCKED	REMARKS
ROOF DECK	1932" EXT. STR. 1" PL WOOD	10d	4" O.C.	12" O.C.	NO
NOTES: NAILS SHALL HAVE A SUFFICIENT LENGTH TO PENETRATE ROOF AND FLOOR FRAMING MEMBERS BY A MINIMUM OF 1 1/2". ALL BLOCKED DIAPHRAGMS SHALL HAVE ALL PANEL EDGES BLOCKED WITH MIN. 2x4 MATERIAL AND NAILED PER BOUNDARY NAILING REQUIREMENTS. BOUNDARY NAILING REFERS TO THE NAILS ALONG THE EDGES OF EACH PANEL. FIELD NAILING REFERS TO NAILING REQUIRED ALONG ALL INTERMEDIATE SUPPORTS UNDER EACH PANEL. CUT NAIL SPACING IN HALF AT OVERHANGS. GLUE DECKING AS REQUIRED BY ARCHITECTURAL PLANS.					

WOOD FRAMING - CONNECTIONS:

FASTEN WOOD FRAME ELEMENTS IN ACCORDANCE WITH IBC TABLE 2304.10.1 UNLESS NOTED OTHERWISE IN THE PLANS. PROVIDE BC FASTENING IN ADDITION TO MANUFACTURED CONNECTIONS.

THE NUMBER AND SIZE OF FASTENERS CONNECTING WOOD MEMBERS SHALL NOT BE LESS THAN THAT SET FORTH IN THE IBC 2021 "FASTENING SCHEDULE" UNLESS NOTED AS GREATER ON DRAWINGS.

BEAM TO BEAM FLUSH CONNECTIONS SHALL BE MADE USING MANUFACTURED BEAM HANGERS PER THE STRUCTURAL DETAILS. NO STRUCTURAL BEAMS OR HEADER CONNECTIONS SHALL RELY ON TOE-NAILING FOR LOAD TRANSFER. CONNECTORS AND FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT DIPPED ZINC COATED GALVANIZED STEEL, INCLUDING BUT NOT LIMITED TO ANCHOR BOLTS, POWER ACTUATED FASTENERS, NAILS, SCREWS, BOLTS AND METAL FRAMING HARDWARE. THE ZINC COATING WEIGHTS SHALL BE IN ACCORDANCE WITH ASTM A153.

CONNECTORS SHALL BE GALVANIZED AND MANUFACTURED BY SIMPSON STRONG-TIE COMPANY OR APPROVED ALTERNATE. INSTALL ALL CONNECTORS PER MANUFACTURER'S RECOMMENDATIONS. USE TYPE, SIZE AND QUANTITY OF FASTENERS IN CONNECTORS SPECIFIED BY CONNECTOR MANUFACTURER, WHERE FASTENER OPTIONS ARE GIVEN BY THE MANUFACTURER. INSTALL TYPE, SIZE AND QUANTITY OF FASTENERS REQUIRED TO ACHIEVE THE MAXIMUM RATED CONNECTION CAPACITY. ALL SPECIFIED MANUFACTURED PRODUCTS MAY BE SUBSTITUTED WITH AN EQUIVALENT PRODUCT HAVING THE SAME LOAD CAPACITY AT THE CONTRACTOR'S OPTION.

ALL STEEL CAPS, BRACKETS, HANGERS, BASE PLATES AND BOLTS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED.

NAILS NOTED IN NOTES, SECTION PLANS, AND DETAILS ARE COMMON WIRE NAILS, UNLESS NOTED OTHERWISE. PNEUMATIC GUN NAILED IS ALLOWED WITH UNITS OF EQUIVALENT GAGE AND LENGTH AS COMMON WIRE NAIL OF SIZE NOTED. ENSURE THAT ALL OVERDRIVEN OR CROOKED NAILS ARE REMOVED AND PROPERLY REPLACED.

ALL BOLT HEADS AND NUTS BEARING ON WOOD SHALL HAVE STANDARD CUT WASHERS, UNLESS NOTED OTHERWISE. ALL BOLT HOLES IN WOOD SHALL BE DRILLED 1/32" DIAMETER LARGER THAN NOMINAL BOLT DIAMETER.

BOLTS IN WOOD SHALL NOT BE LESS THAN 7 DIAMETERS FROM THE END AND 4 DIAMETERS FROM THE EDGE OF THE MEMBER.

WOOD SHEATHING:

ROOF, WALL AND FLOOR SHEATHING SHALL BE AS SCHEDULED IN THE STRUCTURAL DOCUMENTS.

ORIENTED STRAND BOARD (OSB) MAY BE USED INTERCHANGEABLY WITH PLYWOOD AT VERTICAL APPLICATIONS.

ALL WOOD SHEATHING WITHIN 4'-0" ON EACH SIDE OF FIRE WALLS SHALL BE FIRE RETARDANT.

INTERIOR GYPSUM SHEAR WALLS SHALL BE 5/8" THICK TYPE X GYPSUM REGULAR CONFORMING TO THE REQUIREMENTS OF ASTM C 36 AND INSTALLED PER GA-216.

REFER TO ARCHITECTURAL DRAWINGS FOR PROPOSED LOCATIONS OF FIRE RETARDANT PLYWOOD AT ROOF DECKING.

PROVIDE 1/4" GAPS EVERY 80 FEET IN PLYWOOD DECKING OR PLYWOOD RUNS LONGER THAN 80 FEET.

ALL ROOF SHEATHING SHALL RUN CONTINUOUS BELOW ALL DORMERS, CUPOLAS, AND VALLEY / BUTT-LIP TRUSSES UNLESS NOTED OTHERWISE. ANCHOR VALLEY / TRUSSES TO SUPPORTING ELEMENTS BELOW WITH SIMPSON V10R AT 24" O.C. MAXIMUM.

EXISTING STEEL SURFACE PREPARATION

SURFACE PREPARATION AND APPLICATION OF COATINGS TO BE IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. IN THE ABSENCE OF PRINTED INSTRUCTIONS CLEAN NEW STEEL TO SSPC-SP 10.

ALL DIRT AND DELETERIOUS CONTAMINATION SHALL BE REMOVED BY 2500 PSI MIN HIGH PRESSURE FRESH WATER WASHING CLEAN USING COMPRESSED AIR.

ALL LOOSE MILL SCALE, LOOSE RUST AND LOOSE PAINT SHALL BE REMOVED BY HAND TOOL CLEANING OR POWER CLEANING. ALL WELD SPATTER AND FLUX SHALL BE REMOVED BY CHIPPING OR GRINDING. SHARP EDGES SHALL BE GROUND SMOOTH. CLEAN TO SSPC-SP 1.

ALL DEFECTS AND OR DEGRADATION EXPOSED BY SURFACE PREPARATION INCLUDING CORRODED WELD JOINTS AND LOSS OF SECTION) SHALL BE REPAIRED BY THE GENERAL CONTRACTOR.

EXTERIOR STEEL COATINGS

ONLY MATERIALS (PRIMERS, COATING, ETC.) LISTED IN THE LATEST EDITION OF THE MPI APPROVED PRODUCT LIST (API) ARE ACCEPTABLE FOR USE ON THIS PROJECT.

PROVIDE HIGH PERFORMANCE COATING PRODUCTS FROM THE SAME MANUFACTURER TO THE GREATEST EXTENT POSSIBLE.

PROVIDE COMPLETE MULTI-COAT SYSTEMS FORMULATED AND RECOMMENDED BY MANUFACTURER FOR THE APPLICATIONS INDICATED. IN THE THICKNESSES INDICATED, NUMBER OF COATS SPECIFIED DOES NOT INCLUDE PRIMER OR FILLER COAT.

MANUFACTURERS REPRESENTATIVE SHALL BE CONSULTED FOR SUITABILITY OF APPLICATION.

COATING THICKNESS TO MANUFACTURERS PRINTED INSTRUCTIONS

DEPTH OF BLAST PROFILE CREATED BY CLEANING METHOD SHALL BE LESS THAN DFT (DRY FILM THICKNESS)

DFT SHALL ACCOMMODATE ROGUE PEAKS CREATED IN BLAST PROFILE

STEEL TO BE COATED SHALL BE FREE OF ALL DELETERIOUS MATERIAL

PRIMER AND/OR TOPCOAT SHALL BE COMPATIBLE WITH HOG AS REDD

FILE OR GRIND EXPOSED WELDS SMOOTH AND FLUSH

FOR EACH COATING LAYER, TOUCH UP AND REPAIR ALL DAMAGED AREAS

PRIME COAT SHALL BE COMPATIBLE WITH TOP COAT

TOPCOAT COLOR FOR ALL COMPONENTS SHALL BE SELECTED BY THE CLIENT FROM THE MANUFACTURERS LIST OF STANDARD PROVEN COLORS

DO NOT PROVIDE COATING ON SURFACES IN CONTACT WITH CONC. FAYING SURFACES OF BOLTED JOINTS. AREAS TO BE WELDED, BEARING SURFACES IN DIRECT CONTACT WITH CONC. MASONRY OR STEEL AND SURFACES TO RECEIVE SHEAR CONNECTORS

ALTERNATIVE COATING SYSTEMS PROPOSED BY THE GENERAL CONTRACTOR SHALL BE REVIEWED BY THE DESIGN TEAM.

GENERAL

ALL DESIGN LOADS SHOWN ON THE STRUCTURAL PLANS ARE ALLOWABLE STRESS DESIGN (UNFACTORED) SERVICE LOADS.

ALL METHODS, PROCEDURES, AND SEQUENCES OF WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE ALL PRECAUTIONS ARE TAKEN TO MAINTAIN THE INTEGRITY OF THE STRUCTURE THROUGHOUT ALL STAGES OF CONSTRUCTION.

REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING PLANS FOR ALL ITEMS OMITTED FROM THE STRUCTURAL PLANS.

IF A CONFLICT IS OBSERVED IN THE STRUCTURAL DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD FOR PROPER GUIDANCE AND CLARIFICATION PRIOR TO CONSTRUCTION.

THE STRUCTURAL INTEGRITY OF THE DESIGN DEPENDS ON THE FULL INTERACTION OF ALL ITS FRAMING MEMBERS AND CLADDING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROPERLY SHORE AND BRACE ALL STAGES OF CONSTRUCTION UNTIL THE STRUCTURE IS COMPLETED.

THE GENERAL CONTRACTOR SHALL COORDINATE THE STRUCTURAL DRAWINGS WITH ALL OTHER DRAWINGS, ALL EXISTING CONDITIONS, DIMENSIONS, ELEVATIONS, AND QUANTITIES SHALL BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO ANY FABRICATION OR INSTALLATION.

SCALING OF THE STRUCTURAL DRAWINGS SHALL NOT BE PERMITTED. IF ANY DIMENSIONS VITAL TO CONSTRUCTION ARE NOTED ON THE DRAWINGS, THE CONTRACTOR SHALL SEND FORMAL REQUEST TO THE ARCHITECT OR ENGINEER OF RECORD FOR CLARIFICATION.

IN THE EVENT OF CONFLICTING OR DIFFERING REQUIREMENTS INDICATED ON THE STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS THAT HAVE NOT BEEN SUBSEQUENTLY CLARIFIED OR CHANGED, THE CONTRACTOR SHALL PROVIDE THE BETTER QUALITY, GREATER QUANTITY, OR MORE STRINGENT UNLESS OTHERWISE DIRECTED BY THE ENGINEER OF RECORD.

CODES AND DESIGN SPECIFICATIONS

BUILDING CODE: INTERNATIONAL BUILDING CODE (IBC) 2021

AMERICAN CONCRETE INSTITUTE (ACI 318 LATEST EDITION)

AMERICAN IRON AND STEEL INSTITUTE (AISC LATEST EDITION)

ASCE 7-16

DESIGN LOADS

- ROOF DESIGN LOADS
 - ROOF COLLATERAL DEAD LOAD = 10 PSF
 - ROOF LIVE LOAD = 20 PSF
- WIND LOAD CRITERIA
 - ULTIMATE WINDSPEED = 134 MPH
 - NOMINAL WINDSPEED = 104 MPH
 - DESIGN WIND CATEGORY = II
 - EXPOSURE = 1
 - INTERNAL PRESSURE COEFFICIENT = +/- 0.18

POST-INSTALLED ANCHORS

POST-INSTALLED ANCHORS SHALL ONLY BE USED WITH THE PRIOR WRITTEN APPROVAL OF THE ENGINEER OF RECORD. CONTRACTOR SHALL AVOID DAMAGING ANY REINFORCING STEEL OR POST-TENSIONED TENDONS WHEN DRILLING HOLES FOR POST-INSTALLED ANCHORS.

POST-INSTALLED ANCHOR HOLES SHALL BE ADEQUATELY CLEANED PER THE MANUFACTURER'S RECOMMENDATIONS FOR THE EPOXY SELECTED BY THE ENGINEER OF RECORD.

STRUCTURAL STEEL

DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH LATEST EDITION THE "MANUAL OF STEEL CONSTRUCTION" AND "THE SPECIFICATION FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.

SHOP DRAWINGS FOR FABRICATION AND ERECTION OF ALL STEEL MEMBERS SHALL BE SUBMITTED IN ACCORDANCE WITH AISC STANDARDS NOTED ABOVE. DETAILS SHALL ASSUME EQUAL BEAM SPACING BETWEEN COLUMN LINES (OR BETWEEN BEAMS THAT ARE SPECIFICALLY LOCATED ON THE DRAWINGS), UNLESS NOTED OTHERWISE ON THE DRAWINGS.

STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

MISC. SHAPES (S.M.C.) I, PLATES, BARS
ASTM A36 (F_y = 36 KSI)
SQUARE/RECTANGULAR TUBING (HSS)
ASTM A500 GRADE B (F_y = 46 KSI)
PIPE
ASTM A53

ALL STEEL, INCLUDING MASONRY RELIEF ANGLES AND UNTELS, EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED. REFER TO ARCHITECTURAL FOR ADDITIONAL PAINTING REQUIREMENTS AS APPLICABLE.

WELDING PROCEDURES SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S (AWS) STRUCTURAL WELDING CODES AND SHALL BE PERFORMED BY CERTIFIED WELDERS.

WELDED CONNECTIONS FOR STEEL MEETING ASTM A992 OR A572 SHALL BE MADE WITH E70XX LOW HYDROGEN ELECTRODES. OTHER WELDED CONNECTION TO BE MADE WITH REGULAR E70XX ELECTRODES.

WELDS SHOWN ON THE DRAWINGS ARE THE MINIMUM REQUIRED BY DESIGN. MINIMUM WELD SIZE SHALL BE 3/16". ALL STEEL MEMBERS, UNLESS OTHERWISE NOTED, SHALL BE CONNECTED TO OTHER STEEL MEMBERS TO BE CONNECTED WITH 3/8" FILLET WELD ALL AROUND, UNLESS NOTED OTHERWISE.

FABRICATION SHOP DRAWING SHALL REFLECT WELDS IN ACCORDANCE WITH AWS REQUIREMENTS. SHOP DRAWINGS SHALL DETAIL ALL SHOP AND FIELD WELDS. SHOP AND FIELD WELD SHOWN ON DRAWINGS FOR CONCEPT. GENERAL CONTRACTOR SHALL COORDINATE WELDING SEQUENCE REQUIREMENTS, UNLESS NOTED OTHERWISE.

EXISTING ROOF - TRUSS REPAIR ALLOWANCE:


THE GENERAL CONTRACTOR SHALL INCLUDE IN THEIR BASE BID AN ALLOWANCE FOR THE AMOUNT OF \$25,000 TO BE USED AT THE EOR'S DISCRETION FOR THE REPAIR OF EXISTING BUILD-UP ROOF, TRUSSES, CONNECTOR PLATES, WEBS, AND CHORDS. ALLOWED EXPENDITURES UP TO THE ALLOWANCE SHALL BE CREDITED BACK TO THE OWNER UPON COMPLETION OF THE REPAIRS.

PROJECT DESCRIPTION:

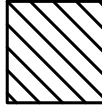
1. ABATE THE AREA OF FLOOR TILE, MASTIC AND CARPET AS SHOWN WITH HATCHING. THE FLOOR TILE AND MASTIC ARE POSITIVE FOR ASBESTOS.
2. ABATE THE AREA OF DRYWALL AND MUD AS SHOWN WITH LINETYPE. THE DRYWALL AND MUD ARE POSITIVE FOR ASBESTOS.
3. CONTRACTOR SHALL MAKE ALL NOTIFICATIONS TO LARCO AS PER CHAP 27 AND 51 OF THE STATE REGULATIONS.
4. CONTRACTOR SHALL ERECT ALL NECESSARY CRITICAL BARRIERS FOR WORK AREA.
5. THE AIR MONITORING OF THE PROJECT SHALL BE PROVIDED THROUGH THE OWNER.
6. PRIOR TO START OF WORK, A COPY OF EMERGENCY CONTACTS, ON SITE SUPERVISOR AND WORK SCHEDULED SHALL BE PROVIDED TO LEE RITTER AT RITTER CONSULTING ENGINEERS.
7. A COPY OF THE AAC-2 NOTIFICATION SHALL BE ON SITE AT THE START OF WORK. IF AN EMERGENCY WAS CALLED IN, A RECORD OF THE CALL MUST BE EMAILED TO THE DESIGNER WITH DAY/TIME OF CALL.

GENERAL NOTES:

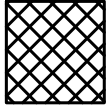
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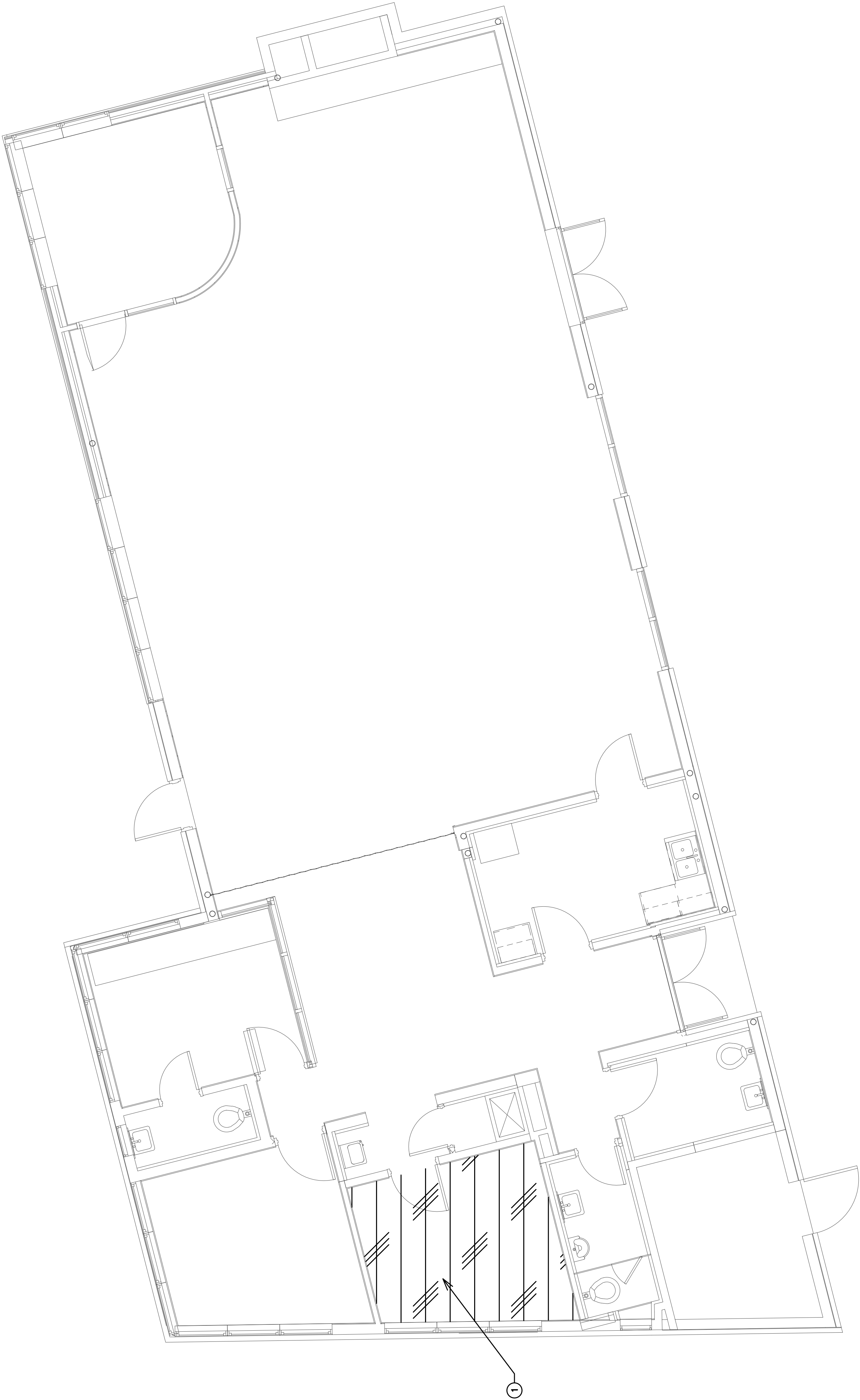
FLOOR TILE 12"x12" AND MASTIC POSITIVE FOR ASBESTOS.
APPROXIMATELY: 120 SF
- ②



BLACK MASTIC UNDERNEATH CARPET POSITIVE FOR ASBESTOS.
BLDG 1 APPROXIMATELY: 1050 SF
BLDG 2 APPROXIMATELY: 1050 SF
BLDG 3 APPROXIMATELY: 1050 SF
BLDG 4 APPROXIMATELY: 1050 SF
BLDG 5 APPROXIMATELY: 1050 SF
TOTAL: 5250 SF
- ③



FLOOR TILE 9"x9" AND MASTIC POSITIVE FOR ASBESTOS.
APPROXIMATELY: 500 SF



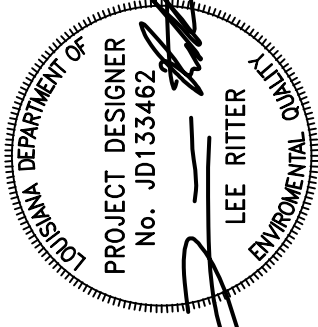
Safe Haven Cardinal Cove Renovations
Safe Haven Campus, 23929 Cardinal Cove
Mandeville LA 70448

Project Status

Issue date

04.17.2025

revisions



job no.

2252.1

sheet title

Abatement

Plan

sheet no.

ENV1

ADDITIONAL INFORMATION

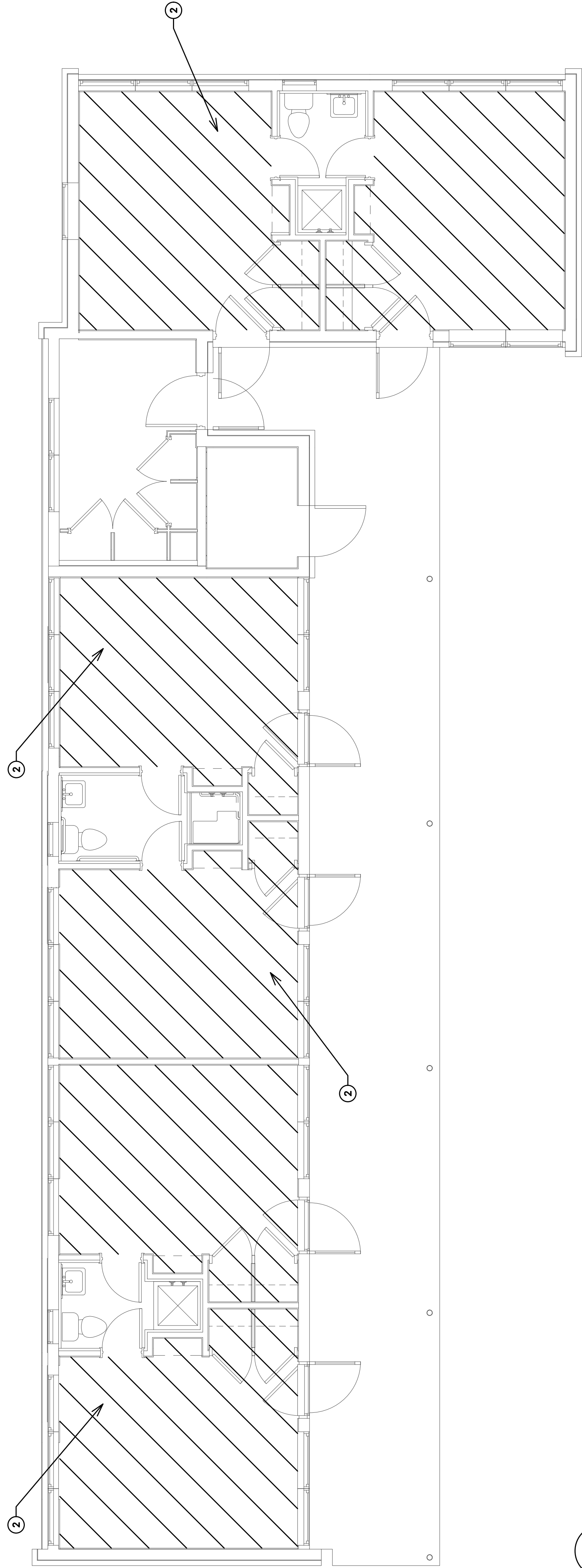
INSPECTOR NAME: DUSTIN VIVIANO
INSPECTOR ACCREDITATION NO.: M197450
DATE OF INSPECTION: OCTOBER 31, 2023

CERTIFIED LAB NAME: CA LABS, LLC
LAB ACCREDITATION NO.: 03069
ANALYSIS DATE: NOVEMBER 2, 2023

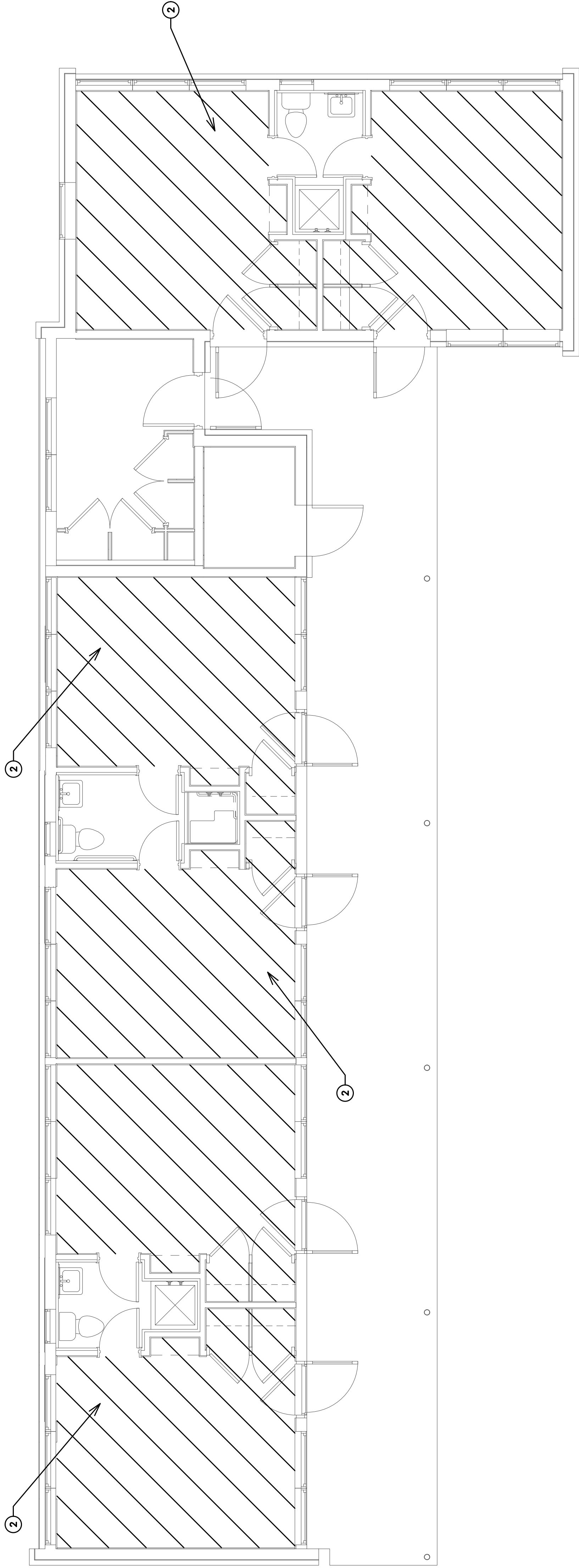
DESIGNER NAME: LEE RITTER
DESIGNER ACCREDITATION NO.: JD133462

USE AND INTERPRETATION OF THIS DRAWING

1. GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, ARTICLE 1 AND DOCUMENTS AND PARTS OF THE CONTRACT, SHALL BE THE BASIS OF THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
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4. AS INSTRUMENTS OF SERVICE, ALL DRAWINGS, SPECIFICATIONS AND COPIES THEREOF FURNISHED BY THE ARCHITECT SHALL BE THE BASIS OF THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
5. ANY CHANGES TO THE DRAWINGS SHALL BE MADE BY THE ARCHITECT AND SHALL BE FURNISHED TO THE CONTRACTOR IN WRITING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.



1 Existing Building 1 - Asbestos Abatement
1/4" = 1'-0"



2 Existing Building 2 - Asbestos Abatement
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GENERAL NOTES:

1. FLOOR TILE 12"x12" AND MASTIC POSITIVE FOR ASBESTOS. APPROXIMATELY: 120 SF
2. BLACK MASTIC UNDERNEATH CARPET POSITIVE FOR ASBESTOS.
BLDG 1 APPROXIMATELY: 1050 SF
BLDG 2 APPROXIMATELY: 1050 SF
BLDG 3 APPROXIMATELY: 1050 SF
BLDG 4 APPROXIMATELY: 1050 SF
BLDG 5 APPROXIMATELY: 1050 SF
TOTAL: 5250 SF
3. FLOOR TILE 9"x9" AND MASTIC POSITIVE FOR ASBESTOS. APPROXIMATELY: 500 SF

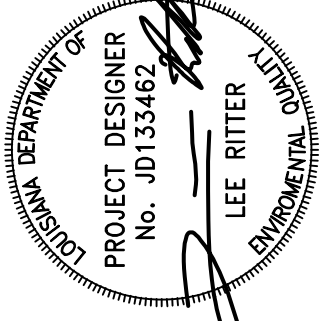
Safe Haven Cardinal Cove Renovations
Safe Haven Campus, 23929 Cardinal Cove
Mandeville LA 70448

Project Status

Issue date

04.17.2025

revisions



job no.

2252.1

sheet title

Abatement

Plan

sheet no.

ENV2

ADVE INFORMATION

INSPECTOR NAME: DUSTIN VIVIANO
INSPECTOR ACCREDITATION NO.: M197450
DATE OF INSPECTION: OCTOBER 31, 2023

CERTIFIED LAB NAME: CA LABS, LLC
LAB ACCREDITATION NO.: 03069
ANALYSIS DATE: NOVEMBER 2, 2023

DESIGNER NAME: LEE RITTER
DESIGNER ACCREDITATION NO.: JD133462

USE AND INTERPRETATION OF THIS DRAWING

1. GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, ARTICLE 1 AND DOCUMENTS ARE PART OF THIS DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE STARTING THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE STARTING THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE STARTING THE WORK.

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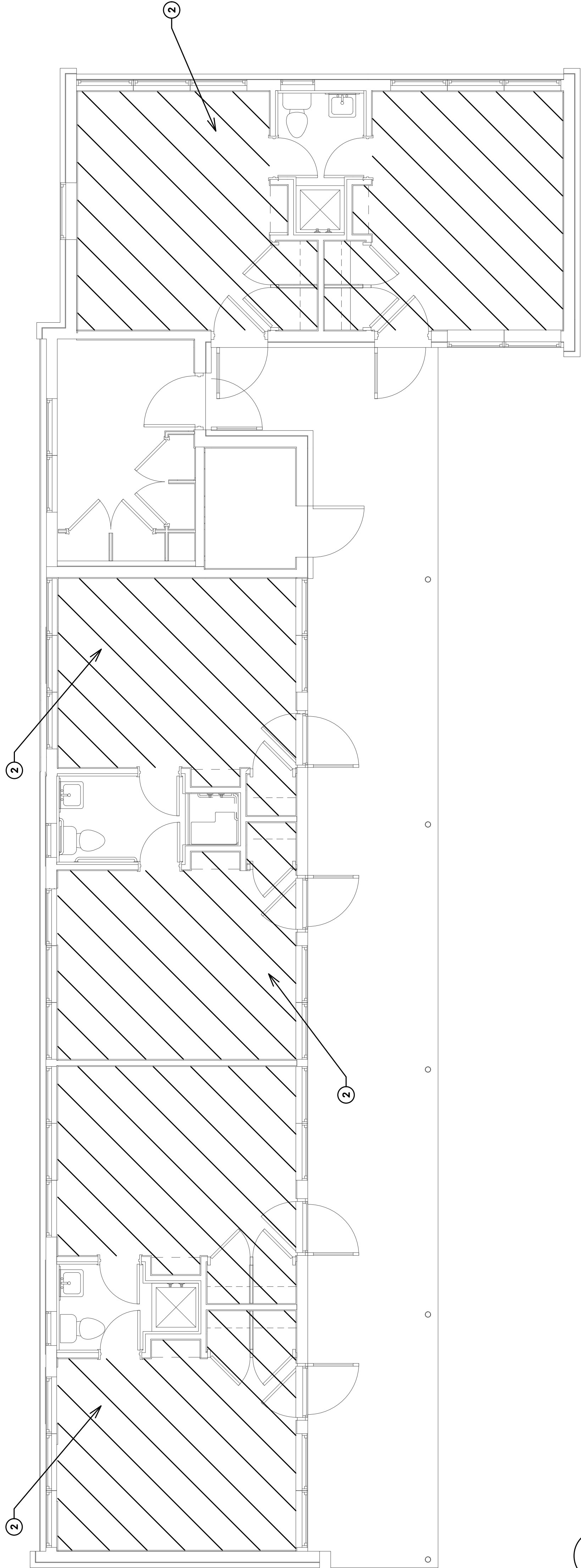
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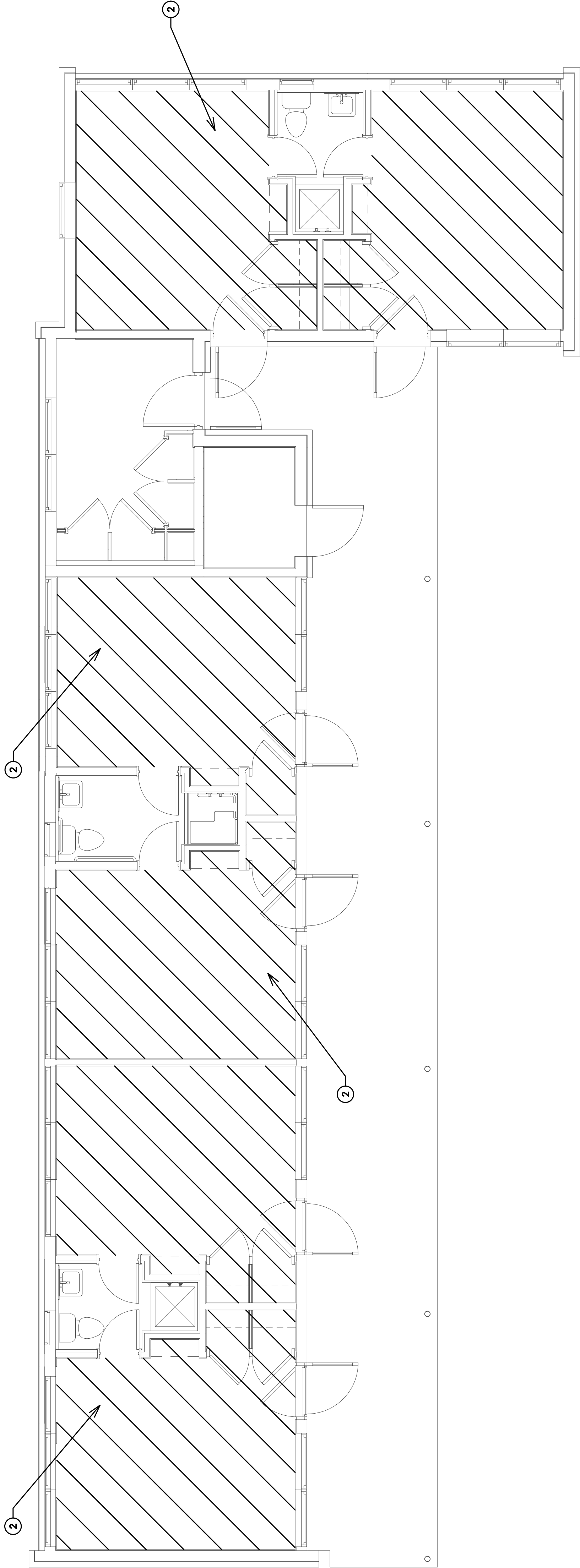
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PROJECT ENGINEER: LEE RITTER
RITTER CONSULTING ENGINEERS, LTD.



1 Existing Building 3 - Asbestos Abatement
1/4" = 1'-0"



2 Existing Building 4 - Asbestos Abatement
1/4" = 1'-0"

- PROJECT DESCRIPTION:**
1. ABATE THE AREA OF FLOOR TILE, MASTIC AND CARPET AS SHOWN WITH HATCHING. THE FLOOR TILE AND MASTIC ARE POSITIVE FOR ASBESTOS.
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BLDG 1 APPROXIMATELY: 1050 SF
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BLDG 4 APPROXIMATELY: 1050 SF
BLDG 5 APPROXIMATELY: 1050 SF
TOTAL: 5250 SF
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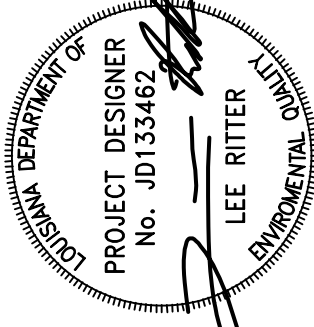
Safe Haven Cardinal Cove Renovations
Safe Haven Campus, 23929 Cardinal Cove
Mandeville LA 70448

Project Status

Issue date

04.17.2025

revisions



job no.

2252.1

sheet title

Abatement

Plan

sheet no.

ENV3

ADDITIONAL INFORMATION

INSPECTOR NAME: DUSTIN VIVIANO
INSPECTOR ACCREDITATION NO.: M197450
DATE OF INSPECTION: OCTOBER 31, 2023

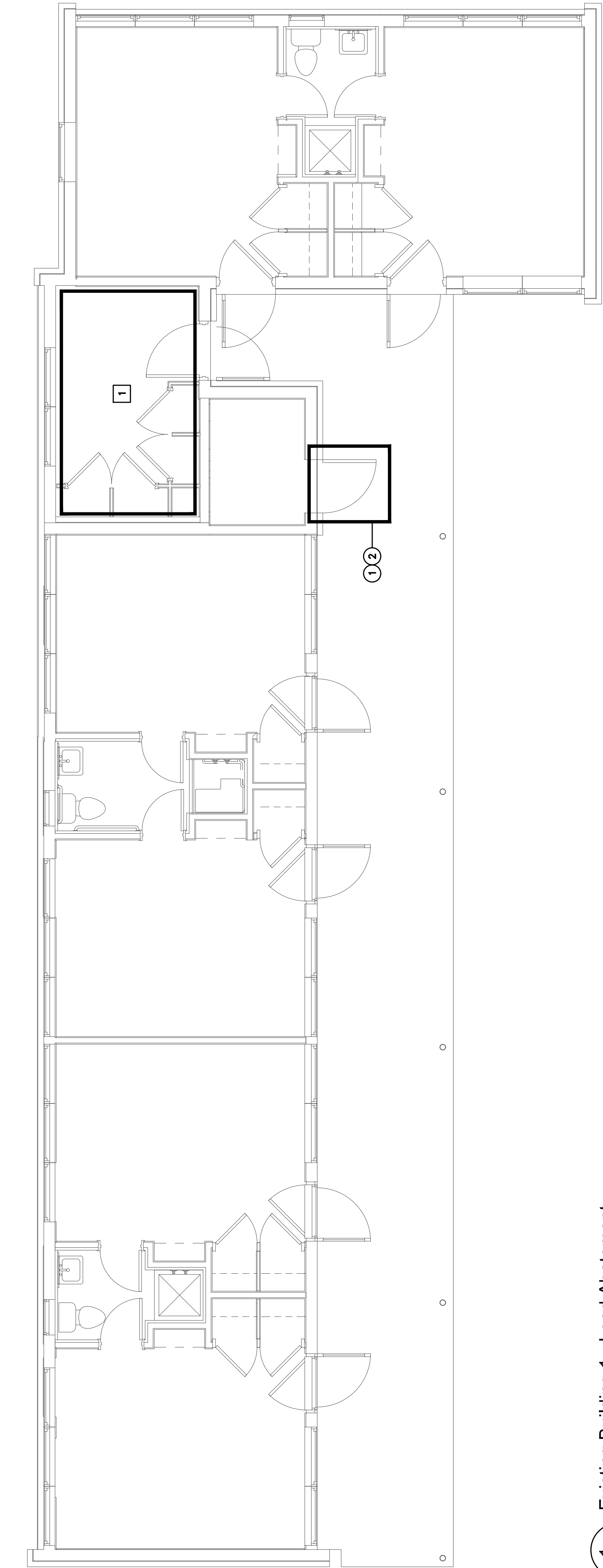
CERTIFIED LAB NAME: CA LABS, LLC
LAB ACCREDITATION NO.: 03069
ANALYSIS DATE: NOVEMBER 2, 2023

DESIGNER NAME: LEE RITTER
DESIGNER ACCREDITATION NO.: JD133462

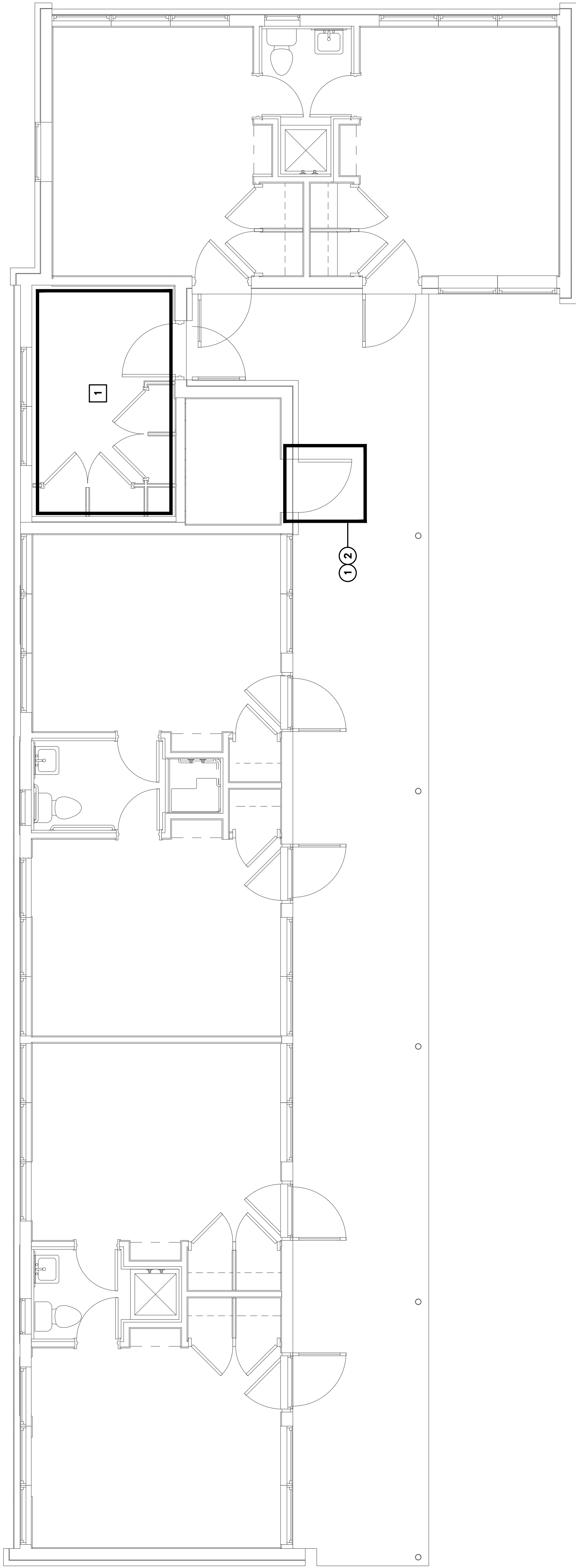
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DESIGNED BY: LEE RITTER
PROJECT NO.: 2252.1
RITTER CONSULTING ENGINEERS, LTD.



1 Existing Building 1 - Lead Abatement
1/4" = 1'-0"



2 Existing Building 2 - Lead Abatement
1/4" = 1'-0"

- LEAD NOTES:**
- CONTRACTOR SHALL MAKE ALL NOTIFICATIONS TO LADQ AS PER CHAPTER 28 OF STATE REGULATIONS.
 - CONTRACTOR SHALL REMOVE ALL LEAD PAINT COMPONENTS AS STATED BELOW FOR BUILDINGS AND PERFORM TCLP FOR PROPER DISPOSAL.
 - CONTRACTOR SHALL CHEMICALLY STRIP ALL LEAD PAINT SURFACES AS STATE BELOW FOR BUILDINGS AND DISPOSE OF PROPERLY.
 - CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES TO BUILDING AND PROPERTY.
 - CONTRACTOR SHALL ERECT ALL NECESSARY CRITICAL BARRIERS FOR WORK AREA.
 - CONTRACTOR TO PROVIDE PHOTOS PRIOR TO START OF WORK.
 - TO START OF WORK, A COPY OF EMERGENCY CONTACTS ON SITE SUPERVISOR, AND WORK SCHEDULE SHALL BE PROVIDED TO LEE RITTER AT RITTER CONSULTING ENGINEERS.

LEAD COMPONENT REMOVAL:

- DOOR CASING/TRIM & FRAME (APPROXIMATELY: 5 TOTAL)
- DOOR (APPROXIMATELY: 5 TOTAL)
- SOFFIT

LEAD CHEMICALLY STRIP REMOVAL:

- CONCRETE BLOCK WALLS

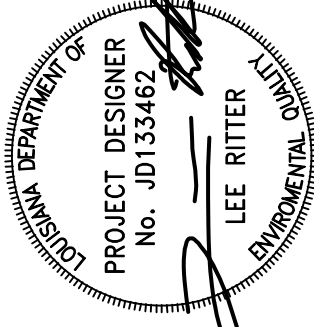
Safe Haven Cardinal Cove Renovations
Safe Haven Campus, 23929 Cardinal Cove
Mandeville LA 70448

Project Status

Issue date

04.17.2025

revisions



job no.

2252.1

sheet title

Lead Removal
Plan

sheet no.

ENV5

ADVF INFORMATION

INSPECTOR NAME: DUSTIN VIVIANO
INSPECTOR ACCREDITATION NO.: M197450
DATE OF INSPECTION: OCTOBER 31, 2023

CERTIFIED LAB NAME: CA LABS, LLC
LAB ACCREDITATION NO.: 03069
ANALYSIS DATE: NOVEMBER 2, 2023

DESIGNER NAME: LEE RITTER
DESIGNER ACCREDITATION NO.: JD133462

USE AND INTERPRETATION OF THIS DRAWING

1. GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, ARTICLE 1. ALL DOCUMENTS ARE PART OF THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS.

2. BY USE OF THE DRAWINGS FOR CONSTRUCTION OF THE PROJECT, THE OWNER REPRESENTS THAT HE HAS REVIEWED AND APPROVED THE DRAWINGS, AND THAT THE CONSTRUCTION DOCUMENTS PREPARED BY THE ARCHITECT ARE COMPLETE AND CORRECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS.

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4. AS INSTRUMENTS OF SERVICE, ALL DRAWINGS, SPECIFICATIONS AND COPIES THEREOF FURNISHED BY THE ARCHITECT ARE THE PROPERTY OF THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS.

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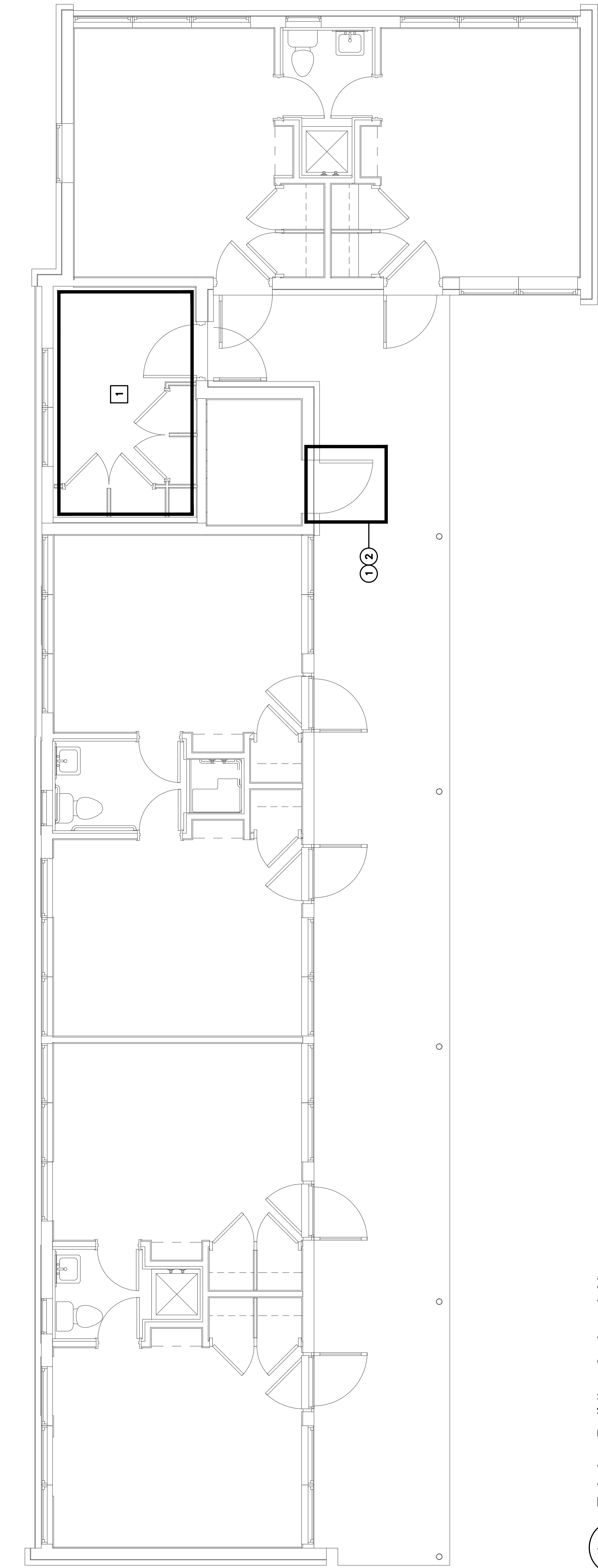
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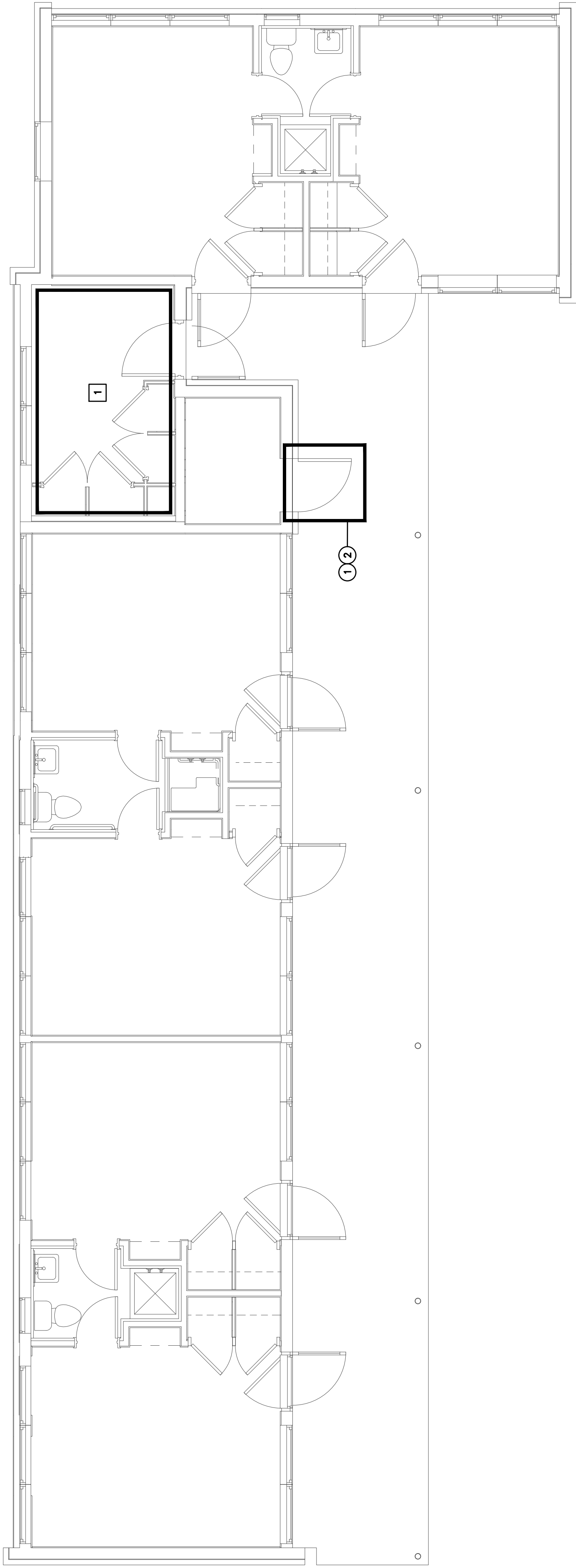
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DESIGNED BY: LEE RITTER
PROJECT DESIGNER
RITTER CONSULTING ENGINEERS, LTD.



1 Existing Building 3 - Lead Abatement
1/4" = 1'-0"



2 Existing Building 4 - Lead Abatement
1/4" = 1'-0"

- LEAD NOTES:**
- CONTRACTOR SHALL MAKE ALL NOTIFICATIONS TO LADQ AS PER CHAPTER 28 OF STATE REGULATIONS.
 - CONTRACTOR SHALL REMOVE ALL LEAD PAINT COMPONENTS AS STATED BELOW FOR BUILDINGS AND PERFORM TCLP FOR PROPER DISPOSAL.
 - CONTRACTOR SHALL CHEMICALLY STRIP ALL LEAD PAINT SURFACES AS STATE BELOW FOR BUILDINGS AND DISPOSE PROPERLY.
 - CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES TO BUILDING AND PROPERTY.
 - CONTRACTOR SHALL ERECT ALL NECESSARY CRITICAL BARRIERS FOR WORK AREA.
 - CONTRACTOR TO PROVIDE PHOTOS PRIOR TO START OF WORK.
 - TO START OF WORK, A COPY OF EMERGENCY CONTACTS ON SITE SUPERVISOR, AND WORK SCHEDULE SHALL BE PROVIDED TO LEE RITTER AT RITTER CONSULTING ENGINEERS.

LEAD COMPONENT REMOVAL:

- DOOR CASING/TRIM & FRAME (APPROXIMATELY: 5 TOTAL)
- DOOR (APPROXIMATELY: 5 TOTAL)
- SOFFIT

LEAD CHEMICALLY STRIP REMOVAL:

- CONCRETE BLOCK WALLS

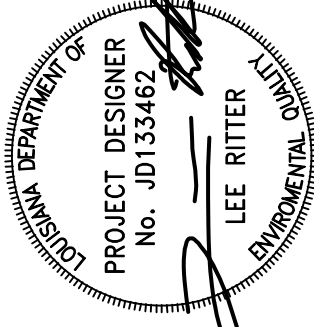
Safe Haven Cardinal Cove Renovations
Safe Haven Campus, 23929 Cardinal Cove
Mandeville LA 70448

Project Status

Issue date

04.17.2025

revisions



job no.

2252.1

sheet title

Lead Removal
Plan

sheet no.

ENV6

ADVE INFORMATION

INSPECTOR NAME: DUSTIN VIVIANO
INSPECTOR ACCREDITATION NO.: M197450
DATE OF INSPECTION: OCTOBER 31, 2023

CERTIFIED LAB NAME: CA LABS, LLC
LAB ACCREDITATION NO.: 03069
ANALYSIS DATE: NOVEMBER 2, 2023

DESIGNER NAME: LEE RITTER
DESIGNER ACCREDITATION NO.: JD133462

USE AND INTERPRETATION OF THIS DRAWING

1. GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, ARTICLE 1. ALL DOCUMENTS ARE PART OF THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS.

2. BY USE OF THE DRAWINGS FOR CONSTRUCTION OF THE PROJECT, THE OWNER AGREES THAT HE HAS REVIEWED AND APPROVED THE DRAWINGS, AND THAT THE CONSTRUCTION DOCUMENTS SHALL BE THE BASIS FOR THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS.

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4. AS INSTRUMENTS OF SERVICE, ALL DRAWINGS, SPECIFICATIONS AND COPIES THEREOF FURNISHED BY THE ARCHITECT ARE THE PROPERTY OF THE ARCHITECT. NO PART OF THE DRAWINGS SHALL BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT. ANY REPRODUCTION OR USE OF THE DRAWINGS WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT SHALL BE CONSIDERED AS VIOLATION OF THE ARCHITECT'S CONTRACT OR OTHER RESERVED RIGHTS.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DOCUMENTS BEFORE ANY WORK BEGINS.

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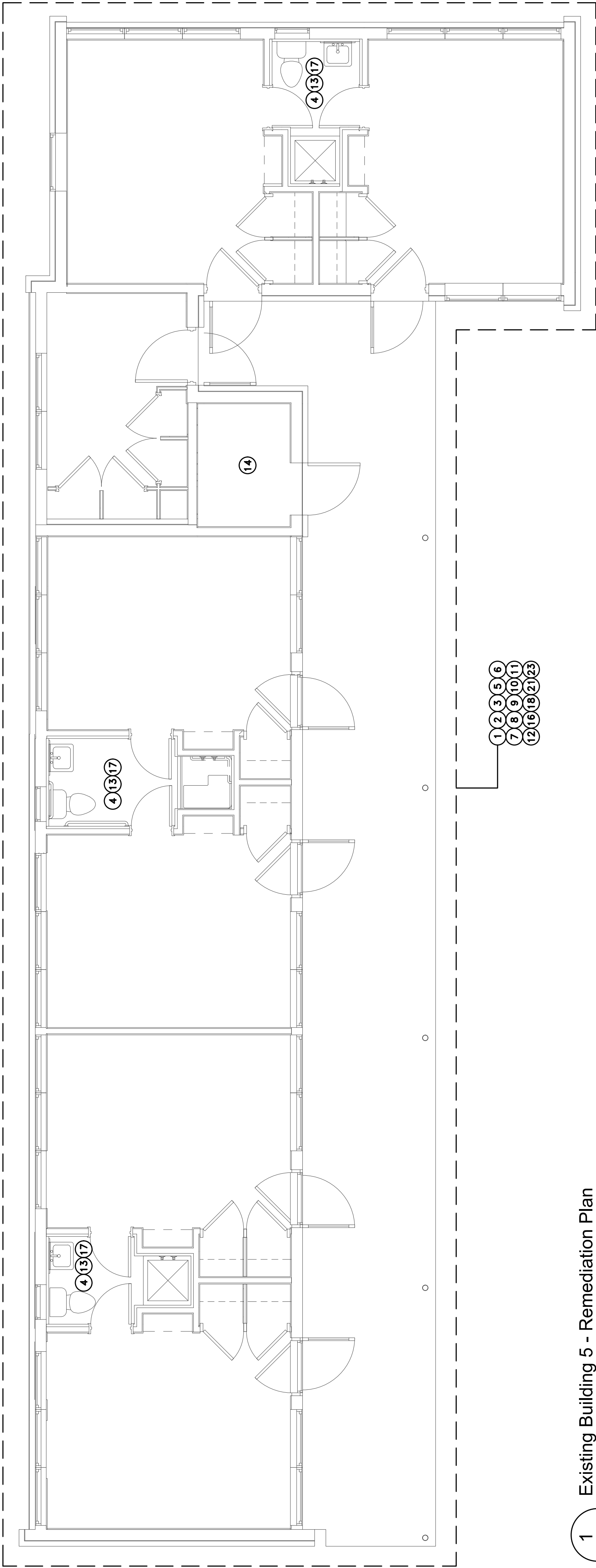
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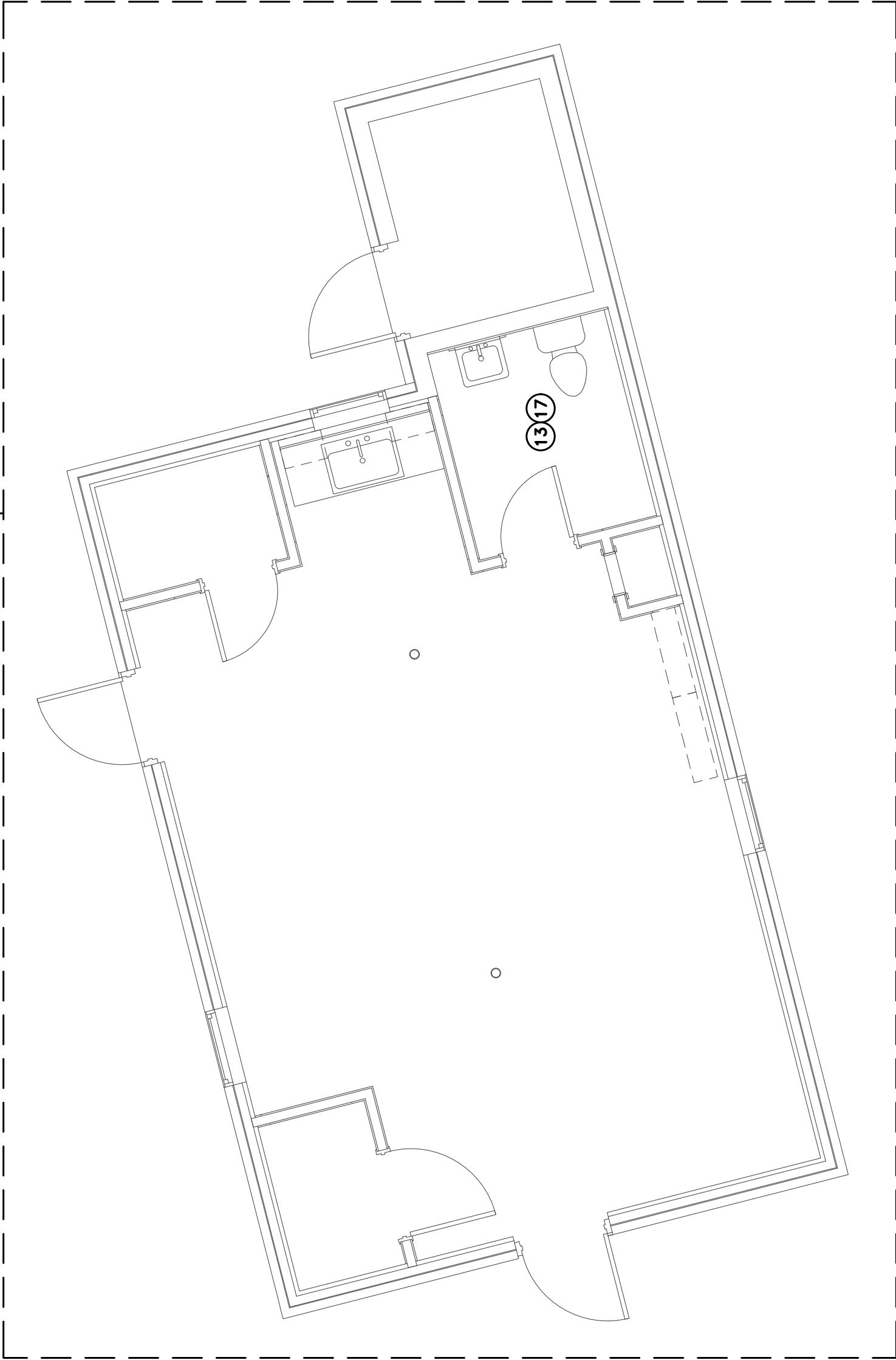
DESIGNED BY: LEE RITTER
PROJECT NO. 2252.1
RITTER CONSULTING ENGINEERS, LTD.



1 Existing Building 5 - Remediation Plan

1/4" = 1'-0"

ENV11



2 Existing Storage Building - Remediation Plan

1/4" = 1'-0"

ENV11

REMEDATION NOTES:

- 1 ALL WORKERS SHALL BE IN PPE.
- 2 PROPERLY DISPOSE OF ALL DAMAGED GOODS.
- 3 ALL AREAS TO BE TREATED WITH REMEDIATION PRODUCTS IF NOT SPECIFICALLY DESCRIBED BELOW IN THE APPROVED SCOPE.
- 4 CERAMIC TILE WALLS: SHALL BE WIPED USING TOP TO BOTTOM AND LEFT TO RIGHT METHODS. THE WIPING SHALL INCLUDE ANY/ALL INSETS, WINDOWS, DOOR FRAMES, CLOSETS, BUT NOT LIMITED TO THESE COMPONENTS.
- 5 GYPSUM BOARD/DRYWALL WALL REMOVAL SHALL BE REMOVED USING METHODS THAT WILL KEEP MOLD CONTAMINATED SECTIONS FROM BECOMING AIRBORNE. THIS MATERIAL SHALL BE DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL IS TO BE CONSIDERED MOLD CONTAMINATED WASTE.
- 6 CEMENTITIOUS BACKING AND PLASTER WALL CLEANING: SHALL BE WIPED USING TOP TO BOTTOM AND LEFT TO RIGHT METHODS.
- 7 CEMENTITIOUS BACKING AND PLASTER CEILING CLEANING: SHALL BE WIPED USING TOP TO BOTTOM AND LEFT TO RIGHT METHODS. THIS MATERIAL SHALL BE REMOVED USING METHODS THAT WILL KEEP MOLD CONTAMINATED SECTIONS FROM BECOMING AIRBORNE. THIS MATERIAL SHALL BE DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL IS TO BE CONSIDERED MOLD CONTAMINATED WASTE.
- 8 DOOR SANITIZATION: SHALL BE WIPED USING TOP TO BOTTOM AND LEFT TO RIGHT METHODS.
- 9 LIGHT PANELS SANITIZATION: SHALL BE WIPED CLEANING USING REMEDIATION CHEMICALS.
- 10 DUCTWORK (FLEX DUCT) REMOVAL: SHALL BE REMOVED IN 3'-4' SECTIONS. DOUBLE SEALED WITH 6 MIL POLYSHEETING AND ADHESIVE TAPE. MATERIALS SHALL BE CONSIDERED MOLD CONTAMINATED WASTE.
- 11 DUCTWORK (SHEET METAL) AND PLenums REMOVAL: SHALL BE REMOVED IN 3'-4' SECTIONS. DOUBLE SEALED WITH 6 MIL POLYSHEETING AND ADHESIVE TAPE. MATERIALS SHALL BE CONSIDERED MOLD CONTAMINATED WASTE.
- 12 HVAC GRILLES/DIFFUSERS REMOVAL: SHALL BE REMOVED USING METHODS THAT WILL KEEP MOLD CONTAMINATED SECTIONS FROM BECOMING AIRBORNE. THIS MATERIAL SHALL BE DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL IS TO BE CONSIDERED MOLD CONTAMINATED WASTE.
- 13 CEILING MOUNTED EXHAUST FAN: SHALL BE CLEANED AND SANITIZED USING REMEDIATION CHEMICALS.
- 14 HVAC EQUIPMENT (AIR HANDLING UNITS): SHALL BE CLEANED AND TREATED WITH REMEDIATION CHEMICALS BY A NADCA CERTIFIED TECHNICIAN.
- 15 HVAC EQUIPMENT (WINDOW UNITS): SHALL BE REMOVED USING METHODS THAT WILL KEEP MOLD CONTAMINATED SECTIONS FROM BECOMING AIRBORNE. THIS MATERIAL SHALL BE DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL IS TO BE CONSIDERED MOLD CONTAMINATED WASTE.
- 16 REMOVE REMAINING CONTENTS: THIS MATERIAL SHALL BE DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL IS TO BE CONSIDERED MOLD CONTAMINATED WASTE.
- 17 PLUMBING FIXTURES: SHALL BE WIPED USING REMEDIATION CHEMICALS.
- 18 WINDOWS: SHALL BE CLEANED AND SANITIZED USING REMEDIATION CHEMICALS.
- 19 ACOUSTICAL CEILING TILE (12"x12"): ACOUSTICAL CEILING TILE ON CEILINGS SHALL BE REMOVED USING METHODS THAT WILL KEEP MOLD CONTAMINATED SECTIONS FROM BECOMING AIRBORNE. THIS MATERIAL SHALL BE DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL IS TO BE CONSIDERED MOLD CONTAMINATED WASTE.
- 20 ACOUSTICAL CEILING TILE (24"x24"): ACOUSTICAL CEILING TILE ON CEILINGS SHALL BE REMOVED USING METHODS THAT WILL KEEP MOLD CONTAMINATED SECTIONS FROM BECOMING AIRBORNE. THIS MATERIAL SHALL BE DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL IS TO BE CONSIDERED MOLD CONTAMINATED WASTE.
- 21 BUILT-IN CABINETS: SHALL BE REMOVED USING METHODS THAT WILL KEEP MOLD CONTAMINATED SECTIONS FROM BECOMING AIRBORNE. THIS MATERIAL SHALL BE DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL IS TO BE CONSIDERED MOLD CONTAMINATED WASTE.
- 22 LAY-IN CEILING GRID: SHALL BE REMOVED USING METHODS THAT WILL KEEP MOLD CONTAMINATED SECTIONS FROM BECOMING AIRBORNE.
- 23 SUB ASSEMBLES ATTACHED TO WALLS: INCLUDING BUT NOT LIMITED TO BULLETIN BOARDS, DRY ERASE BOARDS, SMART BOARDS, PEG BOARDS, ACOUSTICAL PANELS, SHELVES, BOOKSHELVES, CABINETRY, ETC. SHALL BE DETACHED AND IF RESTORABLE, CLEANED.
- 24 VCT FLOORING: DELAMINATED VCT FLOORING SHALL BE DISENGAGED AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
- 25 CARPET: SHALL BE REMOVED USING METHODS THAT WILL KEEP MOLD CONTAMINATED SECTIONS FROM BECOMING AIRBORNE. THIS MATERIAL SHALL BE DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL IS TO BE CONSIDERED MOLD CONTAMINATED WASTE.
- 26 COVE BASE: WOOD AND VINYL COVE BASE SHALL BE REMOVED AND DOUBLE WRAPPED/BAGGED IN 6 MIL POLYSHEETING/BAGS AND SEALED. THIS MATERIAL SHALL BE CONSIDERED MOLD CONTAMINATED WASTE.

ADVF INFORMATION

INSPECTOR NAME: DUSTIN VIVIANO
INSPECTOR ACCREDITATION NO.: MI197450
DATE OF INSPECTION: OCTOBER 31, 2023

CERTIFIED LAB NAME: CA LABS, LLC
LAB ACCREDITATION NO.: 03069
ANALYSIS DATE: NOVEMBER 2, 2023

DESIGNER NAME: LEE RITTER
DESIGNER ACCREDITATION NO.: JD133462

USE AND INTERPRETATION OF THIS DRAWING

1. GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, ARTICLE 1 AND DOCUMENTS AND PARTS OF THE CONTRACT, SHALL BE THE BASIS FOR THE INTERPRETATION OF THIS DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRELATION OF THE DRAWING WITH THE CONTRACT AND THE INTERPRETATION OF THE DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRELATION OF THE DRAWING WITH THE CONTRACT AND THE INTERPRETATION OF THE DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRELATION OF THE DRAWING WITH THE CONTRACT AND THE INTERPRETATION OF THE DRAWING.

2. IN THE EVENT OF A DISCREPANCY BETWEEN THE DRAWING AND THE CONTRACT, THE CONTRACT SHALL PREVAIL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRELATION OF THE DRAWING WITH THE CONTRACT AND THE INTERPRETATION OF THE DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRELATION OF THE DRAWING WITH THE CONTRACT AND THE INTERPRETATION OF THE DRAWING.

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LEE RITTER
PROJECT DESIGNER
No. JD133462
ARCHITECT
JULY 2010

Safe Haven Cardinal Cove Renovations
Safe Haven Campus, 23929 Cardinal Cove
Mandeville LA 70448

Project Status

Issue date

04.17.2025

revisions

PROJECT DESIGNER
No. JD133462
ARCHITECT
JULY 2010

LEE RITTER

job no.

2252.1

sheet title

Remediation
Plan

sheet no.

ENV11