



**Project:** **Buellton USD Roof Replacement Project**

- **Jonata Middle School:** 301 2<sup>nd</sup> St, Buellton, CA 93427
- **Oak Valley Elementary School:** 595 2nd St, Buellton, CA 93427

**Owner:** Buellton Union School District  
301 2nd Street  
Buellton, CA 93427

**Architect:** PBK Architects  
1327 Archer Ave, Suite 110  
San Luis Obispo, CA 93401

**Construction Manager:** TELACU Construction Management  
604 N. Eckhoff Street  
Orange, CA 92868

---

**BID ADDENDUM 01**

**Revision:** **April 4, 2024**

*Note: The following revisions and clarifications to the Bid Documents (plans and specifications) shall become a part of the Contract Documents upon award of Bid. All Bidders are required to incorporate all necessary changes, additions, or deductions into their proposals.*

*In case of conflict between Bid Documents and this Addendum, this Addendum shall govern. Bidder shall acknowledge receipt of this Addendum on the Bid Form as noted in the Instruction to Bidders, failure to do so may subject Bidder to disqualification.*

**Volume I-Jonata MS Canopy Repair Project Manual-Bid Procedures-Contract-Specs**

**1. Updated Division 0 Documents:**

- Division 1 Table of Contents Added
- Notice to Bidders / Invitation to Bid – New Bid Date
  - Bid Date has been moved to **Wednesday, April 17<sup>th</sup> at 2:00 p.m.**
- Bid Form Correction
- Voluntary Job Walk Sign-in Sheet

**2. Division 1 Specifications:**

- Division 1 Specifications Added

**3. Existing Information and Documentation provided:**

- AHERA Reports
- As-Builts: Dropbox Link to As-Builts (both sites):  
[https://www.dropbox.com/scl/fo/g3olsuvbrhiuhccn1nte/APoJ\\_Q7IRc6YveTyIhIpe4M?rlkey=ugqyxpa41wr36gke9r00jqjpj&dl=0](https://www.dropbox.com/scl/fo/g3olsuvbrhiuhccn1nte/APoJ_Q7IRc6YveTyIhIpe4M?rlkey=ugqyxpa41wr36gke9r00jqjpj&dl=0)



4. **Pre-Bid RFIs**
5. **BEAM Professionals Addendum 1A – Jonata Middle School Roof Replacement**
6. **BEAM Professionals Addendum 1B – Oak Valley Elementary School Roof Replacement**

Please call (714) 336-0899 if any potential bidders would like to schedule a site visit prior to bid.

Prepared by,

TELACU Construction Management

Attachments:

1. Volume I - Project Manual-Bid Procedures-Contract-Specs (Addendum-1)
  - a. Updated Table of Contents
  - b. Division 1 Specifications Added
  - c. Job Walk Sign-In Sheet
2. Division 1 Specifications
3. AHERA Reports
4. As-Builts (use Dropbox link)
5. Pre-Bid RFIs
6. BEAM Professionals Addendum 1A – Jonata Middle School Roof Replacement dated 3/27/2024
7. BEAM Professionals Addendum 1B – Oak Valley Elementary School Roof Replacement dated 3/27/2024

# **Division 1 Table of Contents**

## **SPECIFICATIONS – GENERAL REQUIREMENTS**

<b>Division 01</b>	<b>Section</b>	<b>Title</b>
	01 11 00	Summary of Work
	01 12 10	Contract Forms and Submittals
	01 20 00	Price and Payment Procedures
	01 23 00	Alternates and Unit Pricing
	01 25 10	Product Options and Substitutions
	01 26 00	Contract Modification Procedures
	01 26 10	Requests for Information
	01 31 00	Coordination and Project Meetings
	01 32 16	Construction Schedule - Network Analysis
	01 33 00	Submittals
	01 40 00	Quality Requirements
	01 42 13	Abbreviations and Acronyms
	01 42 16	General Definitions and References
	01 45 29	Testing Laboratory Services
	01 50 00	Temporary Facilities and Controls
	01 52 10	Site Standards
	01 56 39	Temporary Tree and Plant Protection
	01 60 00	Materials and Equipment
	01 66 10	Delivery, Storage and Handling
	01 73 00	Execution
	01 73 10	Cutting and Patching
	01 77 00	Contract Closeout and Final Cleaning
	01 78 23	Operation and Maintenance Data
	01 78 36	Warranties
	01 78 39	Record Documents
	01 91 00	Commissioning



**Updated  
Notice to Bidders  
and Bid Form**

**DOCUMENT 00 11 16**

**NOTICE TO BIDDERS / INVITATION TO BID**

1. Notice is hereby given that the governing board ("Board") of the **Buellton Union School District** ("District") will receive sealed bids to construct the following project:

**BUSD Roof Replacement** ("Project" or "Contract")

2. Contractors must submit sealed bids on or before **2:00 p.m., April 17, 2024** at the District Office, located at 301 2nd St, Buellton, CA 93427, at or after which time the District will open the bids and publicly read them aloud. Any claim by a Bidder of error in its bid must be made in compliance with Public Contract Code § 5100, et seq. Any bid that is submitted after this time shall be non-responsive and returned to the Bidder. The District is not responsible for Bids that are received after the deadline noted above.
3. The Project consists of:
  - I. **Jonata Middle School:** Roof replacement at buildings A, A1-A5, B, C, D, E, F, G, H and connecting walkway J.
  - II. **Oak Valley Elementary School:** Selective roofing membrane replacement at buildings A (mechanical well), C, D, E, M, and N
4. All bids shall be on the form provided by the District. Each bid must conform and be responsive to all pertinent Contract Documents, including, but not limited to, the Instructions to Bidders.
5. To bid on this Project, the Bidder is required to possess one or more of the following State of California Contractor Licenses: C-39 and/or B (General Construction)

The Bidder's license(s) must be active and in good standing at the time of the bid opening and must remain so throughout the term of the Contract.

6. As security for its Bid, each Bidder shall provide with its Bid form
  - I. a bid bond issued by an admitted surety insurer on the form provided by the District,
  - II. cash, or
  - III. a cashier's check or a certified check, drawn to the order of the **Buellton Union School District**, in the amount of ten percent (10%) of the total bid price. This bid security shall be a guarantee that the Bidder shall, within seven (7) calendar days after the date of the Notice of Award, enter into a contract with the District for the performance of the services as stipulated in the bid.
7. The successful Bidder shall be required to furnish a 100% Performance Bond and a 100% Payment Bond if it is awarded the contract for the Project.
8. The successful Bidder may substitute securities for any monies withheld by the District to ensure performance under the Contract, in accordance with the provisions of Public Contract Code § 22300.
9. The successful Bidder and its subcontractors shall pay all workers on the Project not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District, pursuant to Labor Code § 1770 et seq. Prevailing wage rates are on file with the District and are available to any interested party on request or at [www.dir.ca.gov/oprl/statistics\\_and\\_databases.html](http://www.dir.ca.gov/oprl/statistics_and_databases.html). Bidders and Bidders' subcontractors shall comply with the registration and qualification requirements pursuant to Labor Code §§ 1725.5 & 1771.1

10. A **voluntary** pre-bid conference and site visit will be held on March 25, 2024, 2:00 p.m. at Jonata Middle School 301 2nd St, Buellton, CA 93427. All participants are required to sign in at the Administration Building. The Site Visit is expected to take approximately 1 hour.
11. Contract Documents are available on March 15, 2024, for review on the website:  
[https://www.buelltonusd.org/facilities/request\\_for\\_proposal](https://www.buelltonusd.org/facilities/request_for_proposal)
12. In addition, Contract Documents are available for review at the following builders' exchanges:  
  
Kern County Builders Exchange: <https://www.kcbex.com/>  
Dodge Construction Network: <https://www.construction.com/>  
Construct Connect: <https://www.constructconnect.com/>
13. The District's Board reserves the right to reject any and all bids and/or waive any irregularity in any bid received. If the District awards the Contract, the security of unsuccessful Bidder(s) shall be returned within sixty (60) days from the time the award is made. Unless otherwise required by law, no Bidder may withdraw its bid for ninety (90) days after the date of the bid opening.
14. The District shall award the Contract, if it awards it at all, to the lowest responsive responsible Bidder based on: The base bid amount plus the following alternates:
  - I. **Jonata MS Alternate #1 (refer to Jonata MS roofing plans):** Apply new roof coating per specification section 07 56 20 over building "I" fitness rooms and canopy walkways "J1" & "J2" where indicated on plans.
  - II. **Oak Valley ES Alternate #1 (refer to Oak Valley ES roofing plans):** Cleanout and repair all gutters and downspouts at buildings F, F1, I, I1, J, and K. Clean and prepare surface for new sealant application at standing seam metal joints and fasteners. Install new sealant at standing seam metal joints and fasteners to ensure a watertight and weatherproof metal roofing system.

END OF DOCUMENT

**DOCUMENT 00 41 13**

**BID FORM**

To: Governing Board of **Buellton Union School District** ("District")

From: \_\_\_\_\_  
(Proper Name of Bidder)

1. **Total Bid.** The undersigned declares that the Contract Documents including, without limitation, the Invitation to Bid, the Instructions to Bidders, and the Special Conditions have been read, and agrees and proposes to furnish all necessary labor, materials, and equipment to perform and furnish all work in accordance with the terms and conditions of the Contract Documents, including, without limitation, the Drawings and Specifications for the following project:

**BUSD Roof Replacement** ("Project" or "Contract")

and will accept in full payment for that Work the following total lump sum amount, all taxes included:

***TOTAL BASE BID (Jonata and Oak Valley Base Bid Amounts Combined)***

**NOTE: IF THERE ARE ALLOWANCES IDENTIFIED IN THIS BID FORM, DO** \$ \_\_\_\_\_ **Dollars**  
**NOT INCLUDE ANY ALLOWANCE(S) AMOUNTS IN THESE BID AMOUNTS.**

2. **Additive/Deductive Alternates:**

**Jonata Middle School Alternate #1**

- III. **Jonata MS Alternate #1 (refer to Jonata MS roofing plans):**  
Apply new roof coating per specification section 07 56 20 over building "I" fitness rooms and canopy walkways "J1" & "J2" where indicated on plans.

Additive/Deductive: \$ \_\_\_\_\_ **Dollars**

**Oak Valley Elementary School Alternate #1**

- IV. **Oak Valley ES Alternate #1 (refer to Oak Valley ES roofing plans):** Cleanout and repair all gutters and downspouts at buildings F, F1, I, I1, J, and K. Clean and prepare surface for new sealant application at standing seam metal joints and fasteners. Install new sealant at standing seam metal joints and fasteners to ensure a watertight and weatherproof metal roofing system.

Additive: \$ \_\_\_\_\_ **Dollars**

Descriptions of alternates are primarily scope definitions and do not necessarily detail the full range of materials and processes needed to complete the construction.

3. **Unit Price(s).** The Bidder’s Base Bid includes the following unit price(s), which the Bidder must provide and the District may, at its discretion, utilize in valuing additive and/or deductive change orders: N/A
  
4. **Contract Review.** The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this bid, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its bid, if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.
  
5. **Requests for Clarification.** The undersigned has notified the District in writing of any discrepancies or omissions or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents, and has contacted the Construction Manager before bid date to verify the issuance of any clarifying Addenda.
  
6. **Contract Time.** The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.
  
7. **Contractual Provisions.** The undersigned hereby acknowledges and agrees to be bound by following provisions and all provisions in the Contract Documents:
  - The liquidated damages clause of the General Conditions and Agreement.
  
  - The “Changes in the Work” provisions in the General Conditions that limit the permitted charges and mark-ups on change orders and on the amount of home office overhead that the successful bidder can receive from the District.
  
  - The “Claims” provisions in the General Conditions that delineate the required process to submit and process disputes and claims.
  
  - The “COVID-19” provisions in the Contract Documents related to the Contractor’s staffing requirements and its compliance with all applicable and existing federal, state, and/or local statutes, orders, rules, regulations, ordinances, and/or directives relating to construction site safety in connection with COVID-19, and/or any similar virus or derivative strain.
  
8. **Bid Open for 90 Days.** It is understood that the District reserves the right to reject this bid and that the bid shall remain open to acceptance and is irrevocable for a period of ninety (90) days.
  
9. **Attachments.** The following documents are attached hereto:
  - The Bid Bond on the District's form or other security
  - The Designated Subcontractors List
  - The Noncollusion Declaration
  - Iran Contracting Act Certification
  
10. **Addenda Acknowledgement.** Receipt and acceptance of the following addenda is hereby acknowledged:

No. _____, Dated _____	No. _____, Dated _____
No. _____, Dated _____	No. _____, Dated _____
No. _____, Dated _____	No. _____, Dated _____
No. _____, Dated _____	No. _____, Dated _____

Or check here if **no** addenda were issued.

- 11. **Bidder's License.** Bidder acknowledges that the license required for performance of the Work is as stated in the Invitation to Bid. Bidder certifies that it is, at the time of bidding, and shall be throughout the period of the contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents. Bidder further certifies that it is regularly engaged in the general class and type of work called for in the Contract Documents.
- 12. **Labor Harmony.** The undersigned hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.
- 13. **DIR Registration.** Bidder shall ensure that it and its Subcontractors comply with the registration and compliance monitoring provisions of Labor Code section 1771.4, including furnishing its CPRs to the Labor Commissioner, and are registered pursuant to Labor Code section 1725.5.
- 14. **General Acknowledgement.** The Bidder represents that it is competent, knowledgeable, and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property. Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.
- 15. **False Claims Act.** Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Cal. Gov. Code, §12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.

Furthermore, Bidder hereby certifies to the District that all representations, certifications, and statements made by Bidder, as set forth in this bid form, are true and correct and are made under penalty of perjury.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

Signature \_\_\_\_\_

Signed by (Print Name) \_\_\_\_\_

Title of Person Signing \_\_\_\_\_

Name of Bidder \_\_\_\_\_

Type of Organization \_\_\_\_\_

Address of Bidder \_\_\_\_\_

Taxpayer's Identification No. of Bidder \_\_\_\_\_

Telephone Number \_\_\_\_\_

Fax Number \_\_\_\_\_

E-mail \_\_\_\_\_ Web page \_\_\_\_\_

Bidder's DIR Registration No.: No.: \_\_\_\_\_

Contractor's License No(s): No.: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

No.: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

No.: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

If Bidder is a corporation, provide the following:

Name of Corporation: \_\_\_\_\_

President: \_\_\_\_\_

Secretary: \_\_\_\_\_

Treasurer: \_\_\_\_\_

END OF DOCUMENT

# **Voluntary Job Walk Sign-in Sheet**





## Construction Management

Project: Roof Replacement

District: Buellton Union School District

Locations: Jonata Middle School & Oak Valley Elementary School

# Job Walk - Sign-In Sheet

Date: 3/25/2024

Time: 2:00 PM

	PRINT NAME	ORGANIZATION	LICENSE CLASSIFICATION	PHONE	Email Address
1	Cristian Jimenez	B&M Tear-Off	Demolition	925-503-7049	<a href="mailto:giobmtearoff@icloud.com">giobmtearoff@icloud.com</a>
2	Aaron Hill	Carlisle/BES	Manuf. Rep	415-371-8098	<a href="mailto:Ahill@buildingenclosuresolutions.com">Ahill@buildingenclosuresolutions.com</a>
3	Robert Flores	KRGS Roofing	C-39	951-663-6259	<a href="mailto:Robert@KRGSRoofing.com">Robert@KRGSRoofing.com</a>
4	Anothony Heredia	Kondike Construction	Demolition	909-395-0610	<a href="mailto:klondikeconstruction@gmail.com">klondikeconstruction@gmail.com</a>
5	Preeti D'Souza	TELACU CM	Construction Management	714-788-2617	<a href="mailto:pdsouza@telacu.com">pdsouza@telacu.com</a>
6	Alex Story	BEAM Professionals	Architect Representative	650-575-0857	<a href="mailto:alexander.story@beamprof.com">alexander.story@beamprof.com</a>
7	David Nichols	TELACU CM	Construction Management	714-336-0899	<a href="mailto:dnichols@telacu.com">dnichols@telacu.com</a>
8					
9					
10					
11					
12					

# **Added Division 1 Specifications**

**DOCUMENT 01 11 00**

**SUMMARY OF WORK**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Submittals; and
- 1.1.5. Temporary Facilities and Controls.

**1.2. SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS**

The Work may consist of the following:

- 1.2.1. Selective demolition and construction necessary for the **Buellton USD Roof Replacement Project**, including associated civil, architectural, structural, and/or electrical work as indicated in the Drawings and Specifications. Generally, these categories of work involve new finishes, adaptive re-use and modification of certain selected areas, re-roofing as needed.
- 1.2.2. The Project will involve the "phasing" and barricading of work areas as indicated on the Plans and enumerated in these Specifications.

**1.3. CONTRACTS**

Perform the Work under a single, fixed-price Contract.

**1.4. SPECIAL PROJECT REQUIREMENTS**

- 1.4.1. Hours of Work: Work is to be performed during regular work hours. Contractor shall coordinate its operations with activities taking place at each campus such as summer school. Contractor shall ensure that there are no disruptions to such activities.

**1.5. CODES, REGULATIONS AND STANDARDS**

- 1.5.1. The codes, regulations, and standards adopted by the State and federal agencies having jurisdiction shall govern minimum requirements for the Project. Where codes,

**DOCUMENT 01 11 00**

**SUMMARY OF WORK**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Submittals; and
- 1.1.5. Temporary Facilities and Controls.

**1.2. SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS**

The Work may consist of the following:

- 1.2.1. Selective demolition and construction necessary for the **Buellton USD Roof Replacement Project**, including associated civil, architectural, structural, and/or electrical work as indicated in the Drawings and Specifications. Generally, these categories of work involve new finishes, adaptive re-use and modification of certain selected areas, re-roofing as needed.
- 1.2.2. The Project will involve the "phasing" and barricading of work areas as indicated on the Plans and enumerated in these Specifications.

**1.3. CONTRACTS**

Perform the Work under a single, fixed-price Contract.

**1.4. SPECIAL PROJECT REQUIREMENTS**

- 1.4.1. Hours of Work: Work is to be performed during regular work hours. Contractor shall coordinate its operations with activities taking place at each campus such as summer school. Contractor shall ensure that there are no disruptions to such activities.

**1.5. CODES, REGULATIONS AND STANDARDS**

- 1.5.1. The codes, regulations, and standards adopted by the State and federal agencies having jurisdiction shall govern minimum requirements for the Project. Where codes,

regulations, and standards conflict with the Contract Documents, these conflicts shall be brought to the immediate attention of the District and the Architect.

- 1.5.2. Codes, regulations, and standards are as published effective as of date of bid opening, unless otherwise specified or indicated.

#### **1.6. EXAMINATION OF EXISTING CONDITIONS**

- 1.6.1. Contractor shall be held to have examined the Project Site and acquainted itself with the conditions of the Site and of the streets and roads approaching the Site.
- 1.6.2. Prior to commencement of Work, Contractor shall survey the Site and existing buildings and improvements to observe existing damage and defects such as cracks, sags, broken, missing or damaged glazing, other building elements and Site improvements, and other damage.
- 1.6.3. Should Contractor observe cracks, sags, and other damage to and defects of the Site and adjacent buildings, paving, and other items not indicated in the Contract Documents, Contractor shall immediately report same to the District and the Architect.

#### **1.7. CONTRACTOR'S USE OF PREMISES**

- 1.7.1. Contractor shall take all reasonable precautions for the safety of the students and the school employees throughout the duration of the Project.
- 1.7.2. If unoccupied and only with District's prior written approval, Contractor may use the building(s) at the Project Site without limitation for its operations, storage, and office facilities for the performance of the Work. If the District chooses to beneficially occupy any building(s), Contractor must obtain the District's written approval for Contractor's use of spaces and types of operations to be performed within the building(s) while so occupied. Contractor's access to the building(s) shall be limited to the areas indicated.
- 1.7.3. If the space at the Project Site is not sufficient for Contractor's operations, storage, office facilities and/or parking, Contractor shall arrange and pay for any additional facilities needed by Contractor, at no expense to District.
- 1.7.4. Contractor shall not interfere with others use of or access to occupied portions of the building(s) or adjacent property.
- 1.7.5. Contractor shall maintain corridors, stairs, halls, and other exit-ways of building clear and free of debris and obstructions at all times.
- 1.7.6. No one other than those directly involved in the demolition and construction or specifically designated by the District or the Architect shall be permitted in the areas of Work during demolition and construction activities.

#### **1.8. PROTECTION OF EXISTING STRUCTURES AND UTILITIES**

- 1.8.1. The Drawings show above-grade and below-grade structures, utility lines, and other installations that are known or believed to exist in the area of the Work. Contractor shall locate these existing installations before proceeding with excavation and other operations that could damage same; maintain them in service, where appropriate; and

repair damage to them caused by the performance of the Work. Should damage occur to these existing installations, the costs of repair shall be at the Contractor's expense and made to the District's satisfaction.

- 1.8.2. Contractor shall be alert to the possibility of the existence of additional structures and utilities. If Contractor encounters additional structures and utilities, Contractor will immediately report to the District for disposition of same as indicated in the General Conditions.

#### **1.9. UTILITY SHUTDOWNS AND INTERRUPTIONS**

- 1.9.1. Contractor shall give the District a minimum of three (3) days written notice in advance of any need to shut off existing utility services or to effect equipment interruptions. District will set exact time and duration for shutdown, and will assist Contractor with shutdown. Work required to re-establish utility services shall be performed by the Contractor.
- 1.9.2. Contractor shall obtain District's written approval as indicated in the General Conditions in advance of deliveries of material or equipment or other activities that may conflict with District's use of the building(s) or adjacent facilities.

#### **1.10. STRUCTURAL INTEGRITY**

- 1.10.1. Contractor shall be responsible for and supervise each operation and work that could affect structural integrity of various building elements, both permanent and temporary.
- 1.10.2. Contractor shall include structural connections and fastenings as indicated or required for complete performance of the Work.

**END OF DOCUMENT**

**DOCUMENT 01 12 10**

**CONTRACT FORMS AND SUBMITTALS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Submittals; and
- 1.1.5. Construction Schedule.

**2. REQUIREMENTS OF THE DISTRICT**

**2.1.** Contractor shall utilize the District's forms as indicated below. This requirement also applies to submittals, including the requirement that the Contractor and its Subcontractors, as indicated, utilize the software, internet and specific programs on this Project as indicated herein.

**2.2. DISTRICT FORMS**

All forms identified below shall utilize District forms available at the above referenced link. Contractor must only utilize these forms, including the programs, processes and software indicated below.

- 2.2.1. **Request for Information.** Contractor shall comply with all applicable provisions in Contract Documents relating to Requests for Information. Contractor shall submit all of its Requests for Information using District's Form attached hereto.
- 2.2.2. **Construction Directive.** Contractor shall comply with all applicable provisions in Contract Documents relating to Changes in the Work. All Construction Directives shall be issued using District's Form attached hereto.
- 2.2.3. **Price Request.** Contractor shall comply with all applicable provisions in Contract Documents relating to Price Requests. All Price Requests shall be issued using District's Form attached hereto.
- 2.2.4. **Proposed Change Order.** Contractor shall comply with all applicable provisions in Contract Documents relating to Changes in the Work. Contractor shall submit all of its Proposed Change Orders using District's Form attached hereto.
- 2.2.5. **Change Order.** Contractor shall comply with applicable provisions in Contract Documents relating to Changes in the Work. All Change Orders shall be issued using District's Form attached hereto.

## **2.3. CONTRACTOR SUBMITTALS**

All submittals required by the Contract Documents shall be submitted using the programs, processes and software indicated below. If no specific program or format is indicated, then Microsoft Word or Microsoft Excel is acceptable.

### **2.3.1. Preliminary Construction Schedule**

2.3.1.1. Microsoft Project or another program if pre-approved by the District.

### **2.3.2. Schedule of Values**

2.3.2.1. Utilize PCM or another program if pre-approved by the District.

### **2.3.3. Contractor's Completed Subcontractor List**

### **2.3.4. Contractor's Safety Plan**

### **2.3.5. Schedule of Submittals**

2.3.5.1. Utilize PCM or another program if pre-approved by the District.

### **2.3.6. Operations and Maintenance Manual & Instructions**

**END OF DOCUMENT**



**DOCUMENT 01 20 00**

**PRICE AND PAYMENT PROCEDURES**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any).

**1.2. DESCRIPTION**

- 1.2.1. This Document contains procedures to be followed by the Contractor to request payment.
- 1.2.2. **IF THERE IS ANY INCONSISTENCY IN THIS DOCUMENT WITH THE PROVISIONS IN THE GENERAL CONDITIONS AND THE SPECIAL CONDITIONS THAT THE CONTRACTOR SHALL COMPLY WITH RELATED TO CHANGES AND/OR REQUESTS FOR CHANGES (e.g., "PAYMENTS," "SCHEDULE OF VALUES"), THOSE PROVISIONS IN THE GENERAL CONDITIONS AND THE SPECIAL CONDITIONS SHALL TAKE PRECEDENCE.**

**1.3. SECTION INCLUDES**

- 1.3.1. Schedule of Values.
- 1.3.2. Application for Payment.

**1.4. SCHEDULE OF VALUES**

- 1.4.1. Provide a breakdown of the Contract Price with enough detail to facilitate continued evaluation of Applications for Payment and Progress Reports.
- 1.4.2. Contractor must update and resubmit the Schedule of Values before the next Invoice or Application for Payment when Change Orders or Construction Change Directives result in a change in the Contract Price.
- 1.4.3. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule. Comply with the provisions in the General Conditions regarding the Schedule of Values.
  - 1.4.3.1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
    - 1.4.3.1.1. Application for Payment forms.

- 1.4.3.1.2. Submittal Schedule.
- 1.4.3.1.3. Contractor's Construction Schedule.
- 1.4.3.2. Submit the Schedule of Values to District as indicated in the Contract Documents and, if an updated Schedule of Values is needed, then no later than ten (10) days before the date scheduled for submittal of the next Application(s) for Payment.
- 1.4.3.3. Sub-schedules: Where the Work is separated into phases requiring separately phased payments, provide sub-schedules showing values correlated with each phase of payment.
- 1.4.4. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.
  - 1.4.4.1. Identification: Include the following Project identification on the Schedule of Values:
    - 1.4.4.1.1. Project name and location.
    - 1.4.4.1.2. Name of District's Representative.
    - 1.4.4.1.3. District's contract number
    - 1.4.4.1.4. District's name and address.
    - 1.4.4.1.5. Date of submittal.
  - 1.4.4.2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
    - 1.4.4.2.1. Related Specification document, section or division.
    - 1.4.4.2.2. Description of the Work.
    - 1.4.4.2.3. Name of subcontractor.
    - 1.4.4.2.4. Name of manufacturer or fabricator.
    - 1.4.4.2.5. Name of supplier.
    - 1.4.4.2.6. Change Orders (numbers) that affect value.
    - 1.4.4.2.7. Dollar value.
      - 1.4.4.2.7.1. Percentage of the Contract Price to nearest one-hundredth percent, adjusted to total 100 percent.
  - 1.4.4.3. Provide a breakdown of the Contract Price in enough detail to facilitate continued evaluation of Applications for Payment and progress reports.

Provide several line items for principal subcontract amounts, where appropriate. Include separate line items under required principal subcontracts for operation and maintenance manuals, punch list activities, Project Record Documents, and demonstration and training.

1.4.4.4. Round amounts to nearest whole dollar; total shall equal the Contract Price.

1.4.4.5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.

1.4.4.6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.

1.4.4.7. Allowances (if any): Provide a separate line item in the Schedule of Values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.

1.4.4.8. Each item in the Schedule of Values and Applications for Payments shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

1.4.5. Schedule Updating: Update and resubmit the Schedule of Values before the next Application for Payment if there is a change in the Contract Price.

## **1.5. APPLICATIONS FOR PAYMENT**

1.5.1. **Form:** Contractor shall utilize AIA Form G702 - Application and Certificate for Payment and AIA Form G703 - Continuation Sheet, or District-approved form with the same information as these AIA forms.

1.5.2. **Content and Format:** District shall use Schedule of Values for listing items in its Application for Payment.

1.5.3. Each Application for Payment shall be consistent with previous applications and payments as certified and paid for by District.

**END OF DOCUMENT**



**DOCUMENT 01 23 00**

**ALTERNATES AND UNIT PRICING**

**1. ALTERNATES AND UNIT PRICES**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Bid Form and Proposal; and
- 1.1.5. Instruction to Bidders.

**2. ALTERNATES**

**2.1. DESCRIPTION**

An amount proposed by Contractor and stated in its Bid Form for certain work defined in the Instruction to Bidders, Bid Form or Contract Documents that may be added to or deducted from the Base Bid amount. The acceptance or rejection of any of the alternates is strictly at the option of the District and subject to District's acceptance of Contractor's stated prices contained in this Proposal.

The cost or credit for each alternate is the net addition to or deduction from the Contract Price to incorporate the alternate into the Work. No other adjustments are made to the Contract Price.

**2.2. GENERAL:**

- 2.2.1. Coordination: Contractor shall modify or adjust adjacent work as necessary to completely integrate work of the alternate into the Project.
  - 2.2.1.1. Include as part of each alternate, miscellaneous devices, accessories and similar items incidental to or required for a complete installation whether or not indicated as part of the alternate.
  - 2.2.1.2. Include as part of each alternate, the costs of related coordination, modification, or adjustments.
- 2.2.2. If District accepts an alternate, Contractor shall perform the work of the alternate under the same conditions as other Work required by Contract Documents.
- 2.2.3. Notification: Immediately following award of the Contract, Contractor shall notify all of its Subcontractor(s) in writing of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.

- 2.2.4. Schedule of Alternates: A Schedule of Alternates is included at the end of this Document. Specifications referenced in the Schedule of Alternates contain requirements for materials necessary to achieve the Work described under each alternate.

**3. UNIT PRICING**

**3.1. DESCRIPTION**

An amount proposed by Contractor and stated in its Bid Form for certain work defined in the Instruction to Bidders and Bid Form that may be priced by unit. The acceptance or rejection of any of the unit prices is strictly at the option of the District and subject to District's acceptance of Contractor's stated prices contained in the Bid Form and may be subsequently negotiated prior to incorporation on Change Order(s).

**3.2. GENERAL**

Contractor shall completely state all required figures based on Unit Prices required in the Bid Form. Where scope of Work is decreased, all Work pertaining to the item, whether specifically stated or not, shall be omitted and where scope of Work is increased, all work pertaining to that item required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

**3.3. UNIT PRICES**

Furnish unit prices for each of the named items on a square foot, lineal foot, or per each basis, as requested and applicable. Unit prices shall include all labor, materials, services, profit, overhead, insurance, bonds, taxes, and all other incidental costs of Contractor, subcontractors, and supplier(s).

**4. EXECUTION**

**END OF DOCUMENT**

**DOCUMENT 01 25 10**

**PRODUCT OPTIONS AND SUBSTITUTIONS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any); and
- 1.1.4. Instructions to Bidders.

**1.2. DOCUMENT INCLUDES**

- 1.2.1. Product options.
- 1.2.2. Limitations on Substitutions.
- 1.2.3. Regulatory Requirements.
- 1.2.4. Substitution Representation.
- 1.2.5. Submittal Procedure.
- 1.2.6. District's Review.

**1.3. DEFINITIONS**

- 1.3.1. Requests for changes in products, materials, or equipment required by Contract Documents proposed by the Contractor prior to and after award of the Contract are considered requests for substitutions. Contractor must refer to the Instructions to Bidders, the General Conditions and the Special Conditions for limitations on when requests for substitution(s) are permitted on Project. The following are not considered substitutions:
  - 1.3.1.1. Revisions to Contract Documents requested by the District or Architect.
  - 1.3.1.2. Specified options of products, materials, and equipment included in Contract Documents.
- 1.3.2. Whenever in the Specifications any material, product, thing, or service is indicated or specified by grade, patent, or proprietary name, or by name of manufacturer, that Specification shall be deemed to be used for the purpose of facilitating the description

of the material, product, thing, or service, and shall be deemed to be followed by the words "or equal," except:

1.3.2.1. When designated to match other material, product, thing, or service in use on a particular public improvement either completed or in the course of completion;  
or

1.3.2.2. When designated as a field test or experiment.

#### **1.4. PRODUCT OPTIONS**

1.4.1. **Products Specified by Reference Standards or by Description Only:** Any Product meeting those standards or description.

1.4.2. **Products Specified by Naming One or More Manufacturers with or without Provision for Substitution:** Products of manufacturers named and meeting specifications with substitution of Products or manufacturer only when submitted under provisions of this section.

#### **1.5. LIMITATIONS ON SUBSTITUTIONS**

1.5.1. **Requests for substitution prior to bid or after bid, shall only be permitted as indicated in and in accordance with requirements specified in the Instructions to Bidders and the Special Conditions.**

1.5.2. The Bid shall be based upon the standards of quality established by those items of equipment and/or materials which are specifically identified in the Contract Documents.

1.5.3. Burden of proof of merit of requested substitution is the responsibility of the Contractor.

1.5.4. It is the sole responsibility of Contractor to submit the proper content of any requests for substitutions. Incomplete submittals will be rejected.

#### **1.6. REGULATORY REQUIREMENTS**

1.6.1. It shall be the responsibility of Contractor to obtain all regulatory approvals required for proposed substitutions.

1.6.2. All regulatory approvals shall be obtained for proposed substitutions prior to submittal of substitution request to Architect.

1.6.3. All costs incurred by the District in obtaining regulatory approvals for proposed substitutions to include the costs of the Architect and any authority having jurisdiction over the Project shall be reimbursed to the District. Costs of these services shall be reimbursed regardless of final acceptance or rejection of substitution.

1.6.4. Substitutions of materials or work procedures which affect the health, safety and welfare of the public shall have prior approval of the Division of the State Architect (DSA) field representative.



**1.7. SUBSTITUTION REPRESENTATION**

- 1.7.1. In submitting a request for substitution, Contractor makes the representation that:
- 1.7.2. Contractor has investigated the proposed substitution and determined that it meets or exceeds the quality level of the specified product;
- 1.7.3. Contractor has determined that all components of the proposed substitution are identical and fully interchangeable with the product name and number specified;
- 1.7.4. Contractor will provide the same warranty or guarantee for the substitution as for the specified product;
- 1.7.5. Contractor will coordinate installation and make changes to other work which may be required for the work to be completed with no additional cost to the District;
- 1.7.6. Contractor waives claims for additional cost or time extension which may subsequently become apparent; and
- 1.7.7. Contractor will reimburse District for the cost of District's and Architect's review or redesign services associated with substitution request.

**1.8. SUBMITTAL PROCEDURE**

- 1.8.1. Submit six (6) copies of each request.
- 1.8.2. Submit request using District's Substitution Request Form as indicated in Contract Forms and Submittals. Substitution requests that are not on District's required form shall be returned without review.
- 1.8.3. Limit each request to one proposed substitution.
- 1.8.4. Request to include sufficient data so that direct comparison of proposed substitution can be made.
- 1.8.5. Provide complete documentation for each request. Documentation shall include the following information, as appropriate, as a minimum:
  - 1.8.5.1. Statement of cause for substitution request.
  - 1.8.5.2. Identify product by specification section and article number.
  - 1.8.5.3. Provide manufacturer's name, address, and phone number. List fabricators, suppliers, and installers as appropriate.
  - 1.8.5.4. List similar projects where proposed substitution has been used, dates of installation and names of Architect and District.
  - 1.8.5.5. List availability of maintenance services and replacement materials.
  - 1.8.5.6. Documented or confirmation of regulatory approval.

- 1.8.5.7. Product data, including drawings and descriptions of products.
  - 1.8.5.8. Fabrication and installation procedures.
  - 1.8.5.9. Samples of proposed substitutions.
  - 1.8.5.10. Itemized comparison of significant qualities of the proposed substitution with those of the product specified. Significant qualities may include size, weight, durability, performance requirements and visual effects.
  - 1.8.5.11. Coordination information, including a list of changes or modifications needed to other items of work that will become necessary to accommodate proposed substitution.
  - 1.8.5.12. Statement on the substitutions effect on the Construction Schedule.
  - 1.8.5.13. Cost information including a proposal of the net reduction in cost to the Contract Price if the proposed substitution is accepted.
  - 1.8.5.14. Certification that the substitution is equal to or better in every respect to that required by the Contract Documents and that substitution will perform adequately in the application intended.
  - 1.8.5.15. Waiver of right to additional payment or time that may subsequently become necessary because of failure of substitution to perform adequately.
- 1.8.6. Inadequate warranty, vagueness of submittal, failure to meet specified requirements, or submittal of insufficient data will be cause for rejection of substitution request.

**1.9. DISTRICT'S REVIEW**

- 1.9.1. The District will accept or reject proposed substitution within a reasonable amount of time.
- 1.9.2. If a request is made prior to bid opening and the District has not completed its review, Contractor shall base its bid on the product specified only.
- 1.9.3. There shall be no claim for additional time for review of proposed substitutions.
- 1.9.4. Final acceptance of a substitution submitted prior to the date established for the receipt of bids will be in the form of an addendum.

**END OF DOCUMENT**

**DOCUMENT 01 26 00**

**CONTRACT MODIFICATION PROCEDURES**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Allowances;
- 1.1.5. Product Options and Substitutions; and
- 1.1.6. Project Coordination.

**1.2. DESCRIPTION**

- 1.2.1. **CONTRACTOR SHALL COMPLY WITH THE PROVISIONS IN THE GENERAL CONDITIONS AND THE SPECIAL CONDITIONS THAT RELATE TO CHANGES AND/OR REQUESTS FOR CHANGES (e.g., "Change in the Work").**

**END OF DOCUMENT**

**DOCUMENT 01 26 10**

**REQUESTS FOR INFORMATION**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Documentation Requirements;
- 1.1.5. Electronic Data Transfer;
- 1.1.6. Submittals;
- 1.1.7. Contract Closeout and Final Cleaning;
- 1.1.8. Operation and Maintenance Data;
- 1.1.9. Warranties; and
- 1.1.10. Record Documents;

**1.2. DESCRIPTION**

This Document contains procedures to be followed by the Contractor to request Architect provide additional information necessary to clarify or amplify an item in the Contract Documents that Contractor thinks is not clearly shown or called for in the Drawings or Specifications or other portions of the Contract Documents, or to address issues that have arisen under field conditions.

**1.3. PROCEDURES**

- 1.3.1. Notification by Contractor:
  - 1.3.1.1. Submit all requirements for clarification or additional information, whether originated by the Contractor, a Subcontractor, or supplier at any tier, in writing to District as required by the Contract Documents.
  - 1.3.1.2. Number RFIs sequentially. Follow RFI number with sequential alphabetical suffix as necessary for each resubmission. For example, the first RFI would be "001." The second RFI would be "002."
  - 1.3.1.3. All RFIs shall reference all applicable Contract Document(s), including Specification section(s), detail(s), page number(s), drawing number(s), and sheet number(s), etc. Contractor shall make suggestions and interpretations of

the issue raised by each RFI. An RFI cannot modify the Contract Price, Contract Time, or the Contract Documents.

1.3.1.4. Limit each RFI to one subject.

1.3.1.5. Submit a RFI if one of the following conditions occurs:

1.3.1.5.1. Contractor discovers an unforeseen condition or circumstance that is not described in the Contract Documents.

1.3.1.5.2. Contractor discovers an apparent conflict or discrepancy between portions of the Contract Documents that appears to be inconsistent or is not reasonably inferred from the intent of the Contract Documents.

1.3.2. Contractor shall not:

1.3.2.1. Submit an RFI as a request for substitution.

1.3.2.2. Submit an RFI as a submittal.

1.3.2.3. Submit an RFI without first having thoroughly reviewed the Contract Documents.

1.3.2.4. Submit an RFI in a manner that suggests that specific portions of the Contract Documents are assumed to be excluded or by taking an isolated portion of the Contract Documents in part rather than whole.

1.3.2.5. Submit an RFI in an untimely manner without proper coordination and scheduling of Work related trades.

1.3.2.6. If Contractor submits an RFI contrary to the above, Contractor shall pay the cost of any review, which cost shall be deducted from the Contract Price.

1.3.3. Contractor shall be liable to the District for all costs incurred by the District associated with the processing, reviewing, evaluating and responding to any RFI, including without limitation, fees of the Architect and any other design consultant to the Architect or the District, that District reasonably determines:

1.3.3.1. Does not reflect adequate or competent supervision or coordination by the Contractor or any Subcontractor; or

1.3.3.2. Does not reflect the Contractor's adequate or competent knowledge of the requirements of the Work or the Contract Documents;

1.3.3.3. Requests an interpretation or decision of a matter where the information sought is equally available to the Contractor; or

1.3.3.4. Is not justified for any other reason.

#### **1.4. RESPONSE TIME**

- 1.4.1. Architect shall review RFIs and issue a response and instructions to Contractor within a reasonable time frame from the date the RFI is received and dated by the District.
- 1.4.2. Responses from the District will not change any requirement of the Contract unless so noted by the District in the response to the RFI. Should the Contractor contend that a response to an RFI causes a change to the Contract that requires a Change Order, the Contractor shall, before proceeding, give written notice to the District, indicating that the Contractor considers the District's response to the RFI to be a Change Order, as required by the Contract Documents.
- 1.4.3. Should Contractor direct its Subcontractors to proceed with the Work affected before receipt of a response from Architect, any portion of the Work which is not done in accordance with the Architect's ultimate interpretations, clarifications, instructions, or decisions is subject to removal or replacement at Contractor's sole expense and responsibility.

**END OF DOCUMENT**

**DOCUMENT 01 31 00**

**COORDINATION AND PROJECT MEETINGS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS:**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any); and
- 1.1.4. Technical Specifications.

**1.2. SECTION INCLUDES**

- 1.2.1. Coordination Responsibilities of the Contractor.
- 1.2.2. Field Engineering Responsibilities of the Contractor.
- 1.2.3. Preconstruction Conference.
- 1.2.4. Progress Meetings.
- 1.2.5. Pre-Installation Conferences.
- 1.2.6. Post Construction Dedication.

**1.3. COORDINATION RESPONSIBILITIES OF THE CONTRACTOR**

- 1.3.1. Coordinate scheduling, submittals, and Work of the Specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- 1.3.2. Prior to commencement of a particular type or kind of Work examine relevant information, contract documents, and subsequent data issued to the Project.
- 1.3.3. Verify that utility requirement characteristics of 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.
- 1.3.4. Closing up of holes, backfilling, and other covering up operations shall not proceed until all enclosed or covered Work and inspections have been completed. Verify before proceeding.
- 1.3.5. Coordinate space requirements and installation of mechanical and electrical Work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and

conduit as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

- 1.3.6. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- 1.3.7. In locations where several elements of mechanical and electrical Work must be sequenced and positioned with precision in order to fit into available space, prepare coordination drawings showing the actual conditions required for the installation. Prepare coordination drawings prior to purchasing, fabricating, or installing any of the elements required to be coordinated.
- 1.3.8. Closing up of walls, partitions or furred spaces, backfilling, and other covering up operations shall not proceed until all enclosed or covered Work and inspections have been completed. Verify before proceeding.
- 1.3.9. Coordinate completion and cleanup of Work of separate sections in preparation for completion and for portions of Work designated for District's occupancy.
- 1.3.10. After District occupancy of Project, coordinate access to Site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of District's activities.
- 1.3.11. Coordinate all utility company Work in accordance with the Contract Documents.
- 1.3.12. Key Personnel Names: Within fifteen (15) days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

#### **1.4. FIELD ENGINEERING RESPONSIBILITIES OF THE CONTRACTOR**

- 1.4.1. Contractor shall employ a Land Surveyor registered in the State of California and acceptable to the Architect.
- 1.4.2. Control datum for survey is that established by District provided survey. Contractor to locate and protect survey control and reference points.
- 1.4.3. Replace dislocated survey control points based on original survey control.
- 1.4.4. Provide field engineering services. Establish elevations, lines, and levels utilizing recognized engineering survey practices.
- 1.4.5. Upon completion of Work, submit certificate signed by the Land Surveyor that elevations and locations of Work are in conformance with Contract Documents. Record deviations on Record Drawings.



## **1.5. PRECONSTRUCTION CONFERENCE**

- 1.5.1. Construction Manager or Project Engineer will schedule a conference immediately after, and in no case more than ten (10) days after, receipt of fully executed Contract Documents prior to Project mobilization.
- 1.5.2. Mandatory Attendance: Construction Manager, Project Engineer, Project Inspector, Architect of Record, Contractor, Contractor's Project Manager, and Contractor's Job/Project Superintendent.
- 1.5.3. Optional Attendance: Architect's consultants, and utility company representatives.
- 1.5.4. Construction Manager shall preside at conference and the Project Architect shall prepare and record minutes and distribute copies.
- 1.5.5. Agenda:
  - 1.5.5.1. Execution of Owner-Contractor Agreement.
  - 1.5.5.2. Issue Notice to Proceed.
  - 1.5.5.3. Submission of executed bonds and insurance certificates.
  - 1.5.5.4. Distribution of Contract Documents.
  - 1.5.5.5. Submission of list of Subcontractors, list of Products, Schedule of Values, and Progress Schedule.
  - 1.5.5.6. Designation of responsible personnel representing the parties.
  - 1.5.5.7. Procedures for processing Change Orders.
  - 1.5.5.8. Procedures for Request for Information.
  - 1.5.5.9. Procedures for testing and inspecting.
  - 1.5.5.10. Procedures for processing applications for payment.
  - 1.5.5.11. Procedures for Project closeout.
  - 1.5.5.12. Use of Premises.
  - 1.5.5.13. Work restrictions.
  - 1.5.5.14. District's occupancy requirements or options.
  - 1.5.5.15. Responsibility for temporary facilities and controls.
  - 1.5.5.16. Construction waste management and recycling.
  - 1.5.5.17. Parking availability.

- 1.5.5.18. Office, work and storage areas.
- 1.5.5.19. Equipment deliveries and priority.
- 1.5.5.20. Security.
- 1.5.5.21. Progress cleaning.
- 1.5.5.22. Review required submittals and (if applicable) LEED Certification requirements.

**1.6. PROGRESS MEETINGS**

- 1.6.1. Construction Manager shall schedule and administer meetings throughout progress of the Work at a minimum of every week.
- 1.6.2. Construction Manager or Project Engineer will make arrangements for meetings, prepare agenda, and preside at meetings. Project Architect shall record minutes (Field Reports), and distribute copies.
- 1.6.3. Attendance Required: Job Superintendent, Construction Manager, Project Engineer, Project Inspector, Architect of Record, Subcontractors, and suppliers as appropriate to agenda topics for each meeting.
- 1.6.4. Agenda:
  - 1.6.4.1. Review minutes of previous meetings (Field Reports).
  - 1.6.4.2. Review of Work progress.
  - 1.6.4.3. Field observations, problems, and decisions.
  - 1.6.4.4. Identification of problems which impede planned progress.
  - 1.6.4.5. Review of submittals schedule and status of submittals.
  - 1.6.4.6. Review of off-site fabrication and delivery schedules.
  - 1.6.4.7. Maintenance of construction schedule.
  - 1.6.4.8. Corrective measures to regain projected schedules.
  - 1.6.4.9. Planned progress during succeeding work period.
  - 1.6.4.10. Coordination of projected progress.
  - 1.6.4.11. Maintenance of quality and work standards.
  - 1.6.4.12. Effect of proposed changes on progress schedule and coordination.
  - 1.6.4.13. Other business relating to Work.
- 1.6.5. District has authority to schedule mandatory meetings other than those listed, as

necessary.

**1.7. PRE-INSTALLATION CONFERENCES**

- 1.7.1. When required in individual specification section, Contractor shall convene a pre-installation conference prior to commencing Work of the section. Refer to individual specification section for timing requirements of conference.
- 1.7.2. Contractor shall require its Subcontractors and suppliers directly affecting, or affected by, Work of the specific section to attend.
- 1.7.3. Notify the Construction Manager, Project Engineer, Project Inspector, and Architect of Record four (4) days in advance of meeting date.
- 1.7.4. A pre-installation conference may coincide with a regularly scheduled progress meeting.
- 1.7.5. Contractor shall prepare agenda, preside at conference, record minutes, and distribute copies within two (2) days after conference to participants.
- 1.7.6. The purpose of the meeting will be to review Contract Documents, conditions of installation, preparation and installation procedures, and coordination with related Work and manufacturer's recommendations.
- 1.7.7. Pre-installation Schedule: As a minimum, Work being installed under the Contract Documents technical sections will require pre-installation conferences. Contractor shall review the technical specifications and add all additional requirements for pre-installation meetings contained in those sections.

**1.8. POST CONSTRUCTION DEDICATION**

- 1.8.1. Attendance Required: Project Superintendent, Contractor, Project Manager, major Subcontractors, Construction Manager, Project Engineer, Project Inspector, and Architect of Record.
- 1.8.2. Preparation prior to Dedication: Contractor and appropriate Subcontractors and suppliers shall:
- 1.8.3. Assist District in operation of mechanical devices and systems.
  - 1.8.3.1. Verify operation and adjust controls for communication systems.
  - 1.8.3.2. Assist District in operation of lighting systems.

**END OF DOCUMENT**

**DOCUMENT 01 32 16**

**CONSTRUCTION SCHEDULE – NETWORK ANALYSIS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISION**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Coordination and Meetings; and
- 1.1.5. Submittals.

**1.2. REFERENCES**

- 1.2.1. Construction Planning and Scheduling Manual - A Manual for General Contractors and the Construction Industry, The Associated General Contractors of America (AGC).
- 1.2.2. CSI - Construction Specifications Institute MP-2-1 Master Format.
- 1.2.3. U.S. National Weather Service - Local Climatological Data.

**1.3. PERFORMANCE REQUIREMENTS**

- 1.3.1. Ensure adequate scheduling during construction activities so Work may be prosecuted in an orderly and expeditious manner within stipulated Contract Time.
- 1.3.2. Ensure coordination of Contractor and Subcontractors at all levels.
- 1.3.3. Ensure coordination of submittals, fabrication, delivery, erection, installation, and testing of products, materials and equipment.
- 1.3.4. Ensure on-time delivery of District furnished products, materials and equipment.
- 1.3.5. Ensure coordination of jurisdictional reviews.
- 1.3.6. Prepare applications for payment.
- 1.3.7. Monitor progress of Work.
- 1.3.8. Prepare proper requests for changes to Contract Time.
- 1.3.9. Prepare proper requests for changes to Construction Schedule.
- 1.3.10. Assist in detection of schedule delays and identification of corrective actions.

**1.4. QUALITY ASSURANCE**

- 1.4.1. Perform scheduling work in accordance with Construction Planning and Scheduling Manual published by the AGC.
- 1.4.2. Maintain one copy of Construction Planning and Scheduling Manual on Site.
- 1.4.3. In the event of discrepancy between the AGC publication and the Contract Documents, provisions of the Contract Documents shall govern.

**1.5. QUALIFICATIONS**

**1.5.1. Scheduler:**

- 1.5.1.1. Contractor shall retain a construction scheduler to work in enough capacity to perform all of the Contractor's requirements to prepare the Construction Schedule. The Scheduler shall plan, coordinate, execute, and monitor a cost/resource loaded CPM schedule as required for Project and have a minimum of five (5) years direct experience using Primavera Project Management.
- 1.5.1.2. Scheduler will cooperate with District and shall be available on site for monitoring, maintaining and updating schedules in a timely manner.
- 1.5.1.3. District has the right to reject the Scheduler based upon a lack of experience as required by this Document or based on lack of performance and timeliness of schedule submittals/fragnets on past projects. Contractor shall within seven (7) calendar days of District's rejection, propose another scheduler who meets the experience requirements stated above.

- 1.5.2. **Administrative Personnel:** Five (5) years minimum experience in using and monitoring schedules on comparable projects.

**1.6. SUBMITTALS**

- 1.6.1. Submit Short Interval Schedule at each Construction Progress Meeting.
- 1.6.2. Submit Time Adjustment Schedule within five (5) days of commencement of a claimed delay.
- 1.6.3. Submit Recovery Schedules as required for timely completion of Work or when demanded by the District.
- 1.6.4. Submit job cost reports when demanded by the District.
- 1.6.5. Submit one (1) reproducible and two (2) copies of each schedule and cost report.
- 1.6.6. Submit large format plotted schedules monthly or at the request of the District or Construction Manager.

## 1.7. REVIEW AND EVALUATION

- 1.7.1. Contractor shall participate in joint review of Construction Schedule and Reports with District and Architect.
- 1.7.2. Within seven (7) days of receipt of District and/or Architect's comments provide satisfactory revision to Construction Schedule or adequate justification for activities in question.
- 1.7.3. In the event that an activity or element of Work is not detected by District or Architect review, such omission or error shall be corrected by next scheduled update and shall not affect Contract Time.
- 1.7.4. Acceptance by District of corrected Construction Schedule shall be a condition precedent to making any progress payments.
- 1.7.5. Cost-loaded values of Construction Schedule shall be basis for determining progress payments.
- 1.7.6. Review and acceptance by District and Architect of Preliminary Construction Schedule or Construction Schedule does not constitute responsibility whatsoever for accuracy or feasibility of schedules nor does such acceptance expressly or impliedly warrant, acknowledge or admit reasonableness of activities, logic, duration, manpower, cost or equipment loading stated or implied on schedules.

## 1.8. FORMAT

- 1.8.1. Prepare diagrams and supporting mathematical analyses using Precedence Diagramming Method, under concepts and methods outlined in AGC Construction Planning and Scheduling Manual, or other method pre-approved by District.
- 1.8.2. **Listings:** Reading from left to right, in ascending order for each activity.
- 1.8.3. **Diagram Size:** 42 inches maximum height x width required.
- 1.8.4. **Scale and Spacing:** To allow for legible notations and revisions.
- 1.8.5. Illustrate order and interdependence of activities and sequence of Work.
- 1.8.6. Illustrate complete sequence of construction by activity.
- 1.8.7. Provide legend of symbols and abbreviations used.

## 1.9. COST AND SCHEDULE REPORTS

- 1.9.1. **Activity Analysis:** Tabulate each activity of network diagram and identify for each activity:
  - 1.9.1.1. Description.
  - 1.9.1.2. Interface with outside contractors or agencies.

- 1.9.1.3. Number.
- 1.9.1.4. Preceding and following number.
- 1.9.1.5. Duration.
- 1.9.1.6. Earliest start date.
- 1.9.1.7. Earliest finish date.
- 1.9.1.8. Actual start date.
- 1.9.1.9. Actual finish date.
- 1.9.1.10. Latest start date.
- 1.9.1.11. Latest finish date.
- 1.9.1.12. Total and free float.
- 1.9.1.13. Identification of critical path activity.
- 1.9.1.14. Monetary value keyed to Schedule of Values.
- 1.9.1.15. Manpower requirements.
- 1.9.1.16. Responsibility.
- 1.9.1.17. Percentage complete.
- 1.9.1.18. Variance positive or negative.

1.9.2. **Cost Report:** Tabulate each activity of network diagram and identify for each activity:

- 1.9.2.1. Description.
- 1.9.2.2. Number.
- 1.9.2.3. Total cost.
- 1.9.2.4. Percentage complete.
- 1.9.2.5. Value prior to current period.
- 1.9.2.6. Value this period.
- 1.9.2.7. Value to date.

1.9.3. **Required Sorts:** List activities in sorts or groups:

- 1.9.3.1. By activity number.

- 1.9.3.2. By amount of float time in order of early start.
  - 1.9.3.3. By responsibility in order of earliest start date.
  - 1.9.3.4. In order of latest start dates.
  - 1.9.3.5. In order of latest finish dates.
  - 1.9.3.6. Application for payment sorted by Schedule of Values.
  - 1.9.3.7. Listing of activities on critical path.
- 1.9.4. Listing of basic input data which generates schedule.

**1.10. CONSTRUCTION SCHEDULE**

- 1.10.1. Contractor shall develop and submit a cost loaded preliminary schedule of construction (or Preliminary Construction Schedule) as required by this Document and the Contract Documents. It shall be submitted in computer generated network format and shall be organized by Activity Codes representing the intended sequencing of the Work, and with time scaled network diagrams of activities. The Preliminary Construction Schedule shall include activities such as mobilization, preparation of submittals, specified review periods, procurement items, fabrication items, milestones, and all detailed construction activities.
- 1.10.2. Upon District's acceptance of the Preliminary Construction Schedule, Contractor shall update the accepted Preliminary Construction Schedule until Contractor's Construction Schedule is fully developed and accepted. Since updates to the Construction Schedule are the basis for payment to Contractor, submittal and acceptance of the Construction Schedule and updates shall be a condition precedent to making of monthly payments, as indicated in the General Conditions.
- 1.10.3. Failure to submit an adequate or accurate Preliminary Construction Schedule, Construction Schedule, updates thereto or failure to submit on established dates, will be considered a breach of Contract.
- 1.10.4. Failure to include any activity shall not be an excuse for completing all Work by required Completion Date.
- 1.10.5. Activities of long intervals shall be broken into increments no longer than fourteen (14) days or a value over \$20,000.00, unless approved by the District or it is a non-construction activity for procurement and delivery.
- 1.10.6. The Construction Schedule shall comply with the following and include the following:
  - 1.10.6.1. Provide a written narrative describing Contractor's approach to mobilization, procurement, and construction during the first thirty (30) calendar days including crew sizes, equipment and material delivery, Site access, submittals, and permits.
  - 1.10.6.2. Shall designate critical path or paths.



- 1.10.6.3. Procurement activities to include mobilization, shop drawings and sample submittals.
  - 1.10.6.4. Identification of key and long-lead elements and realistic delivery dates.
  - 1.10.6.5. Construction activities in units of whole days limited to fourteen (14) days for each activity except non-construction activities for procurement and delivery.
  - 1.10.6.6. Approximate cost and duration of each activity.
  - 1.10.6.7. Shall contain seasonal weather considerations.
  - 1.10.6.8. Indicate a date for Project Completion that is no later than Completion Date subject to any time extensions processed as part of a Change Order.
  - 1.10.6.9. Conform to mandatory dates specified in the Contract Documents.
  - 1.10.6.10. Contractor shall allow for inclement weather in the Proposed Baseline Schedule by incorporating an activity titled "Rain Day Impact Allowance" as the last activity prior to the Completion Milestone. No other activities may be concurrent with it. The duration of the Rain Day Impact Allowance activity will be in accordance with the Special Conditions, and will be calculated from the Notice to Proceed until the Completion.
  - 1.10.6.11. Level of detail shall correspond to complexity of work involved.
  - 1.10.6.12. Indicate procurement activities, delivery, and installation of District furnished material and equipment.
  - 1.10.6.13. Designate critical path or paths.
  - 1.10.6.14. Subcontractor work at all levels shall be included in schedule.
  - 1.10.6.15. As developed, shall show sequence and interdependence of activities required for complete performance of Work.
  - 1.10.6.16. Shall be logical and show a coordinated plan of Work.
  - 1.10.6.17. Show order of activities and major points of interface, including specific dates of completion.
  - 1.10.6.18. Duration of activities shall be coordinated with Subcontractors and suppliers and shall be best estimate of time required.
  - 1.10.6.19. Shall show description, duration and float for each activity.
- 1.10.7. **Activity.** An activity shall meet the following criteria:
- 1.10.7.1. Any portion or element of Work, action, or reaction that is precisely described, readily identifiable, and is a function of a logical sequential process.

- 1.10.7.2. Descriptions shall be clear and concise. Beginning and end shall be readily verifiable. Starts and finishes shall be scheduled by logical restraints.
- 1.10.7.3. Responsibility shall be identified with a single performing entity.
- 1.10.7.4. Additional codes shall identify building, floor, bid opening and/or District's receipt of proposals, whichever is acceptable and CSI classification.
- 1.10.7.5. Assigned dollar value (cost-loading) of each activity shall cumulatively equal total contract amount. Mobilization, bond and insurance costs shall be separate. General requirement costs, overhead, profit, shall be prorated throughout all activities. Activity costs shall correlate with Schedule of Values.
- 1.10.7.6. Each activity shall have manpower-loading assigned.
- 1.10.7.7. Major construction equipment shall be assigned to each activity.
- 1.10.7.8. Activities labeled start, continue or completion are not allowed.
- 1.10.8. **Equipment and Materials.** For major equipment and materials show a sequence of activities including:
  - 1.10.8.1. Preparation of shop drawings and sample submissions.
  - 1.10.8.2. Review of shop drawings and samples.
  - 1.10.8.3. Finish and color selection.
  - 1.10.8.4. Fabrication and delivery.
  - 1.10.8.5. Erection or installation.
  - 1.10.8.6. Testing.
- 1.10.9. Include a minimum of fifteen (15) days prior to Completion Date for punch lists and clean up. No other activities shall be scheduled during this period.

**1.11. SHORT INTERVAL SCHEDULE**

- 1.11.1. The Four-Week Rolling Schedule shall be based on the most recent District Accepted Construction Schedule or Update. It shall include weekly updates to all construction, submittal, fabrication/procurement, and separate Work Contract activities. Contractor shall ensure that it accurately reflects the current progress of the Work.
- 1.11.2. Shall be fully developed horizontal bar-chart-type schedule directly derived from Construction Schedule.
- 1.11.3. Prepare schedule on sheet of sufficient width to clearly show data.
- 1.11.4. Provide continuous heavy vertical line identifying first day of week.

- 1.11.5. Provide continuous subordinate vertical line identifying each day of week.
- 1.11.6. Identify activities by same activity number and description as Construction Schedule.
- 1.11.7. Show each activity in proper sequence.
- 1.11.8. Indicate graphically sequences necessary for related activities.
- 1.11.9. Indicate activities completed or in progress for previous two (2) week period.
- 1.11.10. Indicate activities scheduled for succeeding three (3) week period.
- 1.11.11. Further detail should be added if necessary to monitor schedule or if requested by District.

**1.12. REQUESTED TIME ADJUSTMENT SCHEDULE**

- 1.12.1. Updated Construction Schedule shall not show a Completion Date later than the Contract Time, subject to any time extensions processed as part of a Change Order.
- 1.12.2. If an extension of time is requested, a separate schedule entitled "Requested Time Adjustment Schedule" shall be submitted to District and Architect.
- 1.12.3. Indicate requested adjustments in Contract Time which are due to changes or delays in completion of Work.
- 1.12.4. Extension request shall include forecast of Project Completion date and actual achievement of any dates listed in Contract Documents.
- 1.12.5. To the extent that any requests are pending at time of any Construction Schedule update, Time Adjustment Schedule shall also be updated.
- 1.12.6. Schedule shall be a time-scaled network analysis.
- 1.12.7. Accompany schedule with formal written time extension request and detailed impact analysis justifying extension.
- 1.12.8. Time impact analysis shall demonstrate time impact based upon date of delay, and status of construction at that time and event time computation of all affected activities. Event times shall be those as shown in latest Construction Schedule.
- 1.12.9. Activity delays shall not automatically constitute an extension of Contract Time.
- 1.12.10. Failure of Subcontractors shall not be justification for an extension of time.
- 1.12.11. Float is not for the exclusive use or benefit of any single party. Float time shall be apportioned according to needs of Project, as determined by the District.
- 1.12.12. Float suppression techniques such as preferential sequencing, special lead/lag logic restraints, extended activity durations, or imposed dates shall be apportioned according to benefit of Project.

- 1.12.13. Extensions will be granted only to extent that time adjustments to activities exceed total positive float of the critical path and extends Completion date.
- 1.12.14. District shall not have an obligation to consider any time extension request unless requirements of Contract Documents, and specifically, but not limited to these requirements, are complied with.
- 1.12.15. District shall not be responsible or liable for any construction acceleration due to failure of District to grant time extensions under Contract Documents should requested adjustments in Contract Time not substantially comply with submission and justification requirements of Contract for time extension requests.
- 1.12.16. In the event a Requested Time Adjustment Schedule and Time Impact Analysis are not submitted within ten (10) days after commencement of a delay it is mutually agreed that delay does not require a Contract Time extension.

### **1.13. RECOVERY SCHEDULE**

- 1.13.1. When activities are behind Construction Schedule a supplementary Recovery Schedule shall be submitted.
- 1.13.2. Contractor shall prepare and submit to the District a Recovery Schedule whenever activities are behind Construction Schedule or at any time requested by the District, at no cost to the District.
- 1.13.3. Form and detail shall be sufficient to explain and display how activities will be rescheduled to regain compliance with Construction Schedule and to complete the Work by the Completion Date.
- 1.13.4. Maximum duration shall be one (1) month and shall coincide with payment period.
- 1.13.5. Ten (10) days prior to expiration of Recovery Schedule, Contractor shall have to show verification to determine if activities have regained compliance with Construction Schedule. Based upon this verification the following will occur:
  - 1.13.5.1. Supplemental Recovery Schedule will be submitted to address subsequent payment period.
  - 1.13.5.2. Construction Schedule will be resumed.

### **1.14. UPDATING SCHEDULES**

- 1.14.1. Review and update schedules at least ten (10) days prior to submitting an Application for Payment.
- 1.14.2. Maintain schedules to record actual prosecution and progress.
- 1.14.3. Approved Change Orders which affect schedules shall be identified as separate new activities.
- 1.14.4. Change Orders of less than \$5,000.00 value or less than three (3) days duration need not be shown unless critical path is affected.

- 1.14.5. No other revisions shall be made to schedules unless authorized by District.
- 1.14.6. **Schedule Narrative Report:** Contractor shall include a written report to explain the Monthly Schedule Update. The narrative shall, at a minimum, include the following headings with appropriate discussions of each topic:
  - 1.14.6.1. Activities or portions of activities completed during previous reporting period.
  - 1.14.6.2. Actual start dates for activities currently in progress.
  - 1.14.6.3. Deviations from critical path in days ahead or behind.
  - 1.14.6.4. List of major construction equipment used during reporting period and any equipment idle.
  - 1.14.6.5. Number of personnel by trade engaged on Work during reporting period.
  - 1.14.6.6. Progress analysis describing problem areas.
  - 1.14.6.7. Current and anticipated delay factors and their impact.
  - 1.14.6.8. Proposed corrective actions and logic revisions for Recovery Schedule.
  - 1.14.6.9. Proposed modifications, additions, deletions and changes in logic of Construction Schedule.
  - 1.14.6.10. In updating the Schedule, Contractor shall not modify Activity ID numbers, schedule calculation rules/criteria, or the Activity Coding Structure required.
- 1.14.7. Schedule update will form basis upon which progress payments will be made.
- 1.14.8. District will not be obligated to review or process Application for Payment until the Construction Schedule and Schedule Narrative Report have been submitted.

## **1.15. DISTRIBUTION**

- 1.15.1. Following joint review and acceptance of updated schedules distribute copies to District, Architect, and all other concerned parties.
- 1.15.2. Instruct recipients to promptly report in writing any problem anticipated by projections shown in schedules.

## **2. PRODUCTS**

### **2.1. SCHEDULING SOFTWARE**

Contractor shall utilize District-approved software and shall employ the Critical Path Method (CPM) in the development and maintenance of the Construction Schedule. The scheduling software shall be capable of being resource loaded with manpower, costs and materials. It shall also be capable of generating time-scaled logic diagrams, resource histograms and profiles, bar charts, layouts and reports with any and/or all activity detail.

**2.2. ELECTRONIC DATA**

Provide compact disk(s) that contain a back-up of the Proposed Baseline Schedule data on it and in a format approved by the District.

**END OF DOCUMENT**

**DOCUMENT 01 33 00**

**SUBMITTALS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISION**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions;
- 1.1.3. Instructions to Bidders;
- 1.1.4. Summary of Work;
- 1.1.5. Contract Forms and Submittals;
- 1.1.6. Product Options and Substitutions;
- 1.1.7. Requests for Information;
- 1.1.8. Contract Closeout and Final Cleaning;
- 1.1.9. Operation and Maintenance Data;
- 1.1.10. Warranties;
- 1.1.11. Record Documents;
- 1.1.12. Demonstration and Training;

**1.2. DOCUMENT INCLUDES**

- 1.2.1. Submittal procedures – Use of Primavera.
- 1.2.2. Shop drawings.
- 1.2.3. PCM (or other pre-approved program) Electronic Submittal Process
- 1.2.4. Product data.
- 1.2.5. Samples.
- 1.2.6. Manufacturers' Instructions.
- 1.2.7. Manufacturers' Certificates.
- 1.2.8. Mock-Up.

1.2.9. Deferred approval requirements.

**1.3. SUBMITTAL PROCEDURES – USE OF PRIMAVERA OR ANOTHER PRE-APPROVED PROGRAM**

**Contractor shall utilize District-approved software** for the submittal process.

- 1.3.1. Contractor shall transmit each submittal in conformance with requirements of this Document. For each submittal, Contractor shall:
- 1.3.1.1. Sequentially number the transmittal forms. Resubmitted submittals must have the original number with an alphabetic suffix;
  - 1.3.1.2. Identify Project and Architect's project number, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate;
  - 1.3.1.3. Apply Contractor's stamp, signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the Work and Contract Documents. Submittals without Contractor's stamp and signature will be returned without review.
- 1.3.2. Coordinate preparation and processing of submittals with performance of Work. Transmit each submittal sufficiently in advance of performance of Work to avoid delay.
- 1.3.2.1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 1.3.2.2. Coordinate transmittal of different types of submittals for related parts of Work so processing will not be delayed because of the need to review submittals concurrently for coordination.
  - 1.3.2.3. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- 1.3.3. Comply with Contract Documents for list of submittals and time requirements for scheduled performance of Work.
- 1.3.4. No extension of Contract Time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
- 1.3.5. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
- 1.3.6. Provide space for Contractor and Architect review stamps.
- 1.3.7. Revise and resubmit submittals as required, identify all changes made since previous submittal.
- 1.3.8. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.
- 1.3.9. Submittals not requested will not be recognized or processed. Submittals not requested



will be returned without review.

#### **1.4. SHOP DRAWINGS**

- 1.4.1. Prepare Project-specific information, drawn accurately to scale. 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.
- 1.4.2. Do not use or allow others to use Shop Drawings which have been submitted and have been rejected.
- 1.4.3. Preparation: Fully illustrate requirements in Contract Documents. Include the following information, as applicable:
  - 1.4.3.1. Dimensions.
  - 1.4.3.2. Identification of products.
  - 1.4.3.3. Fabrication and installation drawings.
  - 1.4.3.4. Roughing-in and setting diagrams.
  - 1.4.3.5. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
  - 1.4.3.6. Shop work manufacturing instructions.
  - 1.4.3.7. Templates and patterns.
  - 1.4.3.8. Schedules.
  - 1.4.3.9. Design calculations.
  - 1.4.3.10. Compliance with specified standards.
  - 1.4.3.11. Notation of coordination requirements.
  - 1.4.3.12. Notation of dimensions established by field measurements.
  - 1.4.3.13. Relationship to adjoining construction clearly indicated.
  - 1.4.3.14. Seal and signature of professional engineer if specified.
  - 1.4.3.15. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
  - 1.4.3.16. All deviations from the Contract Documents, clearly indicated.
  - 1.4.3.17. Copy of letter indicating acceptance of deviations indicated on the submittal.
- 1.4.4. 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 30 by 40 inches (750 by 1000 mm).

- 1.4.5. Do not use Shop Drawings without an appropriate final stamp from the Contractor and District indicating action taken in connection with construction.
- 1.4.6. Deviations from Contract Documents require specific written acceptance by the District of the noted deviation and clear indication on the submittal.

## **1.5. ELECTRONIC SUBMITTAL PROCESS**

### **1.5.1. Submittal Procedure for Large Format Shop Drawings.**

- 1.5.1.1. Contractor shall provide six (6) paper copies of the large format Shop Drawings directly to the District and the Construction Manager (CM) and Contractor will upload/post an electronic transmittal (with a detailed description of the submittal including the subject, specification number and number of drawings) on PCM (or other pre-approved program).
- 1.5.1.2. Contractor shall verify that the Schedule of Submittals and all submittal log(s) on PCM (or other pre-approved program) are accurate and up to date.
- 1.5.1.3. The District and Architect will review and markup each Submittal and provide changes to Contractor for Contractor's incorporation into the Submittal.
- 1.5.1.4. This process will continue until the Contractor has provided a Submittal that is acceptable to the District and the Architect.
- 1.5.1.5. Once a Submittal is accepted, the District will provide a final accepted Submittal to the Contractor and the Contractor will closeout that one Submittal.
- 1.5.1.6. Contractor shall send one (1) copy of the completed record submittal of the large format documents to a vendor (Ford Graphics is suggested) for scanning and posting on PCM (or other pre-approved program).

### **1.5.2. Product Data, Calculations and Small Format Drawings**

- 1.5.2.1. Contractor shall upload/post one (1) electronic copy (from manufacturer's website or pre-scanned) of the product literature, data, calculations, and/or small format shop drawings to PCM (or other pre-approved program) with a Transmittal (with a detailed description of the submittal) directly to the CM.
- 1.5.2.2. The District and Architect will review and markup each Submittal and provide changes to Contractor for Contractor's incorporation into the Submittal.
- 1.5.2.3. This process will continue until the Contractor has provided a Submittal that is acceptable to the District and the Architect.
- 1.5.2.4. Once a Submittal is accepted, the District will provide a final accepted Submittal to the Contractor and the Contractor will closeout that one Submittal.

1.5.2.5. Contractor shall send one (1) copy of the completed record submittal of the large format documents to a vendor (Ford Graphics is suggested) for scanning and posting on PCM (or other pre-approved program).

**1.5.3. Sample Submittal Procedure – (Product / Assembly Samples)**

1.5.3.1. Contractor shall provide four (4) physical samples directly to the District and the CM and Contractor will upload/post an electronic transmittal (with a detailed description of the submittal including the subject, specification number and number of drawings) on PCM (or other pre-approved program).

1.5.3.2. The District and Architect will review and markup each Submittal and provide changes to Contractor for Contractor’s incorporation into the Submittal.

1.5.3.3. This process will continue until the Contractor has provided a Submittal that is acceptable to the District and the Architect.

1.5.3.4. Once a Submittal is accepted, the District will provide a final accepted Submittal to the Contractor and the Contractor will closeout that one Submittal.

1.5.3.5. Contractor shall send one (1) copy of the completed record submittal of the large format documents to a vendor (Ford Graphics is suggested) for scanning and posting on PCM (or other pre-approved program).

**1.6. PRODUCT DATA**

1.6.1. In addition to the above requirements, mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this Project.

1.6.2. After review, distribute in accordance with the above provisions and provide copies for Record Documents described in the Contract Documents.

**1.7. SAMPLES**

1.7.1. In addition to the above requirements, submit samples to illustrate functional and aesthetic characteristics of the Product in accordance with this Document, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

1.7.2. Where specific colors or patterns are not indicated, provide materials and products specified in the full range of color, texture and pattern for selection by District. Range shall include standard stocked color/texture/pattern, standard color/texture/pattern not stocked, but available from manufacturer, and special color/ texture/pattern available from manufacturer as advertised in product data and brochures. Unless otherwise indicated in individual specification sections, District may select from any range at no additional cost to District.

1.7.3. Include identification on each sample, with full Project information.

1.7.4. Submit the number of samples that Contractor requires, plus one that will be retained

by Architect and one by District.

- 1.7.5. Reviewed samples which may be used in the Work are indicated in individual specification Sections.

**1.8. MANUFACTURERS' INSTRUCTIONS**

- 1.8.1. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.
- 1.8.2. Identify conflicts between manufacturers' instructions and Contract Documents.

**1.9. MANUFACTURERS' CERTIFICATES**

- 1.9.1. When specified in individual specification Sections, submit manufacturers' certificates to Architect for review, in quantities specified for Product Data.
- 1.9.2. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.
- 1.9.3. Certificates may be recent or previous test results on material or Product, but must be acceptable to District.

**1.10. MOCK-UP**

- 1.10.1. Where indicated, provide mock-ups as required. Mock-ups shall be prepared per the specifications and shall accurately and reasonably represent the quality of construction the Contractor will provide. If the mock-up or portions thereof do not adequately represent the quality of the work specified, the Contractor shall modify the mock-up as needed.
- 1.10.2. Once completed to the District's satisfaction, the mock-up shall serve as the standard of quality for the work.
- 1.10.3. All mock-ups, at District's option, shall remain the property of the District. If not required by the District, Contractor shall remove and dispose of the mock-up.
- 1.10.4. Where indicated, on-site mock-ups, if accepted, may be integrated into the Work.

**1.11. ARCHITECT'S REVIEW OF SUBMITTALS**

- 1.11.1. Submittals will be reviewed and stamped by the Architect "No exceptions taken," "Submit specified item" or "Make corrections noted" to indicate full or conditioned approval or "Revise and resubmit" or "Rejected" to indicate disapproval. Terms are defined as follows:
  - 1.11.1.1. No Exceptions Taken: Accepted subject to its compatibility with future submittals and additional partial submittals for portions of the work not covered in this submittal. Does not constitute approval or deletion of specified or required items not shown in the partial submittal.

- 1.11.1.2. Submit specified item: Submit to the Architect the items indicated for review.
  - 1.11.1.3. Correct as noted: Same as 1., except that minor corrections as noted shall be made by the Contractor. No resubmittal required.
  - 1.11.1.4. Revise and resubmit: Rejected because of major inconsistencies or errors which shall be resolved or corrected by the Contractor prior to subsequent review by the Architect.
  - 1.11.1.5. Rejected: Submitted material does not conform to plans and specifications in major respect. For example, wrong size, model, capacity or material. Resubmit.
  - 1.11.1.6. Receipt Acknowledged. Received, recorded and distributed without further action.
- 1.11.2. Submittals reviewed by the Architect which have been stamped shall be deemed to have the following language affixed and made a part thereof, regardless of the initial or subsequent readability of the actual stamp.
- 1.11.2.1. Corrections or comments made on submittals during this review do not relieve the contractor from compliance with the requirements of the drawings and specifications. This check is for review of general conformance with the design concept of the project and general compliance with information given in the Contract Documents. The contractor is responsible for confirming and correlating all quantities and dimensions, selection of fabrication processes and techniques of construction, coordinating the work of the trades; and performing the work in a safe and satisfactory manner.
- 1.11.3. Architect's review of submittals shall be completed within ten working days of the date of submission. Any requests by Architect for additional time shall not be unreasonably withheld.
- 1.11.4. Architect's review of submittals has, as a primary objective, to assist in the completion of the project on time and in conformance with the Contract requirements by permitting review of material and fabricated items prior to ordering. Architect's review of submittals is based only on the data presented and extends only to conformance with general design intent and information contained in the Contract Documents.
- 1.11.5. Architect's approval of submittals does not constitute final acceptance or unqualified approval of items or work proposed or put in place, nor does it constitute acceptance of responsibility for the accuracy, coordination or completeness of submittals. Architect's approval of submittals does not relieve the Contractor from the responsibility for errors, omissions, or compliance with all the requirements of the Contract Documents.
- 1.11.6. Reimbursement of the Architect's costs for review:

1.11.6.1. Architect will record all time and expenses incurred to review submittals requiring more than two reviews.

1.11.6.2. Contractor shall reimburse the District through deduction from amounts due the Contractor upon receipt of the Architect's billing and that of the Architect's consultants at standard billing rates for all time and expenses incurred in unanticipated reviews.

1.11.7. Architect's review of submittals does not change the Contract in any manner.

**1.12. RESUBMITTAL**

1.12.1. Make all corrections or revisions required by reviewer's comments at Contractor's expense and resubmit as initially specified above. No additional costs will be authorized for corrections or revisions.

1.12.2. Product data and shop drawings:

1.12.2.1. Revise initial drawings or data and resubmit as initially specified.

1.12.2.2. Indicate changes which have been made other than those requested by reviewer.

1.12.3. Submit new samples as initially specified.

**1.13. DISTRIBUTION**

1.13.1. Distribute only submittals with Architect/Engineer (and DSA as applicable) stamps of review. Contractor is responsible for coordination of submittals and comments following review. Contractor to provide all additional reproduction costs for copies required by the Contractor at its expense. No additional costs will be authorized for Contractor costs pertaining to submittals.

**1.14. DEFERRED APPROVAL REQUIREMENTS**

1.14.1. Installation of deferred approval items shall not be started until detailed plans, specifications, and engineering calculations have been accepted and signed by the Architect or Engineer in general responsible charge of design and signed by a California registered Architect or professional engineer who has been delegated responsibility covering the work shown on a particular plan or specification and approved by the agency having authority (e.g., State Fire Marshall, Division of the State Architect, gas company, electrical utility company, water district, etc.). Deferred approval items for this Project are as indicated in the Summary of Work.

1.14.2. Unless otherwise indicated in the Contract Documents or if District provides written approval of a longer time period, Contractor shall submit all deferred approval items for approval within thirty (30) days of the notice to proceed with the Construction Phase.

1.14.3. Deferred approval drawings and specifications become part of the approved documents for the Project when they are submitted to and approved by DSA.

1.14.4. Submit material using electronic submittal process as defined above.

- 1.14.5. Identify and specify all supports, fasteners, spacing, penetrations, etc., for each of the deferred approval items, including calculations for each and all fasteners.
- 1.14.6. Submit documents to Architect for review prior to forwarding to DSA.
- 1.14.7. Documents shall bear the stamp and signature of the Structural, Mechanical, or Electrical Engineer licensed in the State of California who is responsible for the work shown on the documents.
- 1.14.8. Architect and its subconsultants will review the documents only for conformance with design concept shown on the documents. The Architect will then forward the Submittal to agency having authority for approval.
- 1.14.9. Contractor shall respond to review comments made by DSA and revise and resubmit submittal to the Architect for re-submittal to DSA.
- 1.14.10. Contractor is notified that significant lead time is required for deferred approval review by DSA and shall schedule work accordingly. No extension of Contract Time will be allowed for delays incurred by deferred approval review. The Architect is not responsible for DSA delays in deferred approval review.

**END OF DOCUMENT**





**DOCUMENT 01 40 00**

**QUALITY REQUIREMENTS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Drawings;
- 1.1.5. Construction Schedule – Network Analysis;
- 1.1.6. General Definitions and References.

**1.2. SUMMARY**

- 1.2.1. This Document includes administrative and procedural requirements for quality assurance and quality control.
- 1.2.2. Testing and inspecting services by the District are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Documents' requirements.
  - 1.2.2.1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Specifications for those activities. Requirements in those Specifications may also cover production of standard products.
  - 1.2.2.2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Documents' requirements.
  - 1.2.2.3. Requirements for Contractor to provide quality-assurance and -control services required by District, District's consultants, or authorities having jurisdiction are not limited by provisions of this Document.

**1.3. DEFINITIONS**

- 1.3.1. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- 1.3.2. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by District or its consultants.

- 1.3.3. Mock-ups: Full-size, physical assemblies that are constructed on-site. Mock-ups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mock-ups establish the standard by which the Work will be judged.
- 1.3.4. Laboratory Mock-ups: Full-size, physical assemblies that are constructed at testing facility to verify performance characteristics.
- 1.3.5. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- 1.3.6. Product Testing: Tests and inspections that are performed by an NRTL (National Recognized Testing Laboratory), an NVLAP (National Voluntary Laboratory Accreditation Program), or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- 1.3.7. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- 1.3.8. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

#### **1.4. CONFLICTING REQUIREMENTS**

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

#### **1.5. SUBMITTALS**

- 1.5.1. Qualification Data: For testing agencies specified in "Quality Assurance" below to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- 1.5.2. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
  - 1.5.2.1. Specification number and title.
  - 1.5.2.2. Description of test and inspection.
  - 1.5.2.3. Identification of applicable standards, codes or regulations.
  - 1.5.2.4. Identification of test and inspection methods.

- 1.5.2.5. Number of tests and inspections required.
- 1.5.2.6. Time schedule or time span for tests and inspections.
- 1.5.2.7. Entity responsible for performing tests and inspections.
- 1.5.2.8. Requirements for obtaining samples.
- 1.5.2.9. Unique characteristics of each quality-control service.
- 1.5.3. Reports: Prepare and submit certified written reports that include the following:
  - 1.5.3.1. Date of issue.
  - 1.5.3.2. Project title and number.
  - 1.5.3.3. Name, address, and telephone number of testing agency.
  - 1.5.3.4. Dates and locations of samples and tests or inspections.
  - 1.5.3.5. Names of individuals making tests and inspections.
  - 1.5.3.6. Description of the Work and test and inspection method.
  - 1.5.3.7. Identification of product and Specification.
  - 1.5.3.8. Complete test or inspection data.
  - 1.5.3.9. Test and inspection results and an interpretation of test results.
  - 1.5.3.10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
  - 1.5.3.11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Documents' requirements.
  - 1.5.3.12. Name and signature of laboratory inspector.
  - 1.5.3.13. Recommendations on retesting and reinspecting.
  - 1.5.3.14. Descriptions of deficiencies noted, and corrective action undertaken to resolve such deficiencies.
    - 1.5.3.14.1. Deficiencies observed shall immediately be brought to the attention of the Contractor's field superintendent, and trade foreman. In the event deficiencies are not corrected, or if an interpretation of the Contract Documents is required, the Testing Agency shall immediately notify the District and applicable consultant, Architect, or Engineer.
    - 1.5.3.14.2. The Testing Agency shall maintain a deficiency list of all items not corrected and shall reinspect the area after the deficiency has been corrected. The list shall include a description of the deficiency, the date and time the deficiency was observed,

who was notified, the date of reinspection and description of any corrective action taken. Distribute the deficiency list at least once per month.

1.5.3.15.15. At the end of the Project, the Testing Agency shall submit a final signed report stating whether the work tested and inspected conforms to the Contract Documents' requirements.

1.5.4. Permits, Licenses, and Certificates: For District's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents established for compliance with standards and regulations bearing on performance of the Work.

## **1.6. QUALITY ASSURANCE**

1.6.1. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specifications specify additional requirements.

1.6.2. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance. Where required by the individual Specifications, Installer employing workers trained and approved by manufacturer, Installer being acceptable to manufacturer, and/or Installer being an authorized representative of manufacturer for both installation and maintenance.

1.6.3. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

1.6.4. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

1.6.5. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in the State of California, and who is experienced in providing engineering services of the kind indicated.

1.6.6. Engineering services are defined as those performed for installations of the system, assembly, or products that are similar to those indicated for this Project in material, design, and extent.

1.6.7. Specialists: Certain Specifications may require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.

1.6.7.1. Requirement for specialists shall not supersede building codes or regulations governing the Work.

1.6.8. Testing Agency Qualifications: An NRTL, an NVLAP, Division of the State of Architect's Accepted Laboratory, or an independent agency with the experience and capability to conduct testing and inspecting indicated; and with additional qualifications stated in

individual Specifications; and where required by and acceptable to authorities having jurisdiction.

1.6.8.1. NRTL: A Nationally Recognized Testing Laboratory according to 29 CFR 1910.7.

1.6.8.2. NVLAP: A testing agency accredited according to NIST's (National Institute of Standards and Technology) National Voluntary Laboratory Accreditation Program.

1.6.8.3. Tests shall be made by an accredited testing agency with a minimum of 5 years of experience in the specific type of testing to be performed. Except as otherwise provided, sampling and testing of all materials and the laboratory methods and testing equipment shall be in accordance with the applicable standards and methods of the California Building Standards code.

1.6.8.4. For each type of inspection and testing service to be performed, the Testing Agency shall submit certification, signed and sealed by the Agency's professional engineer, of compliance with all applicable requirements of the following:

1.6.8.4.1. ASTM E329, "Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction."

1.6.8.4.2. "Recommended Requirements for Independent Laboratory Qualifications" published by the American Council of Independent Laboratories.

1.6.8.5. Furnish written certification to the District that all equipment to be used has been calibrated in accordance with applicable ASTM standards within the last year and is in proper working order.

1.6.8.6. Testing Agency Personnel Qualifications: Testing and inspection services shall be performed only by trained and experienced technicians currently qualified for the work they are to perform. Documentation of such training and experience shall be submitted to the District and/or its consultants upon request.

1.6.8.7. Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the state where the Project is located.

1.6.8.8. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

1.6.9. Preconstruction Testing: Where a testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:

1.6.9.1. Contractor responsibilities include the following:

1.6.9.1.1. Verify by its Quality Assurance/Quality Control procedures that an element is ready for testing prior to requesting a test.

- 1.6.9.1.2. Provide test specimens representative of proposed products and construction.
  - 1.6.9.1.3. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
  - 1.6.9.1.4. Provide sizes and configurations of test assemblies, mock-ups, and laboratory mock-ups to adequately demonstrate capability of products to comply with performance requirements.
  - 1.6.9.1.5. Build site-assembled test assemblies and mock-ups using installers who will perform same tasks for Project.
  - 1.6.9.1.6. Build laboratory mock-ups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
  - 1.6.9.1.7. When testing is complete, remove test specimens, assemblies, mock-ups, and laboratory mock-ups; do not reuse products on Project.
- 1.6.9.2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to District with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected Work complies with or deviates from the Contract Documents' requirements.
- 1.6.10. Mock-ups: Before installing portions of the Work requiring mock-ups, build mock-ups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
- 1.6.10.1. Build mock-ups in location and of size indicated or, if not indicated, as directed by District or its consultant.
  - 1.6.10.2. Notify District and its consultants seven (7) days in advance of dates and times when mock-ups will be constructed.
  - 1.6.10.3. Demonstrate the proposed range of aesthetic effects and workmanship.
  - 1.6.10.4. Obtain District and its consultant's approval of mock-ups before starting work, fabrication, or construction.
    - 1.6.10.4.1. Allow seven (7) days for initial review and each re-review of each mock-up.
  - 1.6.10.5. Incorporate seismic design of nonstructural components into mock-ups.
  - 1.6.10.6. Maintain mock-ups during construction in an undisturbed condition as a standard for judging the completed Work.
  - 1.6.10.7. Demolish and remove mock-ups when directed, unless otherwise indicated.
- 1.6.11. Laboratory Mock-Ups: Comply with requirements of preconstruction testing and those specified in individual Specifications in Divisions 02 through 49.

## 1.7. QUALITY CONTROL

- 1.7.1. District Responsibilities: Where quality-control services are indicated as District's responsibility, District will engage a qualified testing agency to perform these services.
  - 1.7.1.1. District will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting the testing agencies are engaged to perform.
  - 1.7.1.2. Costs for retesting and reinspecting construction that replaces or is necessitated by Work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Price will be adjusted by Change Order per the Contract Documents.
- 1.7.2. Tests and inspections not explicitly assigned to District are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
  - 1.7.2.1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform the quality-control services.
    - 1.7.2.1.1. Contractor shall not employ same entity engaged by District, unless agreed to in writing by District.
  - 1.7.2.2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
  - 1.7.2.3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
  - 1.7.2.4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
  - 1.7.2.5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- 1.7.3. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Document "Submittal Procedures."
- 1.7.4. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents' requirements.
- 1.7.5. Testing Agency Responsibilities: Cooperate with District, District's consultants, and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
  - 1.7.5.1. Notify District, District's consultants, and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.

- 1.7.5.2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
- 1.7.5.3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
- 1.7.5.4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
- 1.7.5.5. Do not release, revoke, alter, or increase the Contract Documents' requirements or approve or accept any portion of the Work.
- 1.7.5.6. Do not perform any duties of Contractor.
- 1.7.6. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify testing agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
  - 1.7.6.1. Access to the Work.
  - 1.7.6.2. Incidental labor and facilities necessary to facilitate tests and inspections.
  - 1.7.6.3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  - 1.7.6.4. Facilities for storage and field curing of test samples.
  - 1.7.6.5. Delivery of samples to testing agencies.
  - 1.7.6.6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  - 1.7.6.7. Security and protection for samples and for testing and inspecting equipment at Project Site.
  - 1.7.6.8. Furnish tools, samples of materials, design mixes, equipment and assistance as requested.
  - 1.7.6.9. Provide and maintain, for the sole use of the Testing Agency, adequate facilities for the safe storage and proper curing of concrete test cylinders on the project site for the first 24 hours after casting as required by ASTM C31, Method of Making and Curing Concrete Test Specimens in the Field.
  - 1.7.6.10. Build and store masonry test prisms in a manner acceptable to the Testing Agency. Prisms to be tested shall remain at the job site until moved by Testing Agency personnel.
  - 1.7.6.11. Notify Testing Agency at least 10 working days in advance of any qualification testing for welding required herein.
  - 1.7.6.12. Notify Testing Agency at least 24 hours prior to expected time for operations requiring testing or inspection services.



- 1.7.6.13. Make arrangements with the Testing Agency and pay for additional samples and tests made for the Contractor's convenience or for retesting of failed samples.
- 1.7.6.14. For deficiencies requiring corrective action, submit in writing a description of the deficiency and a proposed correction to the District. After review and approval, the proposed corrective action shall be implemented and inspected by the Testing Agency. It is Contractor's responsibility to ascertain that the deficiency is corrected and inspected prior to the work being covered.
- 1.7.6.15. Retention of an independent Testing Agency by the District shall in no way relieve Contractor of responsibility for performing all work in accordance with the Contract Documents' requirements.
- 1.7.7. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
  - 1.7.7.1. Schedule times for tests, inspections, obtaining samples, and similar activities.

**1.8. TESTS AND SPECIAL INSPECTIONS**

- 1.8.1. Tests and Special Inspections: District will engage a qualified testing agency to conduct tests and special inspections required by authorities having jurisdiction as follows:
  - 1.8.1.1. Soils: 2010 CBC 1704.7
  - 1.8.1.2. Cast in Place Concrete: 2010 CBC 1704.4
  - 1.8.1.3. Nonshrink Grout: 2010 CBC 1704.4
  - 1.8.1.4. Post Installed Anchors: 2010 CBC 1704.15 (3) and Manufacturer's ICC-ES Report
- 1.8.2. Special Tests and Inspections: Conducted by a qualified testing agency as required by authorities having jurisdiction, as indicated in individual Specifications, and as follows:
  - 1.8.2.1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
  - 1.8.2.2. Notifying District, District's consultants, and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
  - 1.8.2.3. Submitting a certified written report of each test, inspection, and similar quality-control service to District, with copy to Contractor and to authorities having jurisdiction.
  - 1.8.2.4. Submitting a final report of special tests and inspections at Project Completion, which includes a list of unresolved deficiencies.
  - 1.8.2.5. Interpreting tests and inspections and stating in each report whether tested and inspected Work complies with or deviates from the Contract Documents.
  - 1.8.2.6. Retesting and re-inspecting corrected work.

**2. PRODUCTS**

**2.1. GENERAL**

- 2.1.1. Do not use any materials or equipment represented by samples until tests, if required, have been made and the materials or equipment found to be acceptable. Any product which becomes unfit for use after acceptance shall not be incorporated into the Work.

**3. EXECUTION**

**3.1. TEST AND INSPECTION LOG**

- 3.1.1. Prepare a record of tests and inspections. Include the following:
  - 3.1.1.1. Date test or inspection was conducted.
  - 3.1.1.2. Description of the Work tested and inspected.
  - 3.1.1.3. Date test or inspection results were transmitted to District.
  - 3.1.1.4. Identification of testing agency or special inspector conducting test or inspection.
- 3.1.2. Maintain log at Project Site. Post changes and modifications as they occur. Provide access to test and inspection log for District's reference during normal working hours.

**3.2. REPAIR AND PROTECTION**

- 3.2.1. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
  - 3.2.1.1. Provide materials and comply with installation requirements specified in other Specifications. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
  - 3.2.1.2. Comply with Document "Cutting and Patching" and all related Contract Documents' requirements.
- 3.2.2. Protect construction exposed by or for quality-control service activities.
- 3.2.3. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

**END OF DOCUMENT**

**DOCUMENT 01 42 13**

**ABBREVIATIONS AND ACRONYMS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions including without limitation, Contract Terms and Definitions; and
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any).

**1.2. ABBREVIATIONS AND ACRONYMS FOR STANDARDS AND REGULATIONS**

- 1.2.1. Abbreviations and Acronyms for Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations as indicated in Thomson Gale™ ([www.gale.com](http://www.gale.com)), Gale Research's "Encyclopedia of Associations" or "Encyclopedia of Associations: National Organizations of the U.S.," or in Columbia Books' "National Trade & Professional Associations of the U.S."
- 1.2.2. Some of the applicable abbreviations and acronyms referenced in the Specifications or other Contract Documents have the following meanings, subject to updates or revisions based on the above-referenced publications:

- AA: Aluminum Association
- AAMA: Architectural Aluminum Manufacturers Association
- AASHTO: American Association of State Highway and Transportation Officials
- ABPA: Acoustical and Board Products Association
- ACI: American Concrete Institute
- AGA: American Gas Association
- AGC: Associated General Contractors
- AHC: Architectural Hardware Consultant
- AI: Asphalt Institute
- AIA: American Institute of Architects
- AIEE: American Institute of Electrical Engineers
- AISC: American Institute of Steel Construction
- AISI: American Iron and Steel Institute
- AMCA: Air Moving and Conditioning Association
- ANSI: American National Standards Institute
- APA: American Plywood Association
- ARI: Air Conditioning and Refrigeration Institute
- ASHRAE: American Society of Heating, Refrigeration and Air Conditioning Engineers
- ASME: American Society of Mechanical Engineers
- ASSE: American Society of Structural Engineers
- ASTM: American Society of Testing and Materials
- AWPB: American Wood Preservers Bureau

- AWPI: American Wood preservers Institute
- AWS: American Welding Society
- AWSC: American Welding Society Code
- AWI: Architectural Woodwork Institute
- AWWA: American Water Works Association
- BIA: Brick Institute of America
- CCR: California Code of Regulations
- CLFMI: Chain Link Fence Manufacturers Institute
- CMG: California Masonry Guild
- CRA: California Redwood Association
- CRSI: Concrete Reinforcing Steel Institute
- CS: Commercial Standards
- CSI: Construction Specifications Institute
- CTI: Cooling Tower Institute
- FGMA: Flat Glass Manufacturer’s Association
- FIA: Factory Insurance Association
- FM: Factory Mutual
- FS: Federal Specification
- FTI: Facing Title Institute
- GA: Gypsum Association
- ICC: International Code Council
- IEEE: Institute of Electrical and Electronic Engineers
- IES: Illumination Engineering Society
- LIA: Lead Industries Association
- MIA: Marble Institute of America
- MLMA: Metal Lath Manufacturers Association
- MS: Military Specifications
- NAAMM: National Association of Architectural Metal Manufacturers
- NBHA: National Builders Hardware Association
- NBFU: National Board of Fire Underwriters
- NBS: National Bureau of Standards
- NCMA: National Concrete Masonry Association
- NEC: National Electrical Code
- NEMA: National Electrical Manufacturers Association
- NFPA: National Fire Protection Association/National Forest Products Association
- NMWIA: National Mineral Wool Insulation Association
- NTMA: National Terrazzo and Mosaic Association
- NWMA: National Woodwork Manufacturer’s Association
- ORS: Office of Regulatory Services (California)
- OSHA: Occupational Safety and Health Act
- PCI: Precast Concrete Institute
- PCA: Portland Cement Association
- PDCA: Painting and Decorating Contractors of America
- PDI: Plumbing Drainage Institute
- PEI: Porcelain Enamel Institute
- PG&E: Pacific Gas & Electric Company
- PS: Product Standards
- SDI: Steel Door Institute; Steel Deck Institute
- SJI: Steel Joist Institute
- SSPC: Steel Structures Painting Council
- TCA: Tile Council of America

- TPI: Truss Plate Institute
- UBC: Uniform Building Code
- UL: Underwriters Laboratories Code
- UMC: Uniform Mechanical Code
- USDA: United States Department of Agriculture
- VI: Vermiculite Institute
- WCLA: West Coast Lumberman’s Association
- WCLB: West Coast Lumber Bureau
- WEUSER: Western Electric Utilities Service Engineering Requirements
- WIC: Woodwork Institute of California
- WPOA: Western Plumbing Officials Association

1.2.3. Additional Abbreviations and Symbols: Refer to the above-referenced publications or to Drawings for additional abbreviations and for symbols.

**END OF DOCUMENT**

**DOCUMENT 01 42 16**

**GENERAL DEFINITIONS AND REFERENCES**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISION**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions including without limitation, Contract Terms and Definitions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any); and
- 1.1.4. Special Conditions.

**1.2. DEFINITIONS**

General: Basic Contract definitions are included in the General Conditions of the Contract for Construction. The following are in addition to those definitions.

- 1.2.1. "Alternate": A cost or credit for certain Work that may be added to or deducted from the Project.
- 1.2.2. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- 1.2.3. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- 1.2.4. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- 1.2.5. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- 1.2.6. "Provide": Furnish and install, complete and ready for the intended use.

**1.3. QUALITY ASSURANCE**

- 1.3.1. For products or workmanship specified by association, trade, or Federal Standards, Contractor shall comply with requirements of the standard, except when more stringent requirements are specified in the Contract Documents, or are required by applicable codes.
- 1.3.2. Contractor shall conform to current reference standard publication in effect on the date of bid opening.

- 1.3.3. Unless directed otherwise by the Contract Documents, Contractor shall obtain copies of referenced standards.
- 1.3.4. Unless directed otherwise by the Contract Documents, Contractor shall maintain a copy of referenced standards at jobsite until Completion.
- 1.3.5. If specified standards conflict with Contract Documents, Contractor shall request clarification from the District or the Architect before proceeding.
- 1.3.6. Governing Codes shall be as shown in the Contract Documents including, without limitation, the Specifications.

**1.4. STANDARDS**

- 1.4.1. Standard Specifications: References to codes, specifications and standards referred to in the Contract Documents shall mean, and are intended to be, the latest edition, amendment or revision of such reference standard in effect as of the date of these Contract Documents. If those standard specifications are revised prior to Completion of any part of the Work to which such revision would pertain, Contractor may, if acceptable to and approved by the District, perform such Work in accordance with the revised standard specifications.
- 1.4.2. Conflicting Requirements: Where compliance with two or more standards is specified, and the standards may establish different or conflicting requirements for minimum quantities or quality levels, refer requirements that are different, but apparently equal, and uncertainties to the District for a decision before proceeding.
- 1.4.3. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of the requirements. Refer uncertainties to District for a decision before proceeding.
- 1.4.4. Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to that entity's construction activity. Copies of applicable standards are not bound with the Contract Documents.
- 1.4.5. Copies from the Publication Source: Where copies of standards are needed for performance of a required construction activity, Contractor shall obtain copies directly from the publication source.

**1.5. SCHEDULE OF REFERENCES**

**The following information is intended only for the general assistance of Contractor. District does not represent the accuracy of the information. Contractor shall independently verify the information for each entity listed below:**

AA	Aluminum Association 900 19th Street NW, Suite 300 Washington, DC 20006 <a href="http://www.aluminum.org">www.aluminum.org</a>	202/862-5100
AABC	Associated Air Balance Council 1518 K Street, NW, Suite 503	202/737-0202

	Washington, DC 20005 <a href="http://www.aabchq.com">www.aabchq.com</a>	
AAMA	American Architectural Manufacturers Association 1827 Walden Office Sq., Suite 104 Schaumburg, IL 60173-4268 <a href="http://www.aamanet.org">www.aamanet.org</a>	847/303-5664
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, Suite 249 Washington, DC 20001 <a href="http://www.aashto.org">www.aashto.org</a>	202/624-5800
AATCC	American Association of Textile Chemists and Colorists P.O. Box 12215 One Davis Drive Research Triangle Park, NC 27709-2215 <a href="http://www.aatcc.org">www.aatcc.org</a>	919/549-8141
ACI	American Concrete Institute P.O. Box 9094 Farmington Hills, MI 48333-9094 <a href="http://www.aci-int.org">www.aci-int.org</a>	248/848-3700
ACPA	American Concrete Pipe Association 222 West Las Colinas Blvd., Suite 641 Irving, TX 75039-5423 <a href="http://www.concrete-pipe.org">www.concrete-pipe.org</a>	972/506-7216
ADC	Air Diffusion Council 11 South LaSalle St., Suite 1400 Chicago, IL 60603 <a href="http://www.flexibleduct.org/index.asp">http://www.flexibleduct.org/index.asp</a>	312/201-0101
AFPA	American Forest and Paper Association 1111 19th St., NW, Suite 800 Washington, DC 20036 <a href="http://www.afandpa.org/">http://www.afandpa.org/</a>	202/463-2700
AGA	American Gas Association 1515 Wilson Blvd. Arlington VA 22209 <a href="http://www.aga.com">www.aga.com</a>	703/841-8400
AHA	American Hardboard Association 1210 W. Northwest Hwy Palatine, IL 60067-1897 <a href="http://domensino.com/AHA/default.htm">http://domensino.com/AHA/default.htm</a>	847/934-8800
AI	Asphalt Institute Research Park Drive P.O. Box 14052 Lexington, KY 40512-4052	606/288-4960



[www.asphaltinstitute.org](http://www.asphaltinstitute.org)

AIA	The American Institute of Architects 1735 New York Avenue, NW Washington, DC 20006-5292 <a href="http://www.aia.org">www.aia.org</a>	202/626-7300
AISC	American Institute of Steel Construction One East Wacker Drive, Suite 3100 Chicago, IL 60601-2001 <a href="http://www.aisc.org/">http://www.aisc.org/</a>	800/644-2400
AITC	American Institute of Timber Construction 7012 S. Revere Pkwy., Suite 140 Englewood, CO 80112 <a href="http://www.aitc-glulam.org">www.aitc-glulam.org</a>	303/792-9559
ALCA	Associated Landscape Contractors of America 12200 Sunrise Valley Drive, Suite 150 Reston, VA 20191 <a href="http://www.alca.org">www.alca.org</a>	703/620-6363
ALI	Associated Laboratories, Inc. P.O. Box 152837 1323 Wall St. Dallas, TX 75315 <a href="http://www.assoc-labs.com/">http://www.assoc-labs.com/</a>	214/565-0593
ALSC	American Lumber Standards Committee P.O. Box 210 Germantown, MD 20875	301/972-1700
AMCA	Air Movement and Control Association International, Inc. 30 W. University Drive Arlington Heights, IL 60004-1893 <a href="http://www.amca.org">www.amca.org</a>	847/394-0150
ANLA	American Nursery and Landscape Association 1250 Eye Street, NW, Suite 500 Washington, DC 20005	202/789-2900
ANSI	American National Standards Institute 11 West 42nd Street, 13th Floor New York, NY 10036-8002 <a href="http://www.ansi.org">www.ansi.org</a>	212/642-4900
APA	APA-The Engineered Wood Association P.O. Box 11700 Tacoma, WA 98411-0700 <a href="http://www.apawood.org">www.apawood.org</a>	206/565-6600
APA	Architectural Precast Association P.O. Box 08669 Fort Myers, FL 33908-0669	941/454-6989

ARI	Air Conditioning and Refrigeration Institute 4301 Fairfax Drive, Suite 425 Arlington, VA 22203 <a href="http://www.ari.org">www.ari.org</a>	703/524-8800
ARMA	Asphalt Roofing Manufacturers Association Center Park 4041 Powder Mill Road, Suite 404 Calverton, MD 20705	301/231-9050
ASA	Acoustical Society of America 500 Sunnyside Blvd. Woodbury, NY 11797	516/576-2360
ASCE	American Society of Civil Engineers- World Headquarters 1801 Alexander Bell Drive Reston, VA 20190-4400 <a href="http://www.asce.org">www.asce.org</a>	800/548-2723 703/295-6000
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 1791 Tullie Circle, NE Atlanta, GA 30329-2305 <a href="http://www.ashrae.org">www.ashrae.org</a>	800/527-4723 404/636-8400
ASLA	American Society of Landscape Architects 4401 Connecticut Ave., NW, 5th Floor Washington, DC 20008-2369 <a href="http://www.asla.org">www.asla.org</a>	202/686-2752
ASME	American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017-2392 <a href="http://www.asme.org">www.asme.org</a>	800/434-2763
ASPE	American Society of Plumbing Engineers 3617 Thousand Oaks Blvd., Suite 210 Westlake, CA 91362-3649	805/495-7120
ASQC	American Society for Quality Control 611 E. Wisconsin Avenue Milwaukee, WI 53201-3005 <a href="http://www.asqc.org">www.asqc.org</a>	800/248-1946 414/272-8575
ASSE	American Society of Sanitary Engineering 28901 Clemens Road Westlake, OH 44145 <a href="http://www.asse-plumbing.org">www.asse-plumbing.org</a>	216/835-3040
ASTM	American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 <a href="http://www.astm.org">www.astm.org</a>	610/832-9500

AWCI	Association of the Wall and Ceiling Industries--International 307 E. Annandale Road, Suite 200 Falls Church, VA 22042-2433 <a href="http://www.awci.org">www.awci.org</a>	703/534-8300
AWPA	American Wood-Preservers' Association 3246 Fall Creek Highway, Suite 1900 Granbury, TX 76049-7979	817/326-6300
AWS	American Welding Society 550 NW LeJeune Road Miami, FL 33126 <a href="http://www.amweld.org">www.amweld.org</a>	800/443-9373 305/443-9353
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235 <a href="http://www.awwa.org">www.awwa.org</a>	800/926-7337 303/794-7711
BHMA	Builders' Hardware Manufacturers Association 355 Lexington Avenue, 17th Floor New York, NY 10017-6603	212/661-4261
CBM	Certified Ballast Manufacturers Association 1422 Euclid Avenue, Suite 402 Cleveland, OH 44115-2094	216/241-0711
CGA	Compressed Gas Association 1725 Jefferson Davis Hwy, Suite 1004 Arlington, VA 22202-4102 <a href="http://www.cganet.com">www.cganet.com</a>	703/412-0900
CISCA	Ceilings & Interior Systems Construction Association 1500 Lincoln Hwy, Suite 202 St. Charles, IL 60174 <a href="http://www.cisca.org">www.cisca.org</a>	630/584-1919
CISPI	Cast Iron Soil Pipe Institute 5959 Shallowford Road, Suite 419 Chattanooga, TN 37421	423/892-0137
CPSC	Consumer Product Safety Commission East West Towers 4330 East-West Hwy. Bethesda, MD 20814	800/638-2772
CPPA	Corrugated Polyethylene Pipe Association 432 N. Superior Street Toledo, OH 43604	800/510-2772 419/241-2221
CRA	California Redwood Association 405 Enfrente Drive, Suite 200	415/382-0662

	Novato, CA 94949	
CRI	Carpet and Rug Institute 310 S. Holiday Avenue Dalton, GA 30722-2048 <a href="http://www.carpet-rug.com">www.carpet-rug.com</a>	800/882-8846 706/278-3176
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Road Schaumburg, IL 60173-4758 <a href="http://www.crsi.org">www.crsi.org</a>	847/517-1200
CTI	Ceramic Tile Institute of America 12061 W. Jefferson Blvd. Culver City, CA 90230-6219	310/574-7800
DHI	Door and Hardware Institute 14170 Newbrook Drive Chantilly, VA 20151-2223 <a href="http://www.dhi.org">www.dhi.org</a>	703/222-2010
DIPRA	Ductile Iron Pipe Research Association 245 Riverchase Pkwy East, Suite O Birmingham, AL 35244	205/988-9870
DOC	Department of Commerce 14th Street and Constitution Avenue, NW Washington, DC 20230	202/482-2000
DOT	Department of Transportation 400 Seventh Street, SW Washington, DC 20590	202/366-4000
EJMA	Expansion Joint Manufacturers Association 25 N. Broadway Tarrytown, NY 10591-3201	914/332-0040
EPA	Environmental Protection Agency 401 M Street, SW Washington, DC 20460	202/260-2090
FCICA	Floor Covering Installation Contractors Association P.O. Box 948 Dalton, GA 30722-0948	706/226-5488
FM	Factory Mutual 1151 Boston-Providence Turnpike P.O. Box 9102 Norwood, MA 02062-9102 <a href="http://www.factorymutual.com">www.factorymutual.com</a>	781/255-4300
FS	Federal Specifications Unit (Available from GSA) 470 East L'Enfant Plaza, SW, Suite 8100	202/619-8925

Washington, DC 20407

GA	Gypsum Association 810 First Street NE, Suite 510 Washington, DC 20002 <a href="http://www.usg.com">www.usg.com</a>	202/289-5440
GANA	Glass Association of North America 3310 SW Harrison Street Topeka, KS 66611-2279 <a href="http://www.glasswebsite.com/gana">www.glasswebsite.com/gana</a>	913/266-7013
HMA	Hardwood Manufacturers Association 400 Penn Center Blvd., Suite 530 Pittsburgh, PA 15235-5605 <a href="http://www.hardwood.org">www.hardwood.org</a>	412/828-0770
HPVA	Hardwood Plywood and Veneer Association 1825 Michael Farraday Drive P.O. Box 2789 Reston, VA 22195-0789 <a href="http://www.hpva.org">www.hpva.org</a>	703/435-2900
IEEE	Institute of Electrical and Electronic Engineers 345 E. 47th Street New York, NY 10017-2394 <a href="http://www.ieee.org">www.ieee.org</a>	800/678-4333 212/705-7900
IESNA	Illuminating Engineering Society of North America 120 Wall Street, 17th Floor New York, NY 10005-4001 <a href="http://www.iesna.org">www.iesna.org</a>	212/248-5000
ITS	Intertek Testing Services P.O. Box 2040 607/753-6711 3933 US Route 11 Cortland, NY 13045-7902 <a href="http://www.itsglobal.com">www.itsglobal.com</a>	800/345-3851
LMA	Laminating Materials Association 116 Lawrence Street Hillsdale, NJ 07642-2730 <a href="http://www.lma.org">www.lma.org</a>	201/664-2700
MCAA	Mechanical Contractors Association of America 1385 Piccard Drive Rockville, MD 20850-4329	301/869-5800
ML/SFA	Metal Lath/Steel Framing Association (A Division of the NAAMM) 8 South Michigan Avenue, Suite 1000 Chicago, IL 60603	312/456-5590
MSS	Manufacturers Standardization Society for the Valve and Fittings Industry	703/281-6613

	127 Park Street, NE Vienna, VA 22180-4602	
NAA	National Arborist Association P.O. Box 1094 603/673-3311 Amherst, NH 03031-1094 <a href="http://www.natlarb.com">www.natlarb.com</a>	800/733-2622
NAAMM	National Association of Architectural Metal Manufacturers 8 South Michigan Avenue, Suite 1000 Chicago, IL 60603 <a href="http://www.gss.net/naamm">www.gss.net/naamm</a>	312/782-5590
NAIMA	North American Insulation Manufacturers Association 44 Canal Center Plaza, Suite 310 Alexandria, VA 22314 <a href="http://www.naima.org">www.naima.org</a>	703/684-0084
NAPA	National Asphalt Pavement Association NAPA Building 5100 Forbes Blvd. Lanham, MD 20706-4413	301/731-4748
NCSPA	National Corrugated Steel Pipe Association 1255 23rd Street, NW, Suite 850 Washington, DC 20037 <a href="http://www.ncspa.org">www.ncspa.org</a>	202/452-1700
NEBB	National Environmental Balancing Bureau 8575 Grovemont Circle Gaithersburg, MD 20877-4121	301/977-3698
NECA	National Electrical Contractors Association 3 Bethesda Metro Center, Suite 1100 Bethesda, MD 20814-5372	301/657-3110
NEI	National Elevator Industry 185 Bridge Plaza North, Suite 310 Fort Lee, NJ 07024	201/944-3211
NEMA	National Electrical Manufacturers' Association 1300 N. 17th Street, Suite 1847 Rosslyn, VA 22209 <a href="http://www.nema.org">www.nema.org</a>	703/841-3200
NFPA	National Fire Protection Association One Batterymarch Park P.O. Box 9101 Quincy, MA 02269-9101 <a href="http://www.nfpa.org">www.nfpa.org</a>	800/344-3555 617/770-3000
NHLA	National Hardwood Lumber Association P.O. Box 34518	901/377-1818

	Memphis, TN 38184-0518 <a href="http://www.natlhardwood.org">www.natlhardwood.org</a>	
NIA	National Insulation Association 99 Canal Center Plaza, Suite 222 Alexandria, VA 22314 <a href="http://www.insulation.org">www.insulation.org</a>	703/683-6422
NPA	National Particleboard Association 18928 Premiere Court Gaithersburg, MD 20879-1569 <a href="http://www.pbmdf.com">www.pbmdf.com</a>	301/670-0604
NPCA	National Paint and Coatings Association 1500 Rhode Island Avenue, NW Washington, DC 20005-5597 <a href="http://www.paint.org">www.paint.org</a>	202/462-6272
NRCA	National Roofing Contractors Association O'Hare International Center 10255 W. Higgins Road, Suite 600 Rosemont, IL 60018-5607 <a href="http://www.roofonline.org">www.roofonline.org</a>	800/323-9545
NRMCA	National Ready Mixed Concrete Association 900 Spring Street Silver Spring, MD 20910 <a href="http://www.nrmca.org">www.nrmca.org</a>	301/587-1400
NSF	NSF International P.O. Box 130140 Ann Arbor, MI 48113-0140 <a href="http://www.nsf.org">www.nsf.org</a>	313/769-8010
NUSIG	National Uniform Seismic Installation Guidelines 12 Lahoma Court Alamo, CA 94526	510/946-0135
NWWDA	National Wood Window and Door Association 1400 E. Touhy Avenue, G-54 Des Plaines, IL 60018 <a href="http://www.nwwda.org">www.nwwda.org</a>	800/223-2301 847/299-5200
SHA	Occupational Safety and Health Administration (U.S. Department of Labor) 200 Constitution Ave., NW Washington, DC 20210	202/219-8148
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077-1083 <a href="http://www.portcement.org">www.portcement.org</a>	847/966-6200
PDCA	Painting and Decorating Contractors of America	800/332-7322 703/359-0826

3913 Old Lee Hwy, Suite 33-B  
Fairfax, VA 22030  
[www.pdca.com](http://www.pdca.com)

PDI	Plumbing and Drainage Institute 45 Bristol Drive, Suite 101 South Easton, MA 02375	800/589-8956 508/230-3516
RFCI	Resilient Floor Covering Institute 966 Hungerford Drive, Suite 12-B Rockville, MD 20805-1714	301/340-8580
RIS	Redwood Inspection Service c/o California Redwood Association 405 Enfrente Drive, Suite 200 Novato, CA 94949-7206	415/382-0662
SDI	Steel Deck Institute P.O. Box 25 Fox River Grove, IL 60012 <a href="http://www.sdi.org">www.sdi.org</a>	847/462-1930
SDI	Steel Door Institute 30200 Detroit Road Cleveland, OH 44145-1967	216/889-0010
SMA	Stucco Manufacturers Association 14006 Ventura Blvd. Sherman Oaks, CA 91403	213/789-8733
SMACNA	Sheet Metal and Airconditioning Contractors National Association, Inc. P.O. Box 221230 Chantilly, VA 20151-1209 <a href="http://www.smacna.org">www.smacna.org</a>	703/803-2980
SPI	Society of the Plastics Industry, Inc. Spray Polyurethane Division 1801 K Street, NW, Suite 600K Washington, DC 20006 <a href="http://www.socplas.org">www.socplas.org</a>	800/951-2001 202/974-5200
SSPC	Steel Structures Painting Council 40 24th Street, 6th Floor Pittsburgh, PA 15222-4643	412/281-2331
TCA	Tile Council of America 100 Clemson Research Blvd. Anderson, SC 29625	864/646-8453
TPI	Turfgrass Producers International 1855-A Hicks Road Rolling Meadows, IL 60008	800/405-8873 847/705-9898
UL	Underwriters Laboratories, Inc.	800/704-4050



	333 Pfingston Road Northbrook, IL 60062 <a href="http://www.ul.com">www.ul.com</a>	847/272-8800
UNI	Uni-Bell PVC Pipe Association 2655 Villa Creek Drive, Suite 155 Dallas, TX 75234 <a href="http://www.members.aol.com/unibell1">www.members.aol.com/unibell1</a>	972/243-3902
USDA	U.S. Department of Agriculture 14th St. and Independence Ave., SW Washington, DC 20250	202/720-8732
WA	Wallcoverings Association 401 N. Michigan Avenue Chicago, IL 60611-4267	312/644-6610
WCLIB	West Coast Lumber Inspection Bureau P.O. Box 23145 Portland, OR 97281-3145	503/639-0651
WCMA	Window Covering Manufacturers Association 355 Lexington Ave., 17th Floor New York, NY 10017-6603	212/661-4261
WIC	Woodwork Institute of California P.O. Box 980247 West Sacramento, CA 95798-0247	916/372-9943
WLPDIA	Western Lath/Plaster/Drywall Industries Association 8635 Navajo Road San Diego, CA 92119	619/466-9070
WMMPA	Wood Moulding & Millwork Producers Association 507 First Street Woodland, CA 95695 <a href="http://www.wmmpa.com">www.wmmpa.com</a>	800/550-7889 916/661-9591
WRI	Wire Reinforcement Institute 203 Loudoun Street, SW Leesburg, VA 20175-2718	703/779-2339
WWPA	Western Wood Products Association Yeon Building 522 S.W. 5th Avenue Portland, OR 97204-2122	503/224-3930

END OF DOCUMENT

**DOCUMENT 01 45 29**

**TESTING LABORATORY SERVICES**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISION**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions, including “Tests and Inspections”; and
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any).

**1.2. DOCUMENT INCLUDES**

- 1.2.1. Observation and Supervision.
- 1.2.2. Testing Laboratories and Agencies
- 1.2.3. Tests and Inspections
- 1.2.4. Selection and Payment
- 1.2.5. District's Testing Laboratory Responsibilities
- 1.2.6. Laboratory reports.
- 1.2.7. Limits on testing laboratory authority.
- 1.2.8. Contractor responsibilities.
- 1.2.9. Schedule of inspections and tests.
- 1.2.10. Project Inspector’s Access to Site

**1.3. REFERENCES**

- 1.3.1. ASTM D3740 - Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
- 1.3.2. ASTM E329 - Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction.
- 1.3.3. CBC - California Building Code.
- 1.3.4. UBC - Uniform Building Code.
- 1.3.5. Title 24, Parts 1 and 2, of the California Code of Regulations. Contractor shall keep a copy of these available at the job Site for ready reference during construction

- 1.3.6. DSA - Division of the State Architect, Office of Regulation Services, Structural Safety Section. DSA shall be notified at or before the start of construction.

#### **1.4. OBSERVATION AND SUPERVISION**

- 1.4.1. The District and Architect or their appointed representatives will review the Work and the Contractor shall provide facilities and access to the Work at all times as required to facilitate this review. Administration by the Architect and any consulting Structural Engineer will be in accordance with applicable regulations, including, without limitation, 24 C.C.R. § 4-341.
- 1.4.2. One or more Project Inspector(s) approved by DSA and employed by or in contract with the District( "Project Inspector"), will observe the Work in accordance with 24 C.C.R. §§ 4-333(b) and 4-342:
- 1.4.3. Project Inspector shall have access to the Work wherever it is in preparation or progress for ascertaining that the Work is in accordance with the Contract Documents and all applicable code sections. Contractor shall provide facilities and access as required and shall provide assistance for sampling or measuring materials.
  - 1.4.3.1. Project Inspector will notify District and Architect and inform Contractor of any observed failure of Work or material to conform to Contract Documents.
  - 1.4.3.2. The Project Inspector shall observe and monitor all testing and inspection activities required.
- 1.4.4. Contractor shall conform with all applicable laws as indicated in the Contract Documents, including, without limitation, to 24 C.C.R. § 4-343. Contractor shall supervise and direct the Work and maintain a competent superintendent on the Project who is authorized to act in all matters pertaining to the Work. The Contractor shall inspect all materials, as they arrive, for compliance with the Contract Documents. Contractor shall reject defective Work or materials immediately upon delivery or failure of the Work or material to comply with the Contract Documents. The Contractor shall submit verified reports as indicated in the Contract Documents, including, without limitation, the Specifications and as required by 24 C.C.R. § 4-336.

#### **1.5. TESTING LABORATORIES AND AGENCIES**

- 1.5.1. Testing agencies and tests shall be in conformance with the Contract Documents and the requirements of 24 C.C.R. § 4-335.
- 1.5.2. Testing and inspection in connection with earthwork shall be under the direction of the District's consulting soils engineer ("Soils Engineer").
- 1.5.3. Testing and inspection of construction materials and workmanship shall be performed by a qualified laboratory ("Testing Laboratory" or "Laboratory"). The Testing Laboratory shall be under direction of an engineer registered in the State of California, shall conform to requirements of ASTM E329, and shall be employed by or in contract with the District.

#### **1.6. TESTS AND INSPECTIONS**

- 1.6.1. Contractor shall be responsible for notifying District and Project Inspector of all required tests and inspections. Contractor shall notify District and Project Inspector forty-eight (48) hours in advance of performing any Work requiring testing or inspection.
- 1.6.2. Contractor shall provide access to Work to be tested and furnish incidental labor, equipment, and facilities to facilitate all inspections and tests.
- 1.6.3. District will pay for first inspections and tests required by the Title 24 and other inspections or tests that District and/or Architect may direct to have made, including, but not limited to, the following principal items:
  - 1.6.3.1. Tests and observations for earthwork and pavings.
  - 1.6.3.2. Tests for concrete mix designs, including tests of trial batches.
  - 1.6.3.3. Tests and inspections for structural steel work.
  - 1.6.3.4. Field tests for framing lumber moisture content.
  - 1.6.3.5. Additional tests directed by District that establish that materials and installation comply with the Contract Documents.
  - 1.6.3.6. Test and observation of welding and expansion anchors.
  - 1.6.3.7. Factory observation of components and assembly of modular prefabrication structures and buildings.
- 1.6.4. District may at its discretion, pay and back charge Contractor for:
  - 1.6.4.1. Retests or reinspections, if required, and tests or inspection required due to Contractor error or lack of required identifications of material.
  - 1.6.4.2. Uncovering of work in accordance with Contract Documents.
  - 1.6.4.3. Testing done on weekends, holidays, and overtime will be chargeable to Contractor for the overtime portion.
  - 1.6.4.4. Testing done off site.
- 1.6.5. Testing and inspection reports and certifications:
  - 1.6.5.1. If initially received by Contractor, Contractor shall provide to each of the following a copy of the agency or laboratory report of each test or inspection or certification: District; Construction Manager, if any; Architect; Consulting Engineer, if any; Other Engineers on the Project, as appropriate; and; Project Inspector.
  - 1.6.5.2. When the test or inspection is one required by the Title 24, a copy of the report shall also be provided to the DSA.

## **1.7. SELECTION AND PAYMENT**

- 1.7.1. District will hire and pay for services of an independent Testing Laboratory to perform specified inspection and testing as specified by District's Testing Laboratory.

- 1.7.2. District's hiring of Testing Laboratory shall in no way relieve Contractor of its obligation to perform work in accordance with requirements of Contract Documents.

**1.8. DISTRICT'S TESTING LABORATORY RESPONSIBILITIES**

- 1.8.1. Test samples of mixes submitted by Inspector.
- 1.8.2. Perform specified inspection, sampling, and testing of Products in accordance with specified standards.
- 1.8.3. Notify Architect and Contractor of observed irregularities or non-conformance of Work or Products.
- 1.8.4. Attend preconstruction conferences and progress meetings when requested by Architect.

**1.9. LABORATORY REPORTS**

- 1.9.1. After each inspection and test, District shall then submit one copy of laboratory report to Contractor. Reports of test results of materials and inspections found not to be in compliance with the requirements of the Contract Documents shall be forwarded immediately.
- 1.9.2. Each Testing Laboratory shall submit a verified report covering all of the tests which were required to be made by that agency during the progress of the Project. Such report shall be furnished each time that Work is suspended, covering the tests up to that time and at the Completion of the Project, covering all tests.

**1.10. LIMITS ON TESTING LABORATORY AUTHORITY**

- 1.10.1. Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
- 1.10.2. Laboratory may not approve or accept any portion of the Work.
- 1.10.3. Laboratory may not assume any duties of Contractor.
- 1.10.4. Laboratory has no authority to stop the Work.

**1.11. CONTRACTOR RESPONSIBILITIES**

- 1.11.1. Submit proposed items for testing as required herein and/or as further required in the Contract Documents to Architect for review in accordance with applicable specifications.
- 1.11.2. Cooperate with Laboratory personnel, and provide access to the Work and to manufacturer's facilities.
- 1.11.3. Notify Architect, District, and Testing Laboratory 48 hours prior to expected time for operations requiring inspection and testing services.
- 1.11.4. When tests or inspections cannot be performed after such notice, reimburse District for Laboratory personnel and travel expenses incurred due to the Contractor's negligence.

1.11.5. Contractor shall notify District a sufficient time in advance of the manufacture of material to be supplied by Contractor pursuant to the Contract Documents, which must by terms of the Contract be tested, in order that the District may arrange for the testing of same at the source of supply.

1.11.5.1. Any material shipped by the Contractor from the source of supply prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice that such testing and inspection will not be required shall not be incorporated in the Work.

1.11.6. Contract and pay for services of District's Testing Laboratory to perform additional inspections, sampling and testing required when initial tests indicate Contractor's work and/or materials does not comply with Contract Documents.

## **1.12. SCHEDULE OF INSPECTIONS AND TESTS**

The Testing Laboratory shall perform tests and inspections for the following in conformance with the (CBC) California Building Code (International Building Code with State of California Amendments), California Code of Regulations, Title 24, Part 2:

- Structural Tests and Special Inspections (Chapter 17A)
  - Special Inspections (§ 1704A)
- Soils and Foundations (Chapter 18A)
  - Geotechnical Investigations (§ 1803A)
- Concrete (Chapter 19A)
  - Specifications for Tests and Materials
  - Concrete Quality, Mixing and Placing
  - Concrete Reinforcement and Anchor Testing Inspection (§ 1916A)
- Masonry (Chapter 21A)
  - Masonry Construction Materials (§ 2103A)
  - Masonry Quality (§ 2103A)
  - Quality Assurance (§ 2105A)
- Structural Steel (Chapter 22A)
  - Structural Steel (§ 2205A)
  - Identification & Protection of Steel for Structural Purposes (§ 2203A)
  - Inspection and Tests of Structural Steel (§ 2212A)
- Wood (Chapter 23)
  - Minimum Standards and Quality (§ 2303)
  - Wood Construction (§ 1704A.6)
- Exterior Walls (Chapter 14)
  - Masonry Units (§ 1404.4)
  - Masonry Construction Materials (§ 2103A)
  - Exterior Insulation and Finish Systems (§ 1408)
- Roof Assemblies and Roofing Structures (Chapter 15)
  - Materials (§ 1506)
- Aluminum (Chapter 20)
  - Materials (§ 2002.1)
  - Inspection (§ 2003.1)

### **1.12.1. Plumbing**

Testing as specified in Division 15 including, but not limited to: Sterilization, soil waste and vent, water piping, source of water, gas piping, downspouts and storm drains.

**1.12.2. Automatic Fire Sprinklers (where applicable)**

Testing as specified in Division 15 shall include, but not be limited to: hydrostatic pressure.

**1.12.3. Heating, Ventilating and Air Conditioning**

Testing as specified in Division 15 shall include, but not be limited to: Ductwork tests, cooling tower tests, boiler tests, controls testing, piping tests, water and air systems, and test and balance of heating and air conditioning systems.

**1.12.4. Electrical**

Testing as specified in Division 16, including, but not limited to: Equipment testing, all electrical system operations, grounding system and checking insulation after cable is pulled.

**1.13. PROJECT INSPECTOR'S ACCESS TO SITE**

1.13.1. A Project Inspector employed by the District in accordance with the requirement of State of California Code of Regulations, Title 24, Part 1 will be assigned to the Work. Project Inspector's duties are specifically defined in 24. C.C.R. §4-342, and as indicated in the General Conditions.

1.13.2. District and Construction Manager shall at all times have access for the purpose of inspection to all parts of the Work and to the shops wherein the Work is in preparation, and Contractor shall at all times maintain proper facilities and provide safe access for such inspection.

1.13.3. The Work in all stages of progress shall be subject to the personal continuous observation of the Inspector. Inspector shall have free access to any or all parts of the Work at any time. Contractor shall furnish the Inspector reasonable facilities for obtaining such information as may be necessary to keep Inspector fully informed respecting the progress and manner of the Work and the character of the materials. Inspection of the Work shall not relieve the Contractor from any obligation set forth in the Contract Documents.

1.13.4. The Inspector is not authorized to change, revoke, alter, enlarge or decrease in any way any requirement of the Contract Documents, drawings, specifications or subsequent change orders.

1.13.5. Whenever there is insufficient evidence of compliance with any of the provisions of Title 24 or evidence that any material or construction does not conform to the requirements of Title 24, the Division of the State Architect may require tests as proof of compliance. Test methods shall be as specified herein or by other recognized and accepted test methods determined by the Division of the State Architect. All tests shall be performed by a testing laboratory accepted by the Division of the State Architect.

**END OF DOCUMENT**

**DOCUMENT 01 50 00**

**TEMPORARY FACILITIES AND CONTROLS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Site Standards; and
- 1.1.5. Temporary Tree and Plant Protection.

**1.2. TEMPORARY UTILITIES**

**1.2.1. Electric Power and Lighting:**

- 1.2.1.1. Contractor will furnish and pay for power during the course of the work to the extent power is not in the building(s) or on the Site. Contractor shall be responsible for providing temporary facilities required on the Site to point of intended use.
- 1.2.1.2. Contractor shall furnish, wire for, install, and maintain temporary electrical lights wherever it is necessary to provide illumination for the proper performance and/or observation of the Work: a minimum of 20 foot-candles for rough work and 50 foot-candles for finish work.
- 1.2.1.3. Contractor shall be responsible for maintaining existing lighting levels in the Project vicinity should temporary outages or service interruptions occur.

**1.2.2. Heat and Ventilation:**

- 1.2.2.1. Contractor shall provide temporary heat to maintain environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and curing of materials, and to protect materials and finishes from damage due to improper temperature and humidity conditions. Portable heaters shall be standard units complete with controls.
- 1.2.2.2. Contractor shall provide forced ventilation and dehumidification, as required, of enclosed areas for proper installation and curing of materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, and gases.
- 1.2.2.3. Contractor shall pay the costs of installation, maintenance, operation, and removal of temporary heat and ventilation, including costs for fuel consumed, required for the performance of the Work.



1.2.3. **Water:**

1.2.3.1. Contractor will furnish and pay for water during the course of the work. Contractor shall be responsible for providing temporary facilities required.

1.2.3.2. Contractor shall make potable water available for human consumption.

1.2.4. **Sanitary Facilities:**

1.2.4.1. Contractor shall provide sanitary temporary facilities in no fewer numbers than required by law and such additional facilities as may be directed by the Inspector for the use of all workers. The facilities shall be maintained in a sanitary condition at all times and shall be left at the Site until removal is directed by the District or Contractor completes all Work.

1.2.4.2. Use of toilet facilities in the Site shall not be permitted except by consent of the Project Inspector and District.

1.2.5. **Telephone Service:**

1.2.5.1. Contractor shall arrange with local telephone service company for telephone service for the performance of the Work. Contractor shall, at a minimum, provide in its field office one line for telephone and one line for fax machine.

1.2.5.2. Contractor shall pay the costs for telephone and fax lines installation, maintenance, service, and removal; for Construction Site Office, Construction Manager's Office and Inspector's Office.

1.2.6. **Fire Protection:**

1.2.6.1. Contractor shall provide and maintain fire extinguishers and other equipment for fire protection. Such equipment shall be designated for use for fire protection only and shall comply with all requirements of the California Fire, State Fire Marshall and/or its designee.

1.2.6.2. Where on-site welding and burning of steel is unavoidable, Contractor shall provide protection for adjacent surfaces.

1.2.7. **Trash Removal:**

1.2.7.1. Contractor shall provide trash removal on a timely basis from all Site Offices and throughout the Site.

1.2.8. **Temporary Facilities:**

1.2.8.1. Contractor shall provide sufficient space and facilities for its own force's needs.

**1.3. CONSTRUCTION AIDS**

1.3.1. **Plant and Equipment:**

1.3.1.1. Contractor shall furnish, operate, and maintain a complete plant for fabricating,

handling, conveying, installing, and erecting materials and equipment; and for conveyances for transporting workmen. Include elevators, hoists, debris chutes, and other equipment, tools, and appliances necessary for performance of the Work.

1.3.1.2. Contractor shall maintain plant and equipment in safe and efficient operating condition. Damages due to defective plant and equipment, and uses made thereof, shall be repaired by Contractor at no expense to the District.

1.3.2. No District tools or equipment shall be used by Contractor or its subcontractors for the performance of the Work.

#### **1.4. BARRIERS AND ENCLOSURES**

1.4.1. Contractor shall obtain District's written permission for locations and types of temporary barriers and enclosures, including fire-rated materials proposed for use, prior to their installation.

1.4.2. Contractor shall provide a six (6) foot high, chain link perimeter fence with posts driven into the ground and fabric screen as a temporary barrier around construction area. Contractor shall provide and maintain temporary enclosures to prevent public entry and to protect persons using other buildings and portions of the Site and/or Premises. Contractor shall remove temporary fence, barriers and enclosure upon Completion of the Work.

1.4.3. Contractor shall provide site access to existing facilities for persons using other buildings and portions of the Site, for the public, and for deliveries and other services and activities.

#### **1.5. SECURITY**

Contractor shall secure all construction equipment, machinery and vehicles, park and store only within fenced area, and render inoperable during non-work hours. Contractor is responsible for ensuring that no construction materials, tools, equipment, machinery or vehicles can be used for unauthorized entry or other damage or interference to activities and security of existing facilities adjacent to and in the vicinity of the Project Site.

#### **1.6. TEMPORARY CONTROLS**

##### **1.6.1. Noise Control:**

1.6.1.1. Contractor acknowledges that adjacent facilities may remain in operation during all or a portion of the Work, and Contractor shall take all reasonable precautions to minimize noise as required by applicable laws and the Contract Documents.

1.6.1.2. Notice of proposed noisy operations, including without limitation, operation of pneumatic demolition tools, concrete saws, and other equipment, shall be submitted to District a minimum of forty-eight (48) hours in advance of their performance.

##### **1.6.2. Noise and Vibration:**

1.6.2.1. Equipment and impact tools shall have intake and exhaust mufflers.

1.6.2.2. Contractor shall cooperate with District to minimize and/or cease the use of noisy and vibratory equipment if that equipment becomes objectionable by its longevity.

**1.6.3. Dust and Dirt:**

1.6.3.1. Contractor shall conduct demolition and construction operations to minimize the generation of dust and dirt, and prevent dust and dirt from interfering with the progress of the Work and from accumulating in the Work and adjacent areas including, without limitation, occupied facilities.

1.6.3.2. Contractor shall periodically water exterior demolition and construction areas to minimize the generation of dust and dirt.

1.6.3.3. Contractor shall ensure that all hauling equipment and trucks carrying loads of soil and debris shall have their loads sprayed with water or covered with tarpaulins, and as otherwise required by local and state ordinance.

1.6.3.4. Contractor shall prevent dust and dirt from accumulating on walks, roadways, parking areas, and planting, and from washing into sewer and storm drain lines.

**1.6.4. Surface and Subsurface Water:**

Contractor shall not permit surface and subsurface water, and other liquids, to accumulate in or about the vicinity of the Premises. Should accumulation develop, Contractor shall control the water or other liquid, and suitably dispose of it by means of temporary pumps, piping, drainage lines, troughs, ditches, dams, or other methods.

**1.6.5. Pollution:**

1.6.5.1. No burning of refuse, debris, or other materials shall be permitted on or in the vicinity of the Premises.

1.6.5.2. Contractor shall comply with applicable regulatory requirements and anti-pollution ordinances during the conduct of the Work including, without limitation, demolition, construction, and disposal operations.

**1.6.6. Lighting**

If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

**1.7. JOB SIGN(S)**

**1.7.1. General:**

1.7.1.1. Contractor shall provide and maintain and locate a Project identification sign with the design, text, and colors designated by District and/or the Architect.

1.7.1.2. Signs other than the specified Project sign and or signs required by law, for safety, or for egress, shall not be permitted, unless otherwise approved in advance by the District.

**1.7.2. Materials:**

1.7.2.1. Structure and Framing: Structurally sound, new or used wood or metal; wood shall be nominal 3/4-inch exterior grade plywood.

1.7.2.2. Sign Surface: Minimum 3/4-inch exterior grade plywood.

1.7.2.3. Rough Hardware: Galvanized.

1.7.2.4. Paint: Exterior quality, of type and colors selected by the District and/or the Architect.

**1.7.3. Fabrication:**

1.7.3.1. Contractor shall fabricate to provide smooth, even surface for painting.

1.7.3.2. Size: 4'-0" x 8'-0", unless otherwise indicated.

1.7.3.3. Contractor shall paint exposed surfaces of supports, framing, and surface material with exterior grade paint: one coat of primer and one coat of finish paint.

1.7.3.4. Text and Graphics: As indicated.

**1.8. PUBLICITY RELEASES**

Contractor shall not release any information, story, photograph, plan, or drawing relating to information about the Project to anyone, including press and other public communications medium, including, without limitation, on website(s).

**END OF DOCUMENT**

**DOCUMENT 01 52 10**

**SITE STANDARDS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS:**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions, including without limitation, Site Access, Conditions, and Regulations;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Drug-Free Workplace Certification;
- 1.1.5. Tobacco-Free Environment Certification;
- 1.1.6. Criminal Background Investigation/Fingerprinting Certification; and
- 1.1.7. Temporary Facilities and Controls.

**1.2. REQUIREMENTS OF THE DISTRICT**

**1.2.1. Drug-Free Schools and Safety Requirements:**

- 1.2.1.1. All school sites and other District Facilities have been declared "Drug-Free Zones." No drugs, alcohol, smoking or the use of tobacco products are allowed at any time in any buildings, Contractor-owned vehicles or vehicles owned by others while on District property. No students, staff, visitors, or contractors are to use drugs on these sites.
- 1.2.1.2. Contractor shall post: "Non-Smoking Area" in a highly visible location on Site. Contractor may designate a smoking area outside of District property within the public right-of-way, provided that this area remains quiet and unobtrusive to adjacent neighbors. This smoking area must be kept clean at all times.
- 1.2.1.3. Contractor shall ensure that no alcohol, firearms, weapons, or controlled substances enter or are used at the Site. Contractor shall immediately remove from the Site and terminate the employment of any employee(s) found in violation of this provision.

- 1.2.2. **Language:** Unacceptable and/or loud language will not be tolerated, "Cat calls" or other derogatory language toward students or public will not be allowed.

**1.2.3. Disturbing the Peace (Noise and Lighting):**

- 1.2.3.1. Contractor shall observe the noise ordinance of the Site at all times including, without limitation, all applicable local, city, and/or state laws, ordinances, and/or regulations regarding noise and allowable noise levels.

- 1.2.3.2. The use of radios, etc., shall be controlled to keep all sound at a level that cannot be heard beyond the immediate area of use. District reserves the right to prohibit the use of radios at the Site, except for handheld communication radios.
- 1.2.3.3. If portable lights are used after dark, the lights must be located so as not to direct light into neighboring properties.

1.2.4. **Traffic:**

- 1.2.4.1. Driving on the Premises shall be limited to periods when students and public are not present. If driving or deliveries must be made during the school hours, two (2) or more ground guides shall lead the vehicle across the area of travel. In no case shall driving take place across playgrounds or other pedestrian paths during recess, lunch, and/or class period changes. The speed limit on-the Premises shall be five (5) miles per hour (maximum) or less if conditions require.
- 1.2.4.2. All paths of travel for deliveries, including without limitation, material, equipment, and supply deliveries, shall be reviewed and approved by District in advance. Any damage will be repaired to the pre-damaged condition by the Contractor.
- 1.2.4.3. District shall designate a construction entry to the Site. If Contractor requests, District determines it is required, and to the extent possible, District shall designate a staging area so as not to interfere with the normal functioning of school facilities. Location of gates and fencing shall be approved in advance with District and at Contractor's expense.
- 1.2.4.4. Parking areas shall be reviewed and approved by District in advance. No parking is to occur under the drip line of trees or in areas that could otherwise be damaged.
- 1.2.4.5. All of the above shall be observed and complied with by the Contractor and all workers on the Site. Failure to follow these directives could result in individual(s) being suspended or removed from the work force at the discretion of the District. The same rules and regulations shall apply equally to delivery personnel, inspectors, consultants, and other visitors to the Site.

**END OF DOCUMENT**

**TEMPORARY TREE AND PLANT PROTECTION**

**1. GENERAL**

**1.1. RELATED DOCUMENTS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any); and
- 1.1.4. Temporary Facilities and Controls.

**1.2. SUMMARY**

This Document includes the protection and trimming of existing trees that interfere with, or are affected by, execution of the Work, whether temporary or permanent construction.

**1.3. DEFINITIONS**

Tree Protection Zone: Area surrounding individual trees or groups of trees to remain during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees, unless otherwise indicated.

**1.4. SUBMITTALS**

- 1.4.1. Product Data: For each type of product indicated.
- 1.4.2. Tree Pruning Schedule: Written schedule from arborist detailing scope and extent of pruning of trees to remain that interfere with or are affected by construction.
- 1.4.3. Qualification Data: For tree service firm and arborist.
- 1.4.4. Certification: From arborist, certifying that trees indicated to remain have been protected during construction according to recognized standards and that trees were promptly and properly treated and repaired when damaged.
- 1.4.5. Maintenance Recommendations: From arborist, for care and protection of trees affected by construction during and after completing the Work.

**1.5. QUALITY ASSURANCE**

- 1.5.1. Tree Service Firm Qualifications: An experienced tree service firm that has successfully completed tree protection and trimming work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of tree protection and trimming.
- 1.5.2. Arborist Qualifications: An arborist certified by ISA (International Society of Arboriculture) or licensed in the jurisdiction where Project is located.

1.5.3. Tree Pruning Standard: Comply with ANSI A300 (Part 1), "Tree, Shrub, and Other Woody Plant Maintenance--Standard Practices (Pruning)."

1.5.3.1. Before tree protection and trimming operations begin, meet with District to review tree protection and trimming procedures and responsibilities.

## **2. PRODUCTS**

### **2.1. MATERIALS**

2.1.1. Unless otherwise specified, Contractor shall select materials as recommended by arborist or landscape architect.

2.1.2. Drainage Fill: Selected crushed stone, or crushed or uncrushed gravel, washed, ASTM D 448, Size 24, with 90 to 100 percent passing a 2-1/2-inch (63-mm) sieve and not more than 10 percent passing a 3/4-inch (19-mm) sieve.

2.1.3. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 1 inch (25 mm) in diameter; and free of weeds, roots, and toxic and other nonsoil materials.

2.1.3.1. Obtain topsoil only from well-drained sites where topsoil is 4 inches (100 mm) deep or more; do not obtain from bogs or marshes.

2.1.4. Filter Fabric: Manufacturer's standard, nonwoven, pervious, geotextile fabric of polypropylene, nylon, or polyester fibers.

2.1.5. Chain-Link Fence: Metallic-coated steel chain-link fence fabric of 0.120-inch- (3-mm-) diameter wire; a minimum of 48 inches (1200 mm) high; with 1.9-inch- (48-mm-) diameter line posts; 2-3/8-inch- (60-mm-) diameter terminal and corner posts; 1-5/8-inch- (41-mm-) diameter top rail; and 0.177-inch- (4.5-mm-) diameter bottom tension wire; with tie wires, hog ring ties, and other accessories for a complete fence system.

2.1.6. Select mulch as recommended by arborist or landscape architect.

2.1.7. Organic Mulch: Use shredded hardwood, ground or shredded bark, or wood and bark chips, all free of deleterious materials.

## **3. EXECUTION**

### **3.1. PREPARATION**

3.1.1. Temporary Fencing: Install temporary fencing around tree protection zones to protect remaining trees and vegetation from construction damage. Maintain temporary fence and remove when construction is complete.

3.1.2. Install chain-link fence according to ASTM F 567 and manufacturer's written instructions.

3.1.3. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.



- 3.1.4. Mulch areas inside tree protection zones and other areas indicated.
  - 3.1.4.1. Select mulch as recommended by arborist or landscape architect.
  - 3.1.4.2. Apply 2-inch (50-mm) to 3-inch (75-mm) average thickness of organic mulch. Do not place mulch within 6 inches (150 mm)] of tree trunks.
- 3.1.5. Do not store construction materials, debris, or excavated material inside tree protection zones. Do not permit vehicles or foot traffic within tree protection zones; prevent soil compaction over root systems.
- 3.1.6. Maintain tree protection zones free of weeds and trash.
- 3.1.7. Do not allow fires within tree protection zones.

### **3.2. EXCAVATION**

- 3.2.1. Install shoring or other protective support systems to minimize sloping or benching of excavations where construction or utility excavation is near trees to be protected.
- 3.2.2. Do not excavate within tree protection zones, unless otherwise indicated.
- 3.2.3. Where excavation for new construction is required within tree protection zones, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks and comb soil to expose roots.
  - 3.2.3.1. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.
- 3.2.4. Where utility trenches are required within tree protection zones, tunnel under or around roots by drilling, auger boring, pipe jacking, or digging by hand.
  - 3.2.4.1. Root Pruning: Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots with sharp pruning instruments; do not break or chop.

### **3.3. REGRADING**

- 3.3.1. Grade Lowering: Where new finish grade is indicated below existing grade around trees, slope grade beyond tree protection zones. Maintain existing grades within tree protection zones.
- 3.3.2. Grade Lowering: Where new finish grade is indicated below existing grade around trees, slope grade away from trees as recommended by arborist, unless otherwise indicated.
  - 3.3.2.1. Root Pruning: Prune tree roots exposed during grade lowering. Do not cut main lateral roots or taproots; cut only smaller roots. Cut roots with sharp pruning instruments; do not break or chop.

- 3.3.3. Minor Fill: Where existing grade is 6 inches (150 mm) or less below elevation of finish grade, fill with topsoil. Place topsoil in a single uncompacted layer and hand grade to required finish elevations.
- 3.3.4. Moderate Fill: Where existing grade is more than 6 inches (150 mm) but less than 12 inches (300 mm) below elevation of finish grade, place drainage fill, filter fabric, and topsoil on existing grade as follows:
  - 3.3.4.1. Carefully place drainage fill against tree trunk approximately 2 inches (50 mm) above elevation of finish grade and extend not less than 18 inches (450 mm) from tree trunk on all sides. For balance of area within drip-line perimeter, place drainage fill up to 6 inches (150 mm) below elevation of grade.
  - 3.3.4.2. Place filter fabric with edges overlapping 6 inches (150 mm) minimum.
  - 3.3.4.3. Place fill layer of topsoil to finish grade. Do not compact drainage fill or topsoil. Hand grade to required finish elevations.

#### **3.4. TREE PRUNING**

- 3.4.1. Prune trees to remain that are affected by temporary and permanent construction.
- 3.4.2. Prune trees to remain to compensate for root loss caused by damaging or cutting root system. Provide subsequent maintenance during Contract period as recommended by arborist.
- 3.4.3. Pruning Standards: Prune trees according to ANSI A300 (Part 1), as recommended by arborist report.
- 3.4.4. Adjust pruning requirements per arborist's recommendations.
- 3.4.5. Cut branches with sharp pruning instruments; do not break or chop.
- 3.4.6. Modify below to specific project requirements.
- 3.4.7. Chip removed tree branches and dispose of or spread over areas identified by District.

#### **3.5. TREE REPAIR AND REPLACEMENT**

- 3.5.1. Promptly repair trees damaged by construction operations within 24 hours. Treat damaged trunks, limbs, and roots according to arborist's written instructions.
- 3.5.2. Remove and replace trees indicated to remain that die or are damaged during construction operations or that are incapable of restoring to normal growth pattern.
  - 3.5.2.1. Provide new trees of 6-inch (150-mm) caliper size and of a when damaged trees more than 6 inches (150 mm) in caliper size, measured 12 inches (300 mm) above grade, are required to be replaced. Plant and maintain new trees as specified in Contract Documents.
- 3.5.3. Where recommended by arborist report, aerate surface soil, compacted during construction, 10 feet (3 m) beyond drip line and no closer than 36 inches (900 mm) to tree trunk. Drill 2-inch (50-mm) diameter holes a minimum of 12 inches (300 mm) deep at 24 inches (600 mm) o.c. Backfill holes with an equal mix of augered soil and sand.

**3.6. DISPOSAL OF WASTE MATERIALS**

3.6.1. Burning is not permitted.

3.6.2. Disposal: Remove excess excavated material and displaced trees from Site.

**END OF DOCUMENT**



**DOCUMENT 01 60 00**

**MATERIALS AND EQUIPMENT**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions.
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any); and
- 1.1.4. Imported Materials Certification.

**1.2. MATERIALS AND EQUIPMENT**

- 1.2.1. Only items approved by the District and/or Architect shall be used.
- 1.2.2. Contractor shall submit lists of Products and other Product information in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

**1.3. MATERIALS AND EQUIPMENT COLORS**

- 1.3.1. The Contractor shall comply with all schedule(s) of colors provided by the District and/or Architect.
- 1.3.2. No individual color selections will be made until after approval of all pertinent materials and equipment and after receipt of appropriate samples in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.
- 1.3.3. Contractor shall request priority in writing for any item requiring advance ordering to maintain the approved Construction Schedule.

**1.4. DELIVERY, STORAGE, AND HANDLING**

- 1.4.1. Contractor shall deliver manufactured materials in original packages, containers, or bundles (with seals unbroken), bearing name or identification mark of manufacturer. District may inspect materials prior to Contractor unloading the delivered materials. District may reject any materials that do not conform to the Contract Documents.
- 1.4.2. Contractor shall deliver fabrications in as large assemblies as practicable; where specified as shop-primed or shop-finished, package or crate as required to preserve such priming or finish intact and free from abrasion.

- 1.4.3. Contractor shall store materials in such a manner as necessary to properly protect them from damage. Materials or equipment damaged by handling, weather, dirt, or from any other cause will not be accepted.
- 1.4.4. Materials that have been warehoused for long periods of time, stored or transported in improper environment, improperly packaged, inadequately labeled, poorly protected, excessively shipped, deviated from normal distribution pattern, or reassembled are not acceptable.
- 1.4.5. Contractor shall store materials so as to cause no obstructions of sidewalks, roadways, or underground services. Contractor shall protect materials and equipment furnished pursuant to the Contract Documents.
- 1.4.6. Contractor may store materials on Site with prior written approval by District; all materials shall remain under Contractor's control and Contractor shall remain liable for any damage to the materials. Should the Project Site not have storage area available, the Contractor shall provide for off-site storage at no cost to District.
- 1.4.7. When any room in Project is used as a shop or storeroom, Contractor shall be responsible for any repairs, patching, or cleaning necessary due to that use. Location of storage space shall be subject to prior written approval by District.

## **2. PRODUCTS**

### **2.1. MANUFACTURERS**

- 2.1.1. Manufacturers listed in various sections of the Contract Documents are names of those manufacturers that are believed to be capable of supplying one or more of the items specified therein.
- 2.1.2. The listing of a manufacturer does not imply that every product of that manufacturer is acceptable or as meeting the requirements of the Contract Documents.

### **2.2. FACILITIES AND EQUIPMENT**

Contractor shall provide, install, maintain, and operate a complete and adequate facility for handling, execution, disposal, and distribution of materials and equipment as required for proper and timely performance of Work.

### **2.3. MATERIALS REFERENCE STANDARDS**

Where materials are specified solely by reference to "standard specifications" or other general reference, and if requested by District, Contractor shall submit for review data on actual materials proposed to be incorporated into Work, listing name and address of vendor, manufacturer, or producer, and trade or brand names of those materials, and data substantiating compliance with standard specifications.

## **3. EXECUTION**

### **3.1. WORKMANSHIP**

- 3.1.1. Where not more specifically described in any other Contract Documents, workmanship shall conform to methods and operations of best standards and accepted practices of trade or trades involved and shall include items of fabrication, construction, or installation regularly furnished or required for completion (including finish and for successful operation, as intended).
- 3.1.2. Work shall be executed by tradespersons skilled in their respective field of work. When completed, parts shall have been durably and substantially built and present a neat appearance.

**3.2. COORDINATION**

- 3.2.1. Contractor shall coordinate installation of materials and equipment so as to not interfere with installation of other Work. Adjustment or rework because of Contractor's failure to coordinate will be at no additional cost to District.
- 3.2.2. Contractor shall examine in-place materials and equipment for readiness, completeness, fitness to be concealed or to receive Work , and compliance with Contract Documents. Concealing or covering work constitutes acceptance of additional cost which will result should in-place materials and equipment be found unsuitable for receiving other work or otherwise deviating from the requirements of the Contract Documents.

**3.3. COMPLETENESS**

Contractor shall provide all portions of the Work, unless clearly stated otherwise, installed complete and operational with all elements, accessories, anchorages, utility connections, etc., in a manner to ensure well-balanced performance, in accordance with manufacturer's recommendations and in accordance with Contract Documents. For example, electric water coolers require water, electricity, and drain services; roof drains require drain systems; sinks fit within countertop, etc. Terms such as "installed complete," "operable condition," "for use intended," "connected to all utilities," "terminate with proper cap," "adequately anchored," "patch and refinish," and "to match similar" should be assumed to apply in all cases, except where completeness of functional or operable condition is specifically stated as not required.

**3.4. APPROVED INSTALLER OR APPLICATOR**

Contractor shall ensure that all installations are only performed by a manufacturer's approved installer or applicator.

**3.5. MANUFACTURER'S RECOMMENDATIONS**

All installations shall be in accordance with manufacturer's published recommendations and specific written directions of manufacturer's representative. Should the Contract Documents differ from recommendations of manufacturer or directions of manufacturer's representative, Contractor shall analyze differences, make recommendations to the District and the Architect in writing, and shall not proceed until interpretation or clarification has been issued by the District and/or the Architect.

**END OF DOCUMENT**

**DOCUMENT 01 66 10**

**DELIVERY, STORAGE AND HANDLING**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions, including, without limitation, Site Access, Conditions and Requirements; and
- 1.1.2. Special Conditions.

**1.2. PRODUCTS**

- 1.2.1. Products are as defined in the General Conditions.
- 1.2.2. Contractor shall not use and/or reuse materials and/or equipment removed from existing Premises, except as specifically permitted by the Contract Documents.
- 1.2.3. Contractor shall provide interchangeable components of the same manufacturer, for similar components.

**1.3. TRANSPORTATION AND HANDLING**

- 1.3.1. Contractor shall transport and handle Products in accordance with manufacturer's instructions.
- 1.3.2. Contractor shall promptly inspect shipments to confirm that Products comply with Contract requirements, are of correct quantity, and are undamaged.
- 1.3.3. Contractor shall provide equipment and personnel to properly handle Products to prevent soiling, disfigurement, or damage.

**1.4. STORAGE AND PROTECTION**

- 1.4.1. Contractor shall store and protect Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Contractor shall store sensitive Products in weather-tight, climate controlled enclosures.
- 1.4.2. Contractor shall place fabricated Products that are stored outside, on above-ground sloped supports.
- 1.4.3. Contractor shall provide off-site storage and protection for Products when Site does not permit on-site storage or protection.



- 1.4.4. Contractor shall cover Products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
- 1.4.5. Contractor shall store loose granular materials on solid flat surfaces in a well-drained area and prevent mixing with foreign matter.
- 1.4.6. Contractor shall provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.
- 1.4.7. Contractor shall arrange storage of Products to permit access for inspection and periodically inspect to assure Products are undamaged and are maintained under specified conditions.

**END OF DOCUMENT**

**DOCUMENT 01 73 00**

**EXECUTION**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Coordination and Project Meetings;
- 1.1.5. Submittals;
- 1.1.6. Materials and Equipment;
- 1.1.7. Cutting and Patching;
- 1.1.8. Contract Closeout and Final Cleaning; and
- 1.1.9. General Commissioning Requirements.

**1.2. SUMMARY**

- 1.2.1. This Document includes general procedural requirements governing execution of the Work including, but not limited to, the following:
  - 1.2.1.1. Construction layout;
  - 1.2.1.2. Field engineering and surveying;
  - 1.2.1.3. General installation of products;
  - 1.2.1.4. Owner furnished, Contractor installed items;
  - 1.2.1.5. Coordination of District-installed products;
  - 1.2.1.6. Progress cleaning;
  - 1.2.1.7. Staring and adjusting;
  - 1.2.1.8. Protection of installed construction; and
  - 1.2.1.9. Correction of the Work.

### **1.3. SUBMITTALS**

- 1.3.1. Qualification Data: For land surveyor or professional engineer.
- 1.3.2. Certificates: Submit certificate signed by land surveyor or professional engineer certifying that location and elevation of improvements comply with requirements.
- 1.3.3. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept the materials as classified, for hazardous waste disposal.
- 1.3.4. Certified Surveys: Submit electronic files and three (3) paper copies signed by land surveyor or professional engineer.
- 1.3.5. Final Property Survey: Submit electronic files and three (3) paper copies showing the Work performed and record survey data.

## **2. EXECUTION**

### **2.1. EXAMINATION**

- 2.1.1. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning Site Work, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
  - 2.1.1.1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
  - 2.1.1.2. Furnish location data for Work related to Project that must be performed by public utilities serving the Project Site.

### **2.2. PREPARATION**

- 2.2.1. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- 2.2.2. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- 2.2.3. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- 2.2.4. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to

District per requirements of Document "Requests for Information." Include a detailed description of problem encountered, together with recommendations for any necessary changes to the Contract Documents.

### **2.3. CONSTRUCTION LAYOUT**

- 2.3.1. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify District and its consultant promptly.
- 2.3.2. General: Engage a land surveyor or professional engineer to lay out the Work using accepted surveying practices.
  - 2.3.2.1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
  - 2.3.2.2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
  - 2.3.2.3. Inform installers of lines and levels to which they must comply.
  - 2.3.2.4. Check the location, level and plumb, of every major element as the Work progresses.
  - 2.3.2.5. Notify District and its consultant when deviations from required lines and levels exceed allowable tolerances.
  - 2.3.2.6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- 2.3.3. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- 2.3.4. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- 2.3.5. Record Log: Maintain a log of layout control Work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by District and its consultant.

### **2.4. FIELD ENGINEERING**

- 2.4.1. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
  - 2.4.1.1. Do not change or relocate existing benchmarks or control points without prior written approval of District and its consultant. Report lost or destroyed

permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to District and its consultant before proceeding.

- 2.4.1.2. Require surveyor to replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- 2.4.2. Benchmarks: Establish and maintain a minimum of two (2) permanent benchmarks on Project Site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
  - 2.4.2.1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
  - 2.4.2.2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
  - 2.4.2.3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.
- 2.4.3. Records: Contractor shall maintain a complete, accurate log of all control and survey Work as it progresses. On request of District or Architect, Contractor shall submit documentation to verify accuracy of field engineering Work at no additional cost to the District.
- 2.4.4. Certified Survey: On completion of foundation walls, major site improvements, and other Work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.
- 2.4.5. Final Property Survey: Prepare and submit a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor or professional engineer, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey and are in conformance with Contract Documents.
  - 2.4.5.1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a Site corner to a legal point.
- 2.4.6. Compliance with Laws: Contractor is responsible for meeting all applicable codes, OSHA, safety, and shoring requirements.
- 2.4.7. Nonconforming Work: Contractor is responsible for any re-surveying required by correction of nonconforming Work.

## **2.5. INSTALLATION**

- 2.5.1. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

- 2.5.1.1. Make vertical Work plumb and make horizontal Work level.
- 2.5.1.2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- 2.5.1.3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
- 2.5.1.4. Maintain minimum headroom clearance of 7 feet in spaces without a suspended ceiling.
- 2.5.2. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- 2.5.3. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Completion.
- 2.5.4. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- 2.5.5. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels where possible.
- 2.5.6. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- 2.5.7. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
  - 2.5.7.1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by District.
  - 2.5.7.2. Allow for building movement, including thermal expansion and contraction.
  - 2.5.7.3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project Site in time for installation.
- 2.5.8. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- 2.5.9. Hazardous Materials: Use products, cleaners, and installation materials that are not classed as hazardous per the MSDS sheets for the products where possible. If hazardous materials are necessary, inform District where and when they will be used no less than 48 hours before use. Take all recommended precautions of the materials' manufacturers to ensure safe use and clean-up.

## **2.6. DISTRICT-INSTALLED PRODUCTS**

- 2.6.1. Site Access: Provide access to Project Site for District's construction forces.
- 2.6.2. Coordination: Coordinate construction and operations of the Work with work performed by District's construction forces.
  - 2.6.2.1. Construction Schedule: Inform District of Contractor's preferred schedule for District's portion of the Work. Adjust Construction Schedule based on a mutually agreeable timetable. Notify District if changes to schedule are required due to differences in actual construction progress.
  - 2.6.2.2. Preinstallation Conferences: Include District's construction forces at preinstallation conferences covering portions of the Work that are to receive District's work. Attend preinstallation conferences conducted by District's construction forces if portions of the Work depend on District's construction.

## **2.7. PROGRESS CLEANING**

- 2.7.1. General: Clean Project Site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
  - 2.7.1.1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2.7.1.2. Do not hold materials more than seven (7) days during normal weather or three (3) days if the temperature is expected to rise above 80 degrees F.
  - 2.7.1.3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations. Remove hazardous and unsanitary waste materials daily.
- 2.7.2. Site: Maintain Project Site free of waste materials and debris.
- 2.7.3. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  - 2.7.3.1. Remove liquid spills promptly.
  - 2.7.3.2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- 2.7.4. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- 2.7.5. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

- 2.7.6. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Completion.
- 2.7.7. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- 2.7.8. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Completion.
- 2.7.9. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- 2.7.10. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

## **2.8. STARTING AND ADJUSTING**

- 2.8.1. Start equipment and operating components to confirm proper operation. Replace or repair malfunctioning units and retest.
- 2.8.2. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- 2.8.3. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- 2.8.4. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Document "Quality Requirements."

## **2.9. PROTECTION OF INSTALLED CONSTRUCTION**

- 2.9.1. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Completion.
- 2.9.2. Comply with manufacturer's written instruction for temperature and relative humidity unless otherwise addressed in the construction planning, sequences, and instructions.

## **2.10. CORRECTION OF THE WORK**

- 2.10.1. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Document "Cutting and Patching."
  - 2.10.1.1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.



- 2.10.2. Restore permanent facilities used during construction to their specified condition.
- 2.10.3. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- 2.10.4. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- 2.10.5. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

**END OF DOCUMENT**

**DOCUMENT 01 73 10**

**CUTTING AND PATCHING**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions, including, without limitation, Inspector, Inspections, and Tests, Integration of Work, Nonconforming Work, and Correction of Work, and Uncovering Work;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Hazardous Materials Procedures and Requirements;
- 1.1.5. Hazardous Materials Certification;
- 1.1.6. Lead-Based Materials Certification; and
- 1.1.7. Imported Materials Certification.

**1.2. CUTTING AND PATCHING**

- 1.2.1. Contractor shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work or to:
  - 1.2.1.1. Make several parts fit together properly.
  - 1.2.1.2. Uncover portions of Work to provide for installation of ill-timed Work.
  - 1.2.1.3. Remove and replace defective Work.
  - 1.2.1.4. Remove and replace Work not conforming to requirements of Contract Documents.
  - 1.2.1.5. Remove Samples of installed Work as specified for testing.
  - 1.2.1.6. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.
  - 1.2.1.7. Attaching new materials to existing remodeling areas – including painting (or other finishes) to match existing conditions.
- 1.2.2. In addition to Contract requirements, upon written instructions from District, Contractor shall uncover Work to provide for observations of covered Work in accordance with the

Contract Documents, remove samples of installed materials for testing as directed by District, and remove Work to provide for alteration of existing Work.

- 1.2.3. Contractor shall not cut or alter Work, or any part of it, in such a way that endangers or compromises the integrity of the Work, the Project, or Work of others.
- 1.2.4. Contractor shall not cut and patch operating elements or safety related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include the following:
  - 1.2.4.1. Primary operational systems and equipment.
  - 1.2.4.2. Air or smoke barriers.
  - 1.2.4.3. Fire-suppression systems.
  - 1.2.4.4. Mechanical systems piping and ducts.
  - 1.2.4.5. Control systems.
  - 1.2.4.6. Communication systems.
  - 1.2.4.7. Conveying systems.
  - 1.2.4.8. Electrical wiring systems.
- 1.2.5. Contractor shall not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing capacity to perform as intended, or that results in increased maintenance or decreased operational life of safety. Miscellaneous elements include the following:
  - 1.2.5.1. Water, moisture or vapor barriers.
  - 1.2.5.2. Membranes and flashings.
  - 1.2.5.3. Exterior curtain-wall construction.
  - 1.2.5.4. Equipment supports.
  - 1.2.5.5. Piping, ductwork, vessels and equipment.
  - 1.2.5.6. Noise and vibration control elements and systems.
  - 1.2.5.7. Shoring, bracing and sheeting.

### **1.3. REQUEST TO CUT, ALTER, PATCH OR EXCAVATE**

- 1.3.1. Contractor shall submit written notice to District pursuant to the applicable notice provisions of the Contract Documents, requesting consent to proceed with the cutting or alteration (“Request”) at least ten (10) days prior to any cutting or alterations that

may affect the structural safety of the Project, or Work of others, including the following:

- 1.3.1.1. The Work of the District or other trades.
- 1.3.1.2. Structural value or integrity of any element of the Project.
- 1.3.1.3. Integrity or effectiveness of weather-exposed or weather-resistant elements or systems.
- 1.3.1.4. Efficiency, operational life, maintenance or safety of operational elements.
- 1.3.1.5. Visual qualities of sight-exposed elements.
- 1.3.2. Contractor's Request shall also include:
  - 1.3.2.1. Identification of the Project.
  - 1.3.2.2. Description of affected Work.
  - 1.3.2.3. Necessity for cutting, alterations, or excavations.
  - 1.3.2.4. Impacts of that Work on the District, other trades, or structural or weatherproof integrity of the Project.
  - 1.3.2.5. Description of proposed Work:
    - 1.3.2.5.1. Scope of cutting, patching, alterations, or excavations.
    - 1.3.2.5.2. Trades that will execute Work.
    - 1.3.2.5.3. Products proposed to be used.
    - 1.3.2.5.4. Extent of refinishing to be done.
  - 1.3.2.6. Alternates to cutting and patching.
  - 1.3.2.7. Cost proposal, when applicable.
  - 1.3.2.8. The scheduled date the Work is to be performed and the duration of time to complete the Work.
  - 1.3.2.9. Written permission of other trades whose Work will be affected.

#### **1.4. QUALITY ASSURANCE**

- 1.4.1. Contractor shall ensure that cutting, fitting, and patching shall achieve security, strength, weather protection, appearance for aesthetic match, efficiency, operational life, maintenance, safety of operational elements, and the continuity of existing fire ratings.

- 1.4.2. Contractor shall ensure that cutting, fitting, and patching shall successfully duplicate undisturbed adjacent profiles, materials, textures, finishes, and colors, and that materials shall match existing construction. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the District's decision shall be final.

## **1.5. PAYMENT FOR COSTS**

- 1.5.1. Costs caused by ill-timed or defective Work or Work not conforming to Contract Documents, including costs for additional services of the District or its consultants including but not limited to the Architect, inspector(s), engineers, and agents, will be paid by Contractor and/or deducted from the Contract Price by the District.
- 1.5.2. Contractor shall provide written cost proposals prior to proceeding with cutting and patching. District shall only pay for cost of Work if it is part of the Contract Price or if a change has been made to the Contract in compliance with the provisions of the General Conditions. Cost of Work performed upon instructions from the District, other than defective or nonconforming Work, will be paid by District on approval of written Change Order in accordance with the Contract Documents.

## **2. PRODUCTS**

### **2.1. MATERIALS**

- 2.1.1. Contractor shall provide for replacement and restoration of Work removed. Contractor shall comply with the Contract Documents and with the industry standard(s), for the type of Work, and the Specification requirements for each specific product involved. If not specified, Contractor shall recommend a product of a manufacturer or appropriate trade association for approval by the District.
- 2.1.2. Materials to be cut and patched include those damaged by the performance of the Work.

## **3. EXECUTION**

### **3.1. INSPECTION**

- 3.1.1. Contractor shall inspect existing conditions of the Site and the Work, including elements subject to movement or damage during cutting and patching, excavating and backfilling. After uncovering Work, Contractor shall inspect conditions affecting installation of new products.
- 3.1.2. Contractor shall report unsatisfactory or questionable conditions in writing to District as indicated in the General Conditions and shall proceed with Work as indicated in the General Conditions by District.

### **3.2. PREPARATION**

- 3.2.1. Contractor shall provide shoring, bracing and supports as required to maintain structural integrity for all portions of the Project, including all requirements of the Project.

- 3.2.2. Contractor shall provide devices and methods to protect other portions of Project from damage.
- 3.2.3. Contractor shall, provide all necessary protection from weather and extremes of temperature and humidity for the Project, including without limitation any work that may be exposed by cutting and patching Work. Contractor shall keep excavations free from water.

**3.3. ERECTION, INSTALLATION AND APPLICATION**

- 3.3.1. With respect to performance, Contractor shall ensure its Subcontractors:
  - 3.3.1.1. Execute fitting and adjustment of products to provide finished installation to comply with and match specified tolerances and finishes.
  - 3.3.1.2. Execute cutting and demolition by methods that will prevent damage to other Work, and provide proper surfaces to receive installation of repairs and new Work.
  - 3.3.1.3. Execute cutting, demolition excavating, and backfilling by methods that will prevent damage to other Work and damage from settlement.
  - 3.3.1.4. Contractor shall use original installer or fabricator to perform cutting and patching for:
    - 3.3.1.5. Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other trades.
    - 3.3.1.6. Sight-exposed finished surfaces.
- 3.3.2. Contractor shall ensure its Subcontractors execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes as shown or specified in the Contract Documents including, without limitation, the Drawings and Specifications.
- 3.3.3. Subcontractors shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Contractor shall conform to all Code requirements for penetrations or the Drawings and Specifications, whichever calls for a higher quality or more thorough requirement. Contractor shall maintain integrity of both rated and non-rated fire walls, ceilings, floors, etc.
- 3.3.4. Contractor's Subcontractors shall restore Work which has been cut or removed and install new products to provide completed Work in accordance with requirements of the Contract Documents and as required to match surrounding areas and surfaces.
- 3.3.5. Contractor's Subcontractors shall refinish all continuous surfaces to nearest intersection as necessary to match the existing finish to any new finish.

**END OF DOCUMENT**

**DOCUMENT 01 77 00**

**CONTRACT CLOSEOUT AND FINAL CLEANING**

**1. GENERAL**

**1.1. RELATED DOCUMENTS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions including, without limitation, Documents on Work and Completion of Work;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Submittals;
- 1.1.5. Operation and Maintenance Data;
- 1.1.6. Warranties;
- 1.1.7. Record Documents;
- 1.1.8. Demonstration and Training; and
- 1.1.9. General Commissioning Requirements.

**1.2. PRELIMINARY PROCEDURES**

- 1.2.1. Before requesting inspection for determining date of Completion, complete the following. List items below that are incomplete in request.
  - 1.2.1.1. Prepare a list of items to be completed and corrected (“Punch List”), the value of items on the list, and reasons why the Work is not complete.
  - 1.2.1.2. Advise District of pending insurance changeover requirements.
  - 1.2.1.3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 1.2.1.4. Obtain and submit releases permitting District unrestricted use of the Work and access to services and utilities. Include certificate of occupancy, operating certificates, and similar releases, if required.
  - 1.2.1.5. Prepare and submit Project Record Documents, operation and maintenance manuals, Completion construction photograph prints and electronic files, damage or settlement surveys, property surveys, and similar final record information.

- 1.2.1.6. Deliver tools, spare parts, extra materials, and similar items to location designated by District. Label with manufacturer's name and model number where applicable.
- 1.2.1.7. Make final changeover of permanent locks and deliver keys to District. Advise District's personnel of changeover in security provisions.
- 1.2.1.8. Complete startup testing of systems.
- 1.2.1.9. Submit test/adjust/balance records.
- 1.2.1.10. Terminate and remove temporary facilities from Project Site, along with mockups, construction tools, and similar elements.
- 1.2.1.11. Advise District of changeover in heat and other utilities.
- 1.2.1.12. Submit changeover information related to District's occupancy, use, operation, and maintenance.
- 1.2.1.13. Complete final cleaning requirements, including touch-up painting.
- 1.2.1.14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

**1.3. RECORD DOCUMENTS AND SHOP DRAWINGS**

- 1.3.1. Contractor shall legibly mark each item to record actual construction, including:
  - 1.3.1.1. Measured depths of foundation in relation to finish floor datum.
  - 1.3.1.2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permit surface improvements.
  - 1.3.1.3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - 1.3.1.4. Field changes of dimension and detail.
  - 1.3.1.5. Details not on original Contract Drawings
  - 1.3.1.6. Changes made by modification(s).
  - 1.3.1.7. References to related Shop Drawings and modifications.
  - 1.3.1.8. Contractor will provide one set of Record Drawings to District.
  - 1.3.1.9. Contractor shall submit all required documents to District and/or Architect prior to or with its final Application for Payment.

**1.4. COMPLETION**

- 1.4.1. Preliminary Procedures: Before requesting inspection for determining date of Completion, complete the following:



1.4.1.1. Submit a final Application for Payment according to the Contract Documents.

1.4.1.2. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

1.4.1.3. Submit pest-control final inspection report and warranty.

1.4.1.4. Instruction of District Personnel:

1.4.1.4.1. Before final inspection, at agreed upon times, Contractor shall instruct District's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems.

1.4.1.4.2. For equipment requiring seasonal operation, Contractor shall perform instructions for other seasons within six (6) months.

1.4.1.4.3. Contractor shall use operation and maintenance manuals as basis for instruction. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.

1.4.1.4.4. Contractor shall prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.

1.4.1.4.5. Contractor shall use operation and maintenance manuals as basis for instruction. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.

1.4.2. Inspection: Submit a written request for inspection.

1.4.3. **LIST OF INCOMPLETE ITEMS (PUNCH LIST)** Contractor shall notify District and Architect when Contractor considers the Work complete. Upon notification, District and Architect will prepare a list of minor items to be completed or corrected ("Punch List").

1.4.4. Contractor and/or its Subcontractors shall proceed promptly to complete and correct items on the Punch List. Failure to include an item on Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

1.4.5. Contractor shall comply with Punch List procedures as provided herein and in the Contract Documents, and maintain the presence of a Project Superintendent and Project Manager until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances shall Contractor demobilize its forces prior to completion of the Punch List. Upon receipt of Contractor's written notice that all of the Punch List items have been fully completed and the Work is ready for final inspection and acceptance, District and Architect will inspect the Work and shall submit to Contractor a final inspection report noting the Work, if any, required in order to reach Completion in accordance with the Contract Documents. Absent unusual

circumstances, this report shall consist of the Punch List items not yet satisfactorily completed and any additional Punch List items not originally included.

- 1.4.6. Upon Contractor's completion of all items on the Punch List and any other uncompleted portions of the Work, the Contractor shall notify the District and Architect, who shall again inspect such Work. If the District and Architect find the Work complete and acceptable under the Contract Documents, the District will notify Contractor, who shall then jointly submit to the Architect and District its final Application for Payment.
- 1.4.7. **Costs of Multiple Inspections.** More than two (2) requests of District to make a final inspection shall be considered an additional service of District, the Architect and/or the Inspector, and all subsequent costs will be invoiced to Contractor and withheld from remaining payments, if funds are available.
- 1.4.8. Punch List shall be deemed complete only upon the District's determination that all items on the Punch List, and all updates to the Punch List, are complete.

## **1.5. WARRANTIES**

- 1.5.1. Submittal Time: Submit written warranties on request of District for designated portions of the Work where commencement of warranties other than date of Completion is indicated.
- 1.5.2. Organize warranty documents into an orderly sequence as required by the Division 01 Document "Warranties."

## **2. PRODUCTS**

### **2.1. MATERIALS**

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

## **3. EXECUTION**

### **3.1. FINAL CLEANING**

- 3.1.1. Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations. Contractor shall use cleaning methods and procedures that reduce the overall impact on human health and the natural environment by reducing the amount of disposed waste, pollution and environmental degradation. If Project is subject to LEED certification, Contractor shall ensure compliance with the applicable LEED requirements for final cleaning of the Site.
- 3.1.2. Contractor shall employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program.
  - 3.1.2.1. Complete the following cleaning operations before requesting final inspection:

- 3.1.2.1.1. Clean Project Site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
- 3.1.2.1.2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
- 3.1.2.1.3. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
- 3.1.2.1.4. Remove tools, construction equipment, machinery, and surplus material from Project Site.
- 3.1.2.1.5. Remove snow and ice to provide safe access to building.
- 3.1.2.1.6. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
- 3.1.2.1.7. Clean all surfaces and other work in accordance with recommendations of the manufacturer.
- 3.1.2.1.8. Remove spots, mortar, plaster, soil, and paint from ceramic tile, stone, and other finish materials.
- 3.1.2.1.9. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- 3.1.2.1.10. Sweep concrete floors broom clean in unoccupied spaces.
- 3.1.2.1.11. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
- 3.1.2.1.12. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
- 3.1.2.1.13. Remove labels that are not permanent.
- 3.1.2.1.14. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
  - 3.1.2.1.14.1. Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.

- 3.1.2.1.15. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
  - 3.1.2.1.16. Replace parts subject to unusual operating conditions.
  - 3.1.2.1.17. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
  - 3.1.2.1.18. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
  - 3.1.2.1.19. Clean ducts, blowers, and coils if units were operated without filters during construction.
  - 3.1.2.1.20. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
  - 3.1.2.1.21. Leave Project Site clean and ready for occupancy.
- 3.1.3. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests.
- 3.1.4. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on District's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project Site and dispose of lawfully.

**END OF DOCUMENT**

**DOCUMENT 01 78 23**

**OPERATION AND MAINTENANCE DATA**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions, including, without limitation, Completion of the Work;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Submittals;
- 1.1.5. Contract Closeout and Final Cleaning;
- 1.1.6. Warranties;
- 1.1.7. Record Documents;
- 1.1.8. General Commissioning Requirements.

**1.2. QUALITY ASSURANCE**

- 1.2.1. Contractor shall prepare instructions and data by personnel experienced in maintenance and operation of described products.

**1.3. FORMAT**

- 1.3.1. Contractor shall prepare data in the form of an instructional manual entitled "OPERATIONS AND MAINTENANCE MANUAL & INSTRUCTIONS" ("Manual").
- 1.3.2. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size. When multiple binders are used, Contractor shall correlate data into related consistent groupings.
- 1.3.3. Cover: Contractor shall identify each binder with typed or printed title "OPERATION AND MAINTENANCE MANUAL & INSTRUCTIONS"; and shall list title of Project and identify subject matter of contents.
- 1.3.4. Contractor shall arrange content by systems process flow under section numbers and sequence of the Table of Contents of the Contract Documents.
- 1.3.5. Contractor shall provide tabbed fly leaf for each separate Product and system, with typed description of Product and major component parts of equipment.

- 1.3.6. Text: The content shall include Manufacturer's printed data, or typewritten data on 24 pound paper.
- 1.3.7. Drawings: Contractor shall provide with reinforced punched binder tab and shall bind in with text; folding larger drawings to size of text pages.

**1.4. CONTENTS, EACH VOLUME**

- 1.4.1. Table of Contents: Contractor shall provide title of Project; names, addresses, and telephone numbers of the Architect, any engineers, subconsultants, Subcontractor(s), and Contractor with name of responsible parties; and schedule of Products and systems, indexed to content of the volume.
- 1.4.2. For Each Product or System: Contractor shall list names, addresses, and telephone numbers of Subcontractor(s) and suppliers, including local source of supplies and replacement parts.
- 1.4.3. Product Data: Contractor shall mark each sheet to clearly identify specific Products and component parts, and data applicable to installation. Delete inapplicable information.
- 1.4.4. Drawings: Contractor shall supplement Product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Contractor shall not use Project Record Documents as maintenance drawings.
- 1.4.5. Text: The Contractor shall include any and all information as required to supplement Product data. Contractor shall provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

**1.5. MANUAL FOR MATERIALS AND FINISHES**

- 1.5.1. Building Products, Applied Materials, and Finishes: Contractor shall include Product data, with catalog number, size, composition, and color and texture designations. Contractor shall provide information for re-ordering custom manufactured Products.
- 1.5.2. Instructions for Care and Maintenance: Contractor shall include Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- 1.5.3. Moisture Protection and Weather Exposed Products: Contractor shall include Product data listing applicable reference standards, chemical composition, and details of installation. Contractor shall provide recommendations for inspections, maintenance, and repair.
- 1.5.4. Additional Requirements: Contractor shall include all additional requirements as specified in the Specifications.
- 1.5.5. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

**1.6. MANUAL FOR EQUIPMENT AND SYSTEMS**

- 1.6.1. Each Item of Equipment and Each System: Contractor shall include description of unit or system, and component parts and identify function, normal operating characteristics, and limiting conditions. Contractor shall include performance curves, with engineering data and tests, and complete nomenclature, and commercial number of replaceable parts.
- 1.6.2. Panelboard Circuit Directories: Contractor shall provide electrical service characteristics, controls, and communications.
- 1.6.3. Contractor shall include color coded wiring diagrams as installed.
- 1.6.4. Operating Procedures: Contractor shall include start-up, break-in, and routine normal operating instructions and sequences. Contractor shall include regulation, control, stopping, shut-down, and emergency instructions. Contractor shall include summer, winter, and any special operating instructions.
- 1.6.5. Maintenance Requirements: Contractor shall include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- 1.6.6. Contractor shall provide servicing and lubrication schedule, and list of lubricants required.
- 1.6.7. Contractor shall include manufacturer's printed operation and maintenance instructions.
- 1.6.8. Contractor shall include sequence of operation by controls manufacturer.
- 1.6.9. Contractor shall provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- 1.6.10. Contractor shall provide control diagrams by controls manufacturer as installed.
- 1.6.11. Contractor shall provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- 1.6.12. Contractor shall provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- 1.6.13. Contractor shall provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- 1.6.14. Additional Requirements: Contractor shall include all additional requirements as specified in Specification(s).
- 1.6.15. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

**1.7. SUBMITTAL**

- 1.7.1. Concurrent with the Schedule of Submittals as indicated in the General Conditions, Contractor shall submit to the District for review two (2) copies of a preliminary draft of proposed formats and outlines of the contents of the Manual.
- 1.7.2. For equipment, or component parts of equipment put into service during construction and to be operated by District, Contractor shall submit draft content for that portion of the Manual within ten (10) days after acceptance of that equipment or component.
- 1.7.3. On or before the Contractor submits its final application for payment, Contractor shall submit two (2) copies of a complete Manual in final form. The District will provide comments to Contractor and Contractor must revise the content of the Manual as required by District prior to District's approval of Contractor's final Application for Payment.
- 1.7.4. Contractor must submit two (2) copies of revised Manual in final form within ten (10) days after receiving District's comments. Failure to do so will be a basis for the District withholding funds sufficient to protect itself for Contractor's failure to provide a final Manual to the District.

**END OF DOCUMENT**



**DOCUMENT 01 78 36**

**WARRANTIES**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions, including, without limitation, Warranty/Guarantee/Indemnity;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Submittals;
- 1.1.5. Contract Closeout and Final Cleaning;
- 1.1.6. Operation and Maintenance Data;
- 1.1.7. Record Documents;
- 1.1.8. General Commissioning Requirements.

**1.2. FORMAT**

- 1.2.1. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size.
- 1.2.2. Cover: Contractor shall identify each binder with typed or printed title "WARRANTIES" and shall list the title of Project.
- 1.2.3. Table of Contents: Contractor shall provide the title of Project; name, address, and telephone number of Contractor and equipment supplier, and name of responsible principal. Contractor shall identify each item with the number and title of the specific Specification, document, provision, or section in which the name of the Product or Work item is specified.
- 1.2.4. Contractor shall separate each Warranty with index tab sheets keyed to the Table of Contents listing, providing full information and using separate typed sheets as necessary. Contractor shall list each applicable and/or responsible Subcontractor(s), supplier(s), and/or manufacturer(s), with name, address, and telephone number of each responsible principal(s).
- 1.2.5. In addition to all Warranty documentation and information required herein, Contractor shall provide its Guarantee as required by the Contract Documents.

**1.3. PREPARATION**

- 1.3.1. Contractor shall obtain Warranties, executed in duplicate by each applicable and/or responsible Subcontractor(s), supplier(s), and manufacturer(s), within ten (10) days after completion of the applicable item or Work. Except for items put into use with District's permission, Contractor shall leave date of beginning of time of Warranty until the date of Completion is determined.
- 1.3.2. Contractor shall verify that Warranties.
- 1.3.3. are in proper form, contain full information, and are notarized, when required.
- 1.3.4. Contractor shall co-execute submittals when required.
- 1.3.5. Contractor shall retain warranties until time specified for submittal.

**1.4. TIME OF SUBMITTALS**

- 1.4.1. Schedule of Warranties. Contractor shall provide District with a Schedule of Warranties at least fourteen (14) days prior to submitting its other required submittals indicated herein. This will provide District the opportunity to review the anticipated Warranties and make any comments, suggestions or revisions the District may require.
- 1.4.2. For equipment or component parts of equipment put into service during construction with District's permission, Contractor shall submit a draft Warranty for that equipment or component within ten (10) days after acceptance of that equipment or component.
- 1.4.3. On or before the Contractor submits its final application for payment, Contractor shall submit all Warranties and related documents in final form. The District shall indicate any Warranty-related Work that is being performed and incomplete at the time Contractor submits its final application for payment. District will provide comments to Contractor and Contractor must revise the content of the Warranties as required by District prior to District's approval of Contractor's final Application for Payment.
- 1.4.4. For items of Work that are not completed until after the date of Completion, Contractor shall provide an updated Warranty for those item(s) of Work within ten (10) days after acceptance, listing the date of acceptance as start of the Warranty period.

**END OF DOCUMENT**

**DOCUMENT 01 78 39**

**RECORD DOCUMENTS**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions, including, without limitation, Documents on Work and Completion of Work;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Submittals;
- 1.1.5. Contract Closeout and Final Cleaning;
- 1.1.6. Operation and Maintenance Data;
- 1.1.7. Warranties;
- 1.1.8. General Commissioning Requirements.

**2. RECORD DOCUMENTS OR DRAWINGS**

**2.1. GENERAL**

- 2.1.1. "Record Documents" and "Record Drawings" may also be referred to in the Contract Documents as "As-Built Drawings."
- 2.1.2. As indicated in the Contract Documents, District will provide Contractor with one set of reproducible plans of the original Drawings.
- 2.1.3. Contractor shall maintain at each Project Site one (1) set of marked-up Drawings and shall transfer all changes and information to those marked-up Drawings, as often as required in the Contract Documents, but in no case less than once each month. Contractor shall submit to the Project Inspector one set of reproducible vellums of the Project Record Documents ("As-Built") showing all changes incorporated into the Work since the preceding monthly submittal. The As-Built shall be available at the Project Site. The Contractor shall submit reproducible vellums at the conclusion of the Project following review of the blue line prints.
- 2.1.4. Label and date each Record Document "RECORD DOCUMENT" in legibly printed letters.
- 2.1.5. All deviations in construction, including but not limited to pipe and conduit locations and deviations caused, without limitation, by Change Orders, Construction Directives, RFI's, and Addenda shall be accurately and legibly recorded by Contractor.

- 2.1.6. Locations and changes shall be done by Contractor in a neat and legible manner and, where applicable, indicated by drawing a "cloud" around the changed or additional information.

## 2.2. **RECORD DOCUMENT INFORMATION**

- 2.2.1. Contractor shall record the following information:
  - 2.2.1.1. Locations of Work buried under or outside each building, including, without limitation, all utilities, plumbing and electrical lines, and conduits.
  - 2.2.1.2. Actual numbering of each electrical circuit.
  - 2.2.1.3. Locations of significant Work concealed inside each building whose general locations are changed from those shown on the Drawings.
  - 2.2.1.4. Locations of all items, not necessarily concealed, which vary from the Contract Documents.
  - 2.2.1.5. Installed location of all cathodic protection anodes.
  - 2.2.1.6. Deviations from the sizes, locations, and other features of installations shown in the Contract Documents.
  - 2.2.1.7. Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stubouts, invert elevations, etc.
  - 2.2.1.8. Sufficient information to locate Work concealed in each building with reasonable ease and accuracy.
- 2.2.2. In some instances, this information may be recorded by dimension. In other instances, it may be recorded in relation to the spaces in the building near which it was installed.
- 2.2.3. Contractor shall provide additional Drawings as necessary for clarification.
- 2.2.4. Contractor shall provide in an electronic format as indicated in the Contract Documents, a copy of the Drawings, made from final Shop Drawings marked "No Exceptions Taken" or "Approved as Noted."
  - 2.2.4.1. With the District's prior approval, Contractor may provide these reproducible Drawings in hard copy.

## 3. **RECORD MATERIALS LOG**

- 3.1.1. Materials Log shall be submitted prior to Completion.
- 3.1.2. Preparation: Mark Material Log to indicate the actual product installation where installation varies from that indicated in original Material Log.

- 3.1.3. Give particular attention to information on concealed materials and installations that cannot be readily identified and recorded later.
- 3.1.4. Mark copy with the proprietary name and characteristics of products, materials, and equipment furnished, including substitutions and product options selected.
- 3.1.5. Record the name of the manufacturer, supplier, installer, and other information necessary to provide a record of selections made.
- 3.1.6. The working copy of Materials Log shall be consistently maintained throughout construction, and shall be accessible at Project Site.

**4. MAINTENANCE OF RECORD DOCUMENTS**

- 4.1. Contractor shall store Record Documents apart from documents used for construction as follows:
  - 4.1.1. Provide files and racks for storage of Record Documents.
  - 4.1.2. Maintain Record Documents in a clean, dry, legible condition and in good order.
- 4.2. Contractor shall not use Record Documents for construction purposes.

**END OF DOCUMENT**

**DOCUMENT 01 91 00**

**COMMISSIONING**

**1. GENERAL**

**1.1. RELATED DOCUMENTS AND PROVISIONS**

Contractor shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions, including, without limitation, Documents on Work and Completion of Work;
- 1.1.2. Special Conditions (if any);
- 1.1.3. Supplemental Conditions (if any);
- 1.1.4. Submittals;
- 1.1.5. Contract Closeout and Final Cleaning;
- 1.1.6. Operation and Maintenance Data;
- 1.1.7. Warranties;
- 1.1.8. Record Documents; and

**1.2. SUMMARY**

- 1.2.1. Commissioning is a process for validating and documenting that the facility and its systems are constructed and perform in conformity with the Contract Documents.
- 1.2.2. The objective of the commissioning process is to verify that the performance of the facility and its systems meet or exceed the design intent.
- 1.2.3. Commissioning includes special facility start-up processes used to bring the facility to a fully operational state, free of deficiencies in an efficient and timely manner.
- 1.2.4. Training on related systems and equipment operation and maintenance shall be scheduled to commence only after start-up is complete and systems are verified to be 100% complete and functional.

**1.3. DESCRIPTION**

The following applies to all Contract Documents:

- 1.3.1. **Contractor Startup:** Sub-phase of Contractor's work ending with Acceptance of Work, during which Contractor performs a pre-planned program of activities including starting,

testing, inspecting, adjusting balancing, correcting deficiencies and other similar activities.

1.3.1.1. The District, Construction Manager and Architect and the Inspector shall be present to observe, inspect and identify deficiencies in building systems operations.

1.3.2. The completion of startup means the entire Construction Project including startup and fine tuning has been performed to the requirements of the Contract Documents and is verified in writing by the District, Construction Manager and Architect.

1.3.3. **Fine Tuning:** Fine tuning is the responsibility of Contractors after District occupancy and ending one (1) year after District occupancy. During this time the Contractor is responsible for optimizing systems and correcting deficiencies arising under normal operating conditions.

1.3.3.1. Includes a period after occupancy where systems are optimized under "live" operating conditions and any outstanding construction deficiencies are corrected.

1.3.3.2. Fine Tuning shall extend from date of District occupancy to one year after occupancy.

#### 1.4. DEFINITION OF TERMS

1.4.1. **Contractor's Pre-Commissioning Checklists:** Includes installation and start-up items as specified to be completed by the appropriate contractors prior to operational verification through the functional testing process.

1.4.2. **Installation Verification Process:** Includes the on-site inspection and review of related system components for conformance to Contract Documents. The Contractor shall verify systems readiness for functional testing procedures prior to the start of functional testing. Deficiencies will be documented by the Inspector for future resolution.

1.4.3. **Functional Performance Testing Process:** Includes the documented testing of system parameters, under actual or simulated operating conditions. Final performance commissioning of systems will begin only after the appropriate Contractor certifies that systems are 100% complete and ready for functional testing. The Contractor will be required to schedule, coordinate and perform device tests, calibration and functional performance test procedures.

1.4.4. **Deficiencies and Resolutions List:** Includes a list of noted deficiencies discovered as a result of the commissioning process. This list also includes the current disposition of issues, and the date of final resolution as confirmed by the Construction Manager and Inspector. Deficiencies are defined as those issues where products execution or performance does not satisfy the Project Contract Documents and/or the design intent.

#### 1.5. COMMISSIONING SCHEDULE

1.5.1. Provide schedules for Contractor Start-Up work.

1.5.2. Incorporate in overall construction schedule.

- 1.5.3. Contractor's activities, which will be performed as specified under Fine Tuning, shall be completed within one (1) year from date of occupancy by the District.

**1.6. CONTRACTOR RESPONSIBILITIES**

- 1.6.1. Provide utility services required for the commissioning process.
- 1.6.2. Contractor is responsible for construction means, methods, job safety, and/or management function related to commissioning on the Project Site.
- 1.6.3. Contractor shall assign representatives with expertise and authority to act on behalf of Contractor and schedule the representatives to participate in and perform commissioning team activities including, but not limited to, the following:
  - 1.6.3.1. Participate in design and construction-phase coordination meetings.
  - 1.6.3.2. Participate in maintenance orientation and inspection.
  - 1.6.3.3. Participate in operation and maintenance training sessions.
  - 1.6.3.4. Participate in final review.
  - 1.6.3.5. Certify that Work is complete and systems are operational according to the Contract Documents, including calibration of instrumentation and controls.
  - 1.6.3.6. Evaluate performance deficiencies identified in test reports and, in collaboration with entity responsible for system and equipment installation, recommend corrective action.
  - 1.6.3.7. Review and comment on final commissioning documentation.
- 1.6.4. Contractor shall integrate all commissioning activities into Contractor's Construction Schedule.
- 1.6.5. Contractor's Subcontractors shall assign representatives with expertise and authority to act on behalf of subcontractors and schedule the representatives to participate in and perform commissioning team activities including, but not limited to, the following:
  - 1.6.5.1. Participate in design and construction-phase coordination meetings.
  - 1.6.5.2. Participate in maintenance orientation and inspection.
  - 1.6.5.3. Participate in procedures meeting for testing.
  - 1.6.5.4. Participate in final review.
  - 1.6.5.5. Provide schedule for operation and maintenance data submittals, equipment startup, and testing to Commissioning Authority for incorporation into the commissioning plan. Update schedule on a weekly basis throughout the construction period.



- 1.6.5.6. Provide information to the Commissioning Authority for developing construction phase commissioning plan.
- 1.6.5.7. Participate in training sessions for District's operation and maintenance personnel.
- 1.6.5.8. Provide updated Project Record Documents to Commissioning Authority on a daily basis.
- 1.6.5.9. Gather and submit operation and maintenance data for systems, subsystems, and equipment to the Commissioning Authority, as specified in Division 01 Document "Operation and Maintenance Data."
- 1.6.5.10. Provide technicians who are familiar with the construction and operation of installed systems, who shall execute the test procedures developed by the Commissioning Authority, and who shall participate in testing of installed systems, subsystems, and equipment.

**1.7. SUBMITTALS**

- 1.7.1. Submit Draft and Final Contractor Start-up Forms as described in this Document. Submit Draft Report for Construction Manager and Architect's review and comment prior to Final Submission. Submit Final Report not later than twenty weeks before scheduled date of Acceptance of Work.
- 1.7.2. Prepare and submit one copy of report form to be used in preparation of system reports for:
  - 1.7.2.1. Food Service Equipment.
  - 1.7.2.2. Gymnasium Equipment and Scoreboards
  - 1.7.2.3. Laboratory Fume Hoods
  - 1.7.2.4. Elevators
  - 1.7.2.5. Each mechanical system specified in Division 15.
  - 1.7.2.6. Each Electrical system specified in Division 16.
- 1.7.3. Each System Report shall be submitted including the following:
  - 1.7.3.1. Project Name
  - 1.7.3.2. Name of System
  - 1.7.3.3. Index of report's content
  - 1.7.3.4. Adjacent to list of equipment, columns to indicate status of equipment operation, to date and to sign off equipment start-up.

1.7.3.5. Space to record equipment and operational problems which cannot be corrected with scheduled Contractor Start-Up program and which may delay Acceptance of Work.

1.7.3.6. Manufacturer's equipment start-up reports.

1.7.3.7. Systems' testing, balancing, and adjusting reports.

1.7.3.8. Equipment Report Forms shall include the following: Project name, name of equipment, starting and testing procedures to be performed and observations and test results to be recorded.

## **1.8. QUALITY ASSURANCE**

1.8.1. Training Instructor Qualifications: Contractor shall provide factory-authorized service representatives, experienced in training, operation, and maintenance procedures for installed systems, subsystems, and equipment.

1.8.2. Test Equipment Calibration: Comply with test equipment manufacturer's calibration procedures and intervals. Recalibrate test instruments (per NIST requirements if applicable) immediately whenever instruments have been repaired following damage or dropping. Affix calibration tags to test instruments. Instruments shall have been calibrated within six months prior to use.

## **1.9. SYSTEM FAILURES**

After a second failure of a system to successfully meet the criteria as set for in the functional performance testing process, the Contractor shall reimburse the District for cost associated with any additional retesting required due to uncorrected deficiencies. Costs shall include salary, benefits, overhead, travel costs and per diem lodging costs if applicable.

**END OF DOCUMENT**

# **Site AHERA Reports**



June 21, 2017

Casey Cypert  
Director Operation Services  
Buellton Union School District  
301 Second St.  
Buellton, CA 93427

Dear Mr. Cypert,

On June 12, 2017, I completed your district's AHERA required three-year asbestos inspection. All areas indicated in the asbestos management plan as having asbestos-containing material or assumed asbestos-containing materials were visually inspected. There were no changes to any material or areas; therefore, your management plan reflects current material conditions.

Please sign the enclosed *District Summary* form and return it to SISC Property and Liability, Attention: Shelby Gonzales. The signed form will be added to your online management plan. Also enclosed is an informational sheet outlining your responsibilities as the district's AHERA designated person.

Also, please note that AHERA requires the school district to notify parents and employees each year that there are asbestos-containing building materials present in the schools and the asbestos management plan is available for review. A copy of this letter has been put in your asbestos management plan to show your legal compliance with AHERA.

If you have any further questions, feel free to contact me at (661) 636-4605.

Sincerely,

Joe Singletary  
AHERA Accreditation Numbers  
CALINC Training LLC—  
Building Inspector: 141252  
Management Planner: 141276

JS:SG  
Enc.



October 23, 2014

Casey Cypert  
Director of Operational Services  
Buellton Union School District  
301 Second Street  
Buellton, CA 93427

Dear Mr. Cypert:

On October 16, 2014, John Costa, Safety and Loss Control Specialist, completed your district's AHERA-required three-year reinspection. All areas indicated in the asbestos management plan as having asbestos-containing material or assumed asbestos-containing material were visually inspected. Changes in the condition of materials and areas are listed below:

**Jonata Elementary School**

Building 001 – Library, Computer Lab and Classrooms 24-28, MPR

- The floor tile in room 26 (old band room) was abated.

Building 014 – Classrooms 11-13

- The floor tile in classroom 11 was abated.

Also, please note that AHERA requires the school district to notify parents and employees each year that there are asbestos-containing building materials present in the schools and the asbestos management plan is available for review. A copy of this letter has been put in your asbestos management plan to show your legal compliance with AHERA.

Please sign the enclosed *District Summary* form and return it to SISC Property and Liability, Attention: Sandi Harville. The signed form will be added to your online management plan.

If you have any further questions, feel free to contact me at (661) 636-4605. If you have any further questions, feel free to contact me at (661) 636-4605.

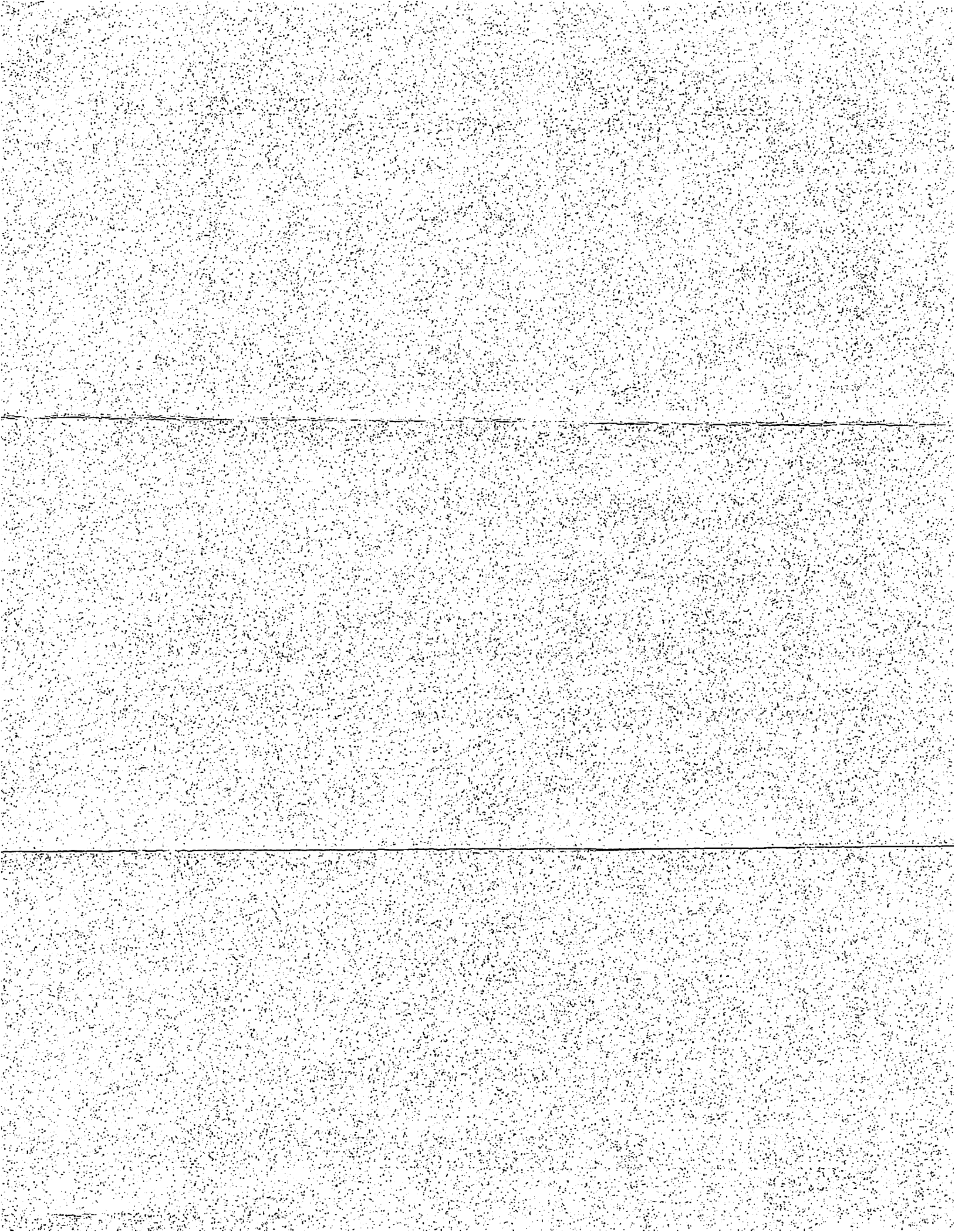
Sincerely,

Joe Singletary  
AHERA Accreditation Numbers  
CALINC Training LLC  
Building Inspector: 130877  
Management Planner: 130890  
State Accreditation #95-1860

John Costa  
AHERA Accreditation Number  
NATEC International, Inc.  
Building Inspector: ABII0106140001N4142

JS:sh





# NOTICE

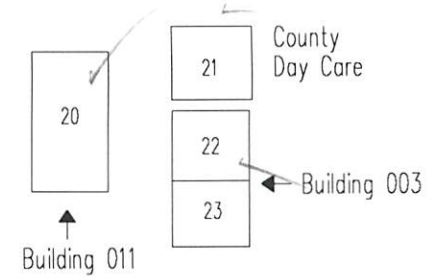
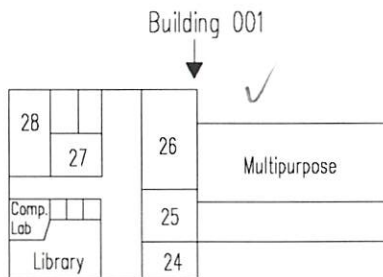
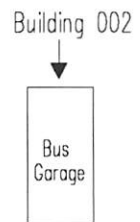
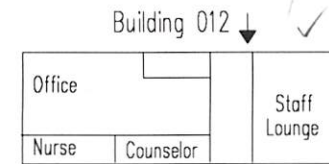
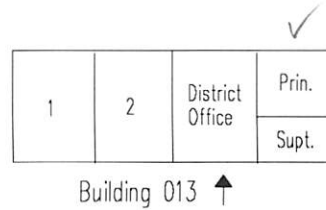
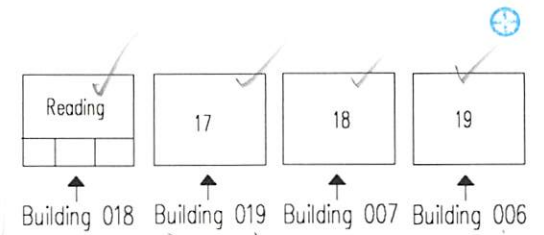
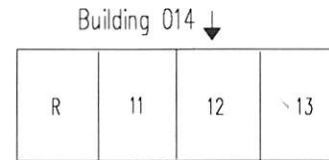
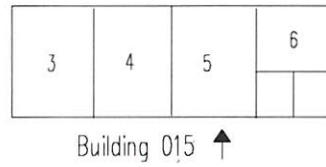
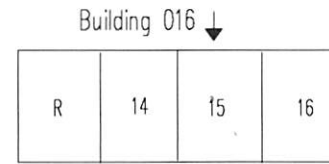
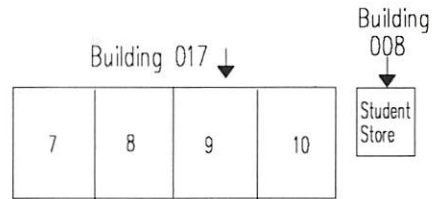
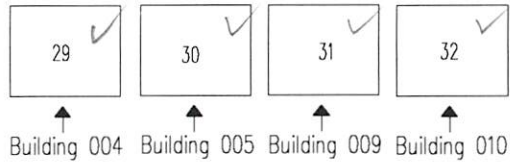
AHERA required sampling and assessment of all suspect materials during the initial inspection. However, some materials were not sampled either because they were not considered suspect by the inspector, or because of uncertainty in interpreting the regulations.

The Environmental Protection Agency (EPA) has since clarified the intent and requirements of the AHERA regulation to consider all of the following materials suspect:

- Drywall joint compound
- Baseboards (except wood)
- Mastics (carpet, baseboards, ceiling tile)

If any of the above materials are present in a building, they must be assumed to contain asbestos until/unless sampled and shown to be otherwise.

Also, if any other suspect materials are discovered in a building that have not been sampled, they too must be assumed to contain asbestos.



**LEGEND**

**SISC**  
SAFETY & LOSS CONTROL

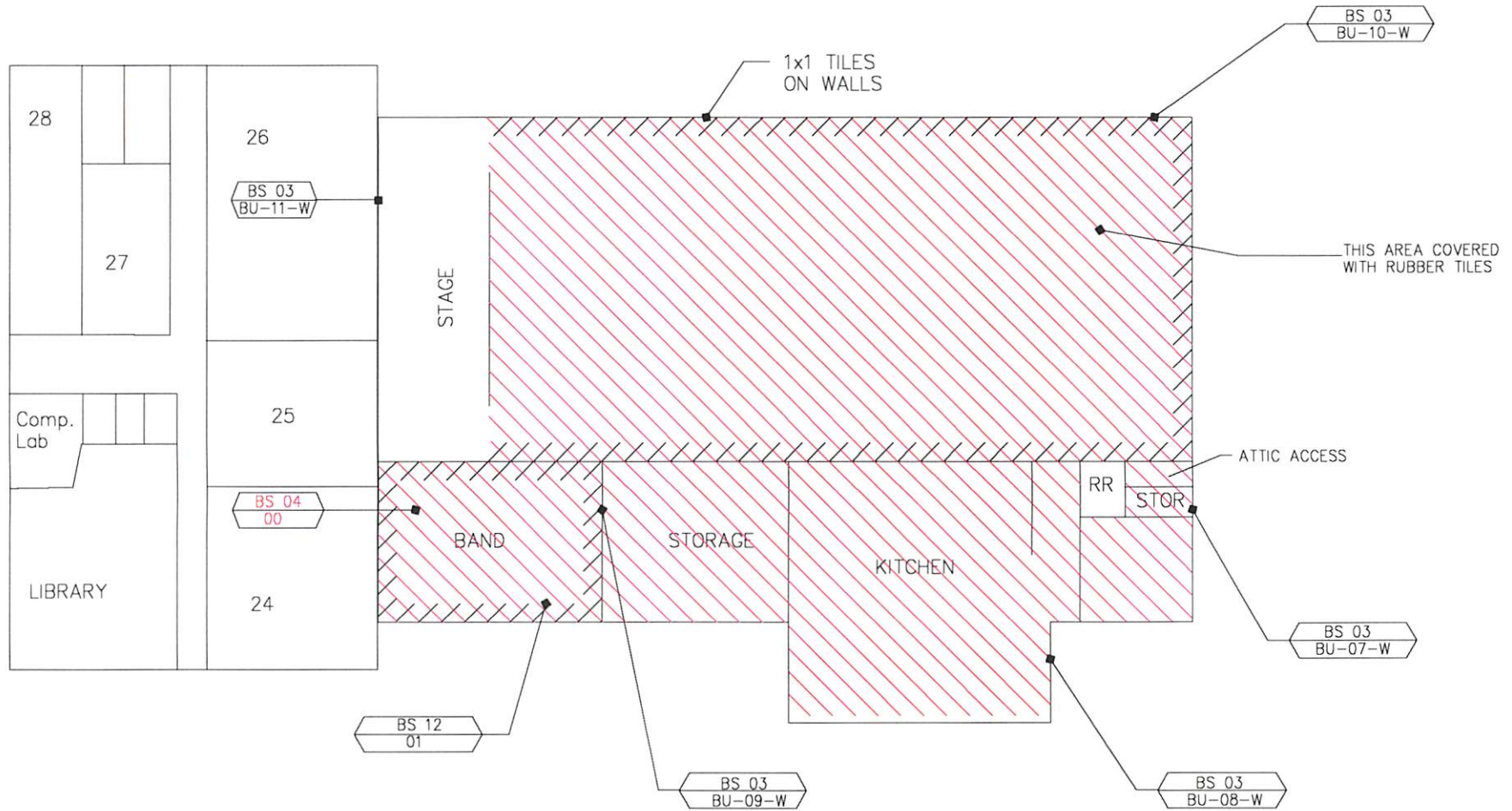
**AHERA**  
COMPLIANCE PROGRAM

INSPECTION  
DATE  
10/06/00

DRAWING  
NUMBER  
00 1COV

050 123-00 1  
BUELLTON UNION ELEMENTARY SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
SITE MAP





**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001001

**AHERA  
COMPLIANCE PROGRAM**

050123-001-001  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
LIBRARY, COMPUTER LAB, CLASSROOMS

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **001 - LIBRARY, COMPUTER LAB, CLASSROOMS**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **19,411**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: **MISCELLANEOUS**      Location: **IN MP ROOM UNDER RUBBER TILES**      Material Description: **VINYL FLOOR TILE**

Damage Category: **ACBM WITH POTENTIAL FOR DAMAGE**      Reason for Damage Category: **The material is observed to be in good condition.**      Potential for Disturbance: **SLIGHT**

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
00	4	04/28/1988	JAMES HOLLINGSHEAD				

Asbestos: **Y**      Friable: **N**      ACM Status: **Non-Friable ACBM**

**MATERIAL QUANTITIES**

5000 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action: **O&M MAINTAIN AND MONITOR**      Priority: **3**      Preventative Measures: **USED W/MISC. & CEMENTITIOUS MATERIAL INCL. VAFT, TRANSITE, TILE UNDERLAY & SCRATCH COATS**

Action Election: **SAME AS RECOMMENDED**

Response Action Schedule	
Start Date	Completion Date
JULY 9, 1989	ONGOING

Inspector's Comments: **RUBBER/PLASTIC TILES HAVE BEEN PLACE ON TOP OF VAFT AS INDICATED ON MAP.**

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 001 - LIBRARY, COMPUTER LAB, CLASSROOMS  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 6,521

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 002 \*\*\***

Material Category: MISCELLANEOUS      Location: THROUGHOUT ON WALLS      Material Description: ACOUSTICAL TILE (1X1)

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
01	0	04/28/1988	JAMES HOLLINGSHEAD				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

4964 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:  
0

Action Election:

Response Action Schedule

Start Date      Completion Date

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
 Project #: 050123 - BUELLTON  
 Campus #: 001 - JONATA ELEMENTRY SCHOOL  
 Building #: 001 - LIBRARY, COMPUTER LAB, CLASSROOMS  
 Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
 Certification#: 810  
 State: CA  
 Gross Square Ft: 6,521

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 003 \*\*\*

Material Category: SURFACING MATERIALS      Location: THROUGHOUT      Material Description: HARDWALL/CEILING PLASTER

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BU-07-W	0	08/09/1991	JOHN COSTA	BU-08-W	0	08/09/1991	JOHN COSTA
BU-09-W	0	08/09/1991	JOHN COSTA	BU-10-W	0	08/09/1991	JOHN COSTA
BU-11-W	0	08/09/1991	JOHN COSTA				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

-----  
 Start Date

-----  
 Completion Date

Inspector's Comments:

-----  
 -----  
 -----

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **002 - BUS GARAGE**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **2,728**

\*\*\* **INSPECTION RESULTS UNIFIED SAMPLING AREA - 001** \*\*\*

Material Category:  
**MISCELLANEOUS**

Location:

Material Description:  
**OTHER-SEE COMMENTS**

Damage Category:  
**N/A**

Reason for Damage Category:

Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
=====	=====	=====	=====	=====	=====	=====	=====

Asbestos: **N**      Friable: **N/A**      ACM Status: **No Suspect Material**

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:                      Priority:                      Preventative Measures:

Action Election:

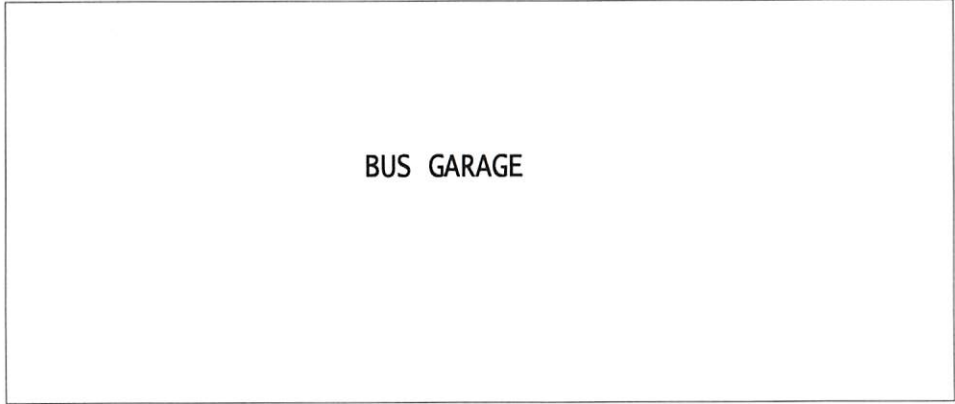
Response Action Schedule

Start Date

Completion Date

Inspector's Comments:

**SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC ASBESTOS INFORMATION ON THIS BUILDING.**



BUS GARAGE

NO SUSPECT MATERIALS

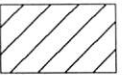
SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC ASBESTOS INFORMATION ON THIS BUILDING.



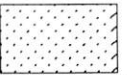
**LEGEND**



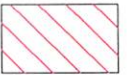
NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE  
10/06/00

DRAWING  
NUMBER  
001002

**AHERA  
COMPLIANCE PROGRAM**

050123-001-002  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
BUS GARAGE

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 003 - ROOMS 22 & 23  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 1,440

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\*

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: DROP OR LAY-IN PANEL

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
06	0	09/12/1988	JAMES HOLLINGSHEAD				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

1440 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

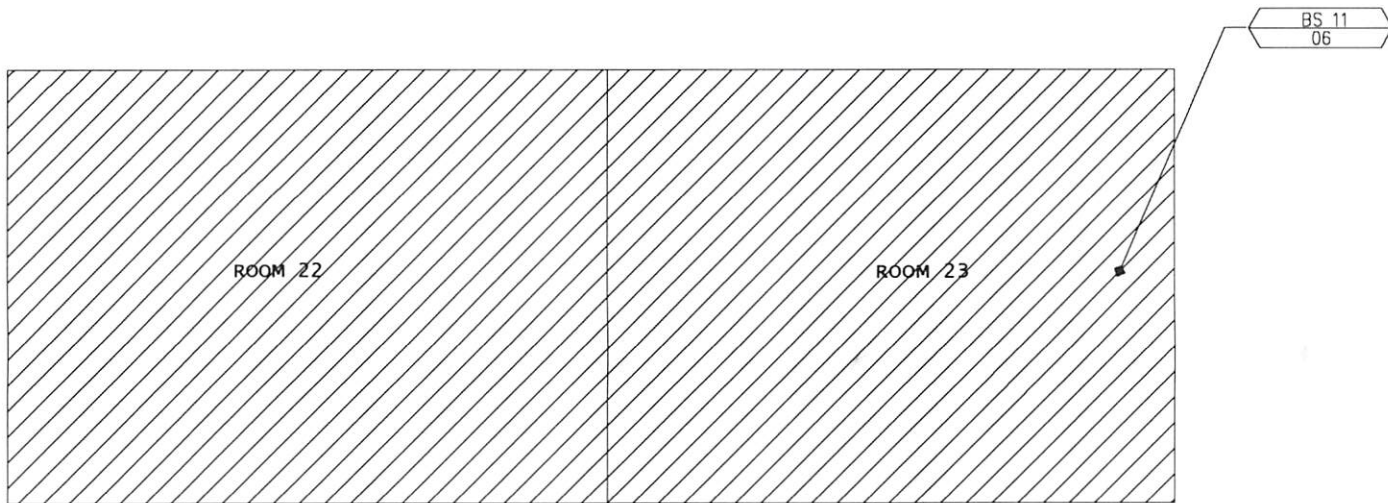
Response Action Schedule

-----  
Start Date

-----  
Completion Date  
-----

Inspector's Comments:





**LEGEND**



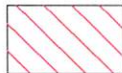
NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001003

**AHERA  
COMPLIANCE PROGRAM**

050123-001-003  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
ROOMS 22 & 23



**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
Project #: **050123 - BUELLTON**  
Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
Building #: **004 - PORTABLE ROOM 29**  
Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
Certification#: **810**  
State: **CA**  
Gross Square Ft: **960**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: **MISCELLANEOUS**      Location:      Material Description: **NO SUSPECT MATERIAL**

Damage Category: **N/A**      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
=====	=====	=====	=====	=====	=====	=====	=====

Asbestos: **N**      Friable: **N/A**      ACM Status: **No Suspect Material**

**MATERIAL QUANTITIES**

960 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

-----  
Start Date      Completion Date  
-----

-----

Inspector's Comments:

**NO SUSPECT MATERIAL**

29

NO SUSPECT MATERIAL



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001004

**AHERA  
COMPLIANCE PROGRAM**

050123-001-004  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
PORTABLE ROOM 29

SISC - AHERA COMPLIANCE PROGRAM

County: SANTA BARBARA
Project #: 050123 - BUELLTON
Campus #: 001 - JONATA ELEMENTARY SCHOOL
Building #: 005 - PORTABLE ROOM 30
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA
Certification#: 810
State: CA
Gross Square Ft: 960

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\*

Material Category: MISCELLANEOUS
Location:
Material Description: NO SUSPECT MATERIAL

Damage Category: N/A
Reason for Damage Category:
Potential for Disturbance:

Table with 8 columns: Sample#, % Asb, Date, Inspector, Sample#, % Asb, Date, Inspector. Includes separator lines above and below the header.

Asbestos: N Friable: N/A ACM Status: No Suspect Material

MATERIAL QUANTITIES

960 Square Feet

MANAGEMENT PLAN RECOMMENDATION

Recommended Response Action: Priority: Preventative Measures:

Action Election:

Response Action Schedule

Start Date

Completion Date

Inspector's Comments:

NO SUSPECT MATERIAL

30

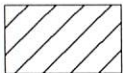
NO SUSPECT MATERIAL



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001005

**AHERA  
COMPLIANCE PROGRAM**

050123-001-005  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
PORTABLE ROOM 30

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 006 - PORTABLE ROOM 19  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 960

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: DROP OR LAY-IN PANEL

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
07	0	09/12/1988	JAMES HOLLINGSHEAD				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

960 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

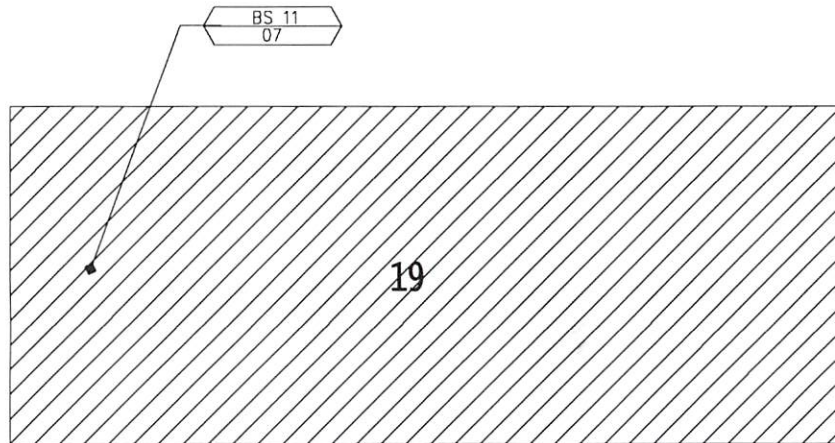
Action Election:

Response Action Schedule

-----  
Start Date

-----  
Completion Date  
-----

Inspector's Comments:



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001006

**AHERA  
COMPLIANCE PROGRAM**

050123-001-006  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
PORTABLE ROOM 19

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 007 - BOOKKEEPING TRAILER  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 960

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: DROP OR LAY-IN PANEL

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
08	0	04/28/1988	JAMES HOLLINGSHEAD				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

960 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

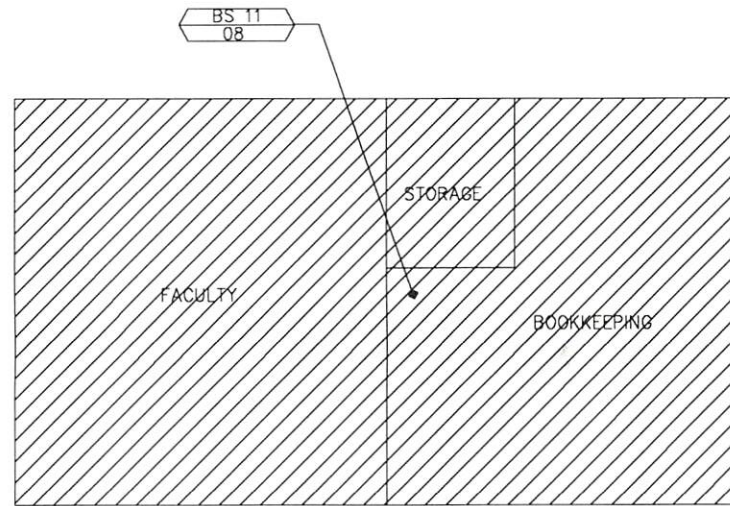
Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

-----  
Start Date      Completion Date  
-----

Inspector's Comments:



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001007

**AHERA  
COMPLIANCE PROGRAM**

050 123-00 1-007  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
BOOKKEEPING TRAILER



**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **008 - STUDENT STORE**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **74**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: **MISCELLANEOUS**      Location: **THROUGHOUT**      Material Description: **ACOUSTICAL TILE (1X1)**

Damage Category: **N/A**      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
09	0	04/28/1988	JAMES HOLLINGSHEAD				

Asbestos: **N**      Friable: **N/A**      ACM Status: **No Suspect Material**

**MATERIAL QUANTITIES**

**74 Square Feet**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

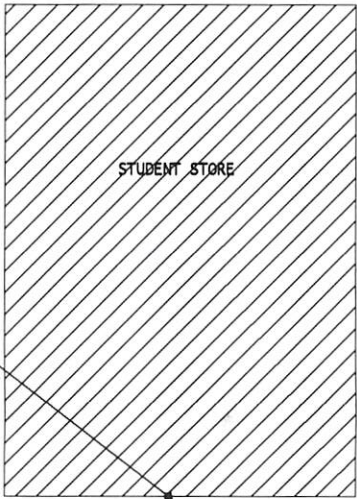
Action Election:

Response Action Schedule

Start Date

Completion Date

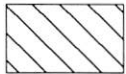
Inspector's Comments:



BS 12  
09



**LEGEND**



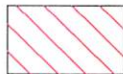
NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001008

**AHERA  
COMPLIANCE PROGRAM**

050123-001-008  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
STUDENT STORE

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 009 - PORTABLE ROOM 31  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 960

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: MISCELLANEOUS                      Location:                      Material Description: OTHER-SEE COMMENTS

Damage Category: N/A                      Reason for Damage Category:                      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
=====	=====	=====	=====	=====	=====	=====	=====

Asbestos: N                      Friable: N/A                      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:                      Priority:                      Preventative Measures:

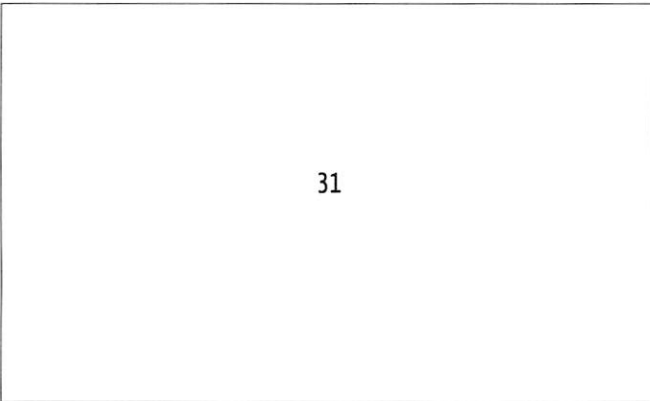
Action Election:

Response Action Schedule

-----  
Start Date                      Completion Date  
-----

Inspector's Comments:

SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC  
ASBESTOS INFORMATION ON THIS BUILDING.



31

SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC ASBESTOS INFORMATION ON THIS BUILDING.



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001009

**AHERA  
COMPLIANCE PROGRAM**

050123-001-009  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
PORTABLE ROOM 31

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
 Project #: 050123 - BUELLTON  
 Campus #: 001 - JONATA ELEMENTRY SCHOOL  
 Building #: 010 - PORTABLE ROOM 32  
 Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
 Certification#: 810  
 State: CA  
 Gross Square Ft: 960

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: MISCELLANEOUS      Location:      Material Description: OTHER-SEE COMMENTS

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
=====	=====	=====	=====	=====	=====	=====	=====

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

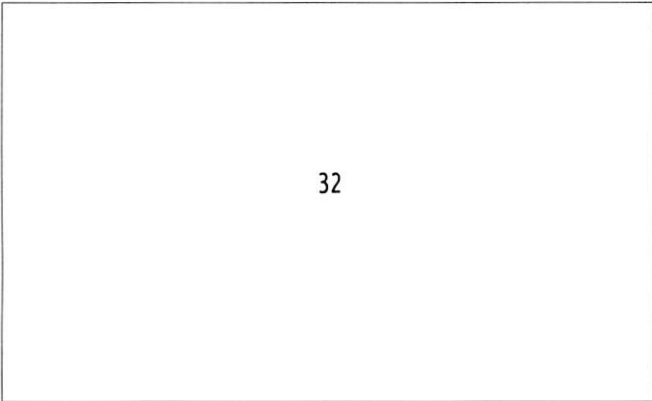
Action Election:

Response Action Schedule

-----  
 Start Date      Completion Date  
 -----

Inspector's Comments:

SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC  
 ASBESTOS INFORMATION ON THIS BUILDING.



32

SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC ASBESTOS INFORMATION ON THIS BUILDING.



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001010

**AHERA  
COMPLIANCE PROGRAM**

050123-001-010  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
PORTABLE ROOM 32

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
Project #: **050123 - BUELLTON**  
Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
Building #: **011 - KINDERGARTEN**  
Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
Certification#: **810**  
State: **CA**  
Gross Square Ft: **2,524**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: **MISCELLANEOUS**                      Location: **GROUND FLOOR**                      Material Description: **ACOUSTICAL TILE (1X1)**

Damage Category: **N/A**                      Reason for Damage Category:                      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
11	0	04/28/1988	JAMES HOLLINGSHEAD				

Asbestos: **N**                      Friable: **N/A**                      ACM Status: **No Suspect Material**

**MATERIAL QUANTITIES**

1386 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:                      Priority:                      Preventative Measures:

Action Election:

Response Action Schedule

Start Date

Completion Date

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
 Project #: 050123 - BUELLTON  
 Campus #: 001 - JONATA ELEMENTRY SCHOOL  
 Building #: 011 - KINDERGARTEN  
 Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
 Certification#: 810  
 State: CA  
 Gross Square Ft: 1,433

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 002 \*\*\*

Material Category: MISCELLANEOUS      Location: THROUGHOUT EXCEPT 2 STORAGE ROOM      Material Description: VINYL FLOOR TILE

Damage Category: ACBM WITH POTENTIAL FOR DAMAGE      Reason for Damage Category: The material is observed to be in good condition.      Potential for Disturbance: SLIGHT

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
12	5	04/28/1988	JAMES HOLLINGSHEAD				

Asbestos: Y      Friable: N      ACM Status: Non-Friable ACBM

**MATERIAL QUANTITIES**

793 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action: O&M MAINTAIN AND MONITOR      Priority: 3      Preventative Measures: USED W/MISC. & CEMENTITIOUS MATERIAL INCL. VAFT, TRANSITE, TILE UNDERLAY & SCRATCH COATS

Action Election:	Response Action Schedule	
	Start Date	Completion Date
SAME AS RECOMMENDED	JULY 9, 1989	ONGOING

Inspector's Comments:  
 9x9 tile partially under carpet.



**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
 Project #: 050123 - BUELLTON  
 Campus #: 001 - JONATA ELEMENTRY SCHOOL  
 Building #: 011 - KINDERGARTEN  
 Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
 Certification#: 810  
 State: CA  
 Gross Square Ft: 2,524

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 003 \*\*\***

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: DRYWALL

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BU-17-W	0	08/09/1991	JOHN COSTA	BU-18-W	0	08/09/1991	JOHN COSTA
BU-19-W	0	08/09/1991	JOHN COSTA	BU-27-W	0	08/09/1991	JOHN COSTA
BU-28-W	0	08/09/1991	JOHN COSTA	BU-29-W	0	08/09/1991	JOHN COSTA

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

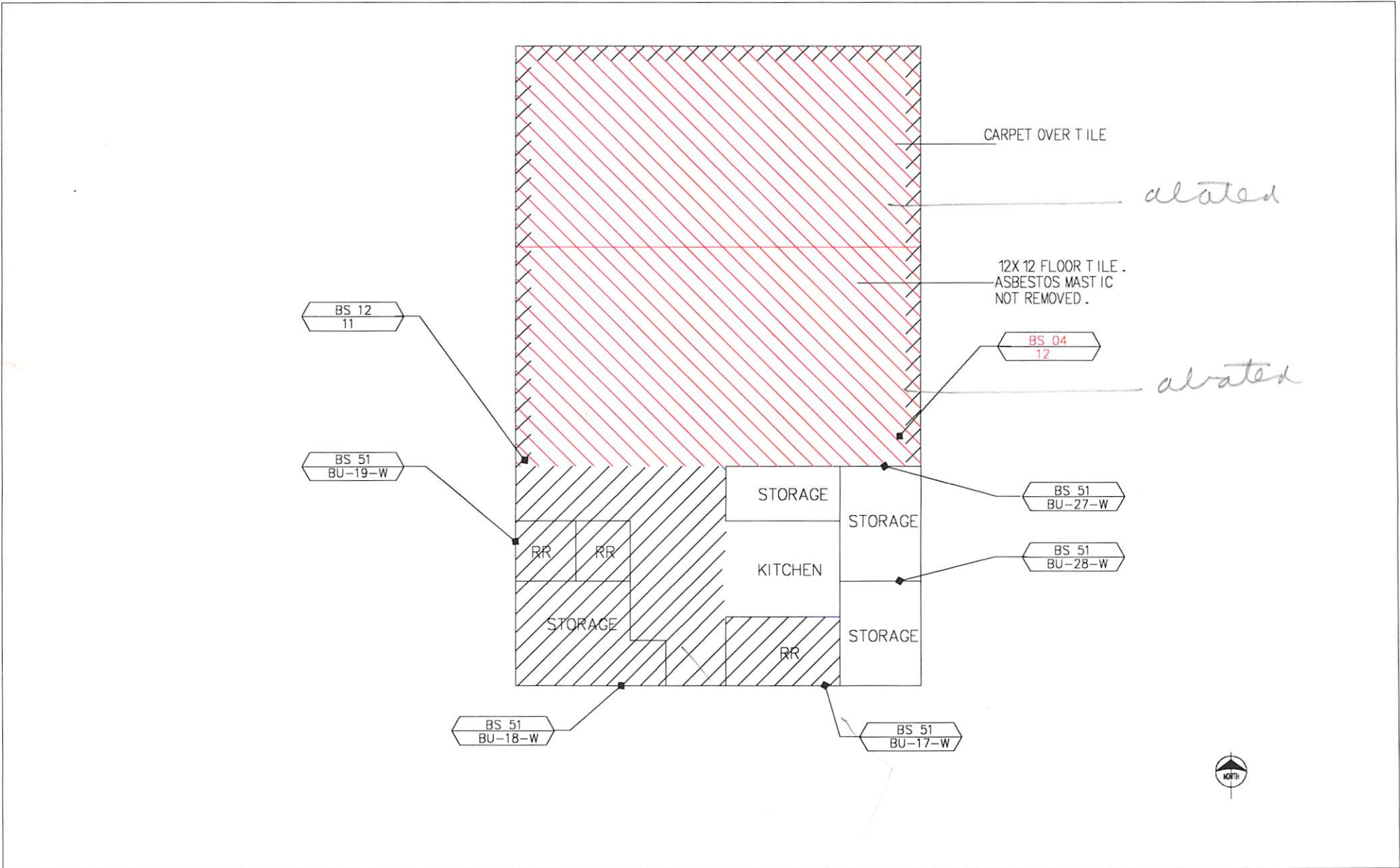
Action Election:

Response Action Schedule

-----  
 Start Date

-----  
 Completion Date

Inspector's Comments:



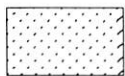
**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001011

**AHERA  
COMPLIANCE PROGRAM**

050123-001-011  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
KINDERGARTEN

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 012 - ADMINISTRATION  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 1,270

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 002 \*\*\***

Material Category: MISCELLANEOUS      Location: GROUND FLOOR      Material Description: ACOUSTICAL TILE (1X1)

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
17	0	04/28/1988	JAMES HOLLINGSHEAD	18	0	04/28/1988	JAMES HOLLINGSHEAD

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

1256 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

Start Date

Completion Date

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **012 - ADMINISTRATION**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **1,270**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 003 \*\*\***

Material Category: **MISCELLANEOUS**      Location: **NURSE'S RESTROOM AND ENTRY**      Material Description: **LINOLEUM**

Damage Category: **N/A**      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
6439	0	06/24/1992	DONNA HARRIS				

Asbestos: **N**      Friable: **N/A**      ACM Status: **No Suspect Material**

**MATERIAL QUANTITIES**

33 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

-----  
 Start Date      Completion Date  
 -----

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **012 - ADMINISTRATION**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **1,270**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 004 \*\*\***

Material Category: **SURFACING MATERIALS**      Location: **THROUGHOUT**      Material Description: **HARDWALL/CEILING PLASTER**

Damage Category: **N/A**      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BU-01-	0	08/09/1991	JOHN COSTA	BU-02-	0	08/09/1991	JOHN COSTA
BU-03-	0	08/09/1991	JOHN COSTA	BU-04-	0	08/09/1991	JOHN COSTA
BU-05-	0	08/09/1991	JOHN COSTA				

Asbestos: **N**      Friable: **N/A**      ACM Status: **No Suspect Material**

**MATERIAL QUANTITIES**

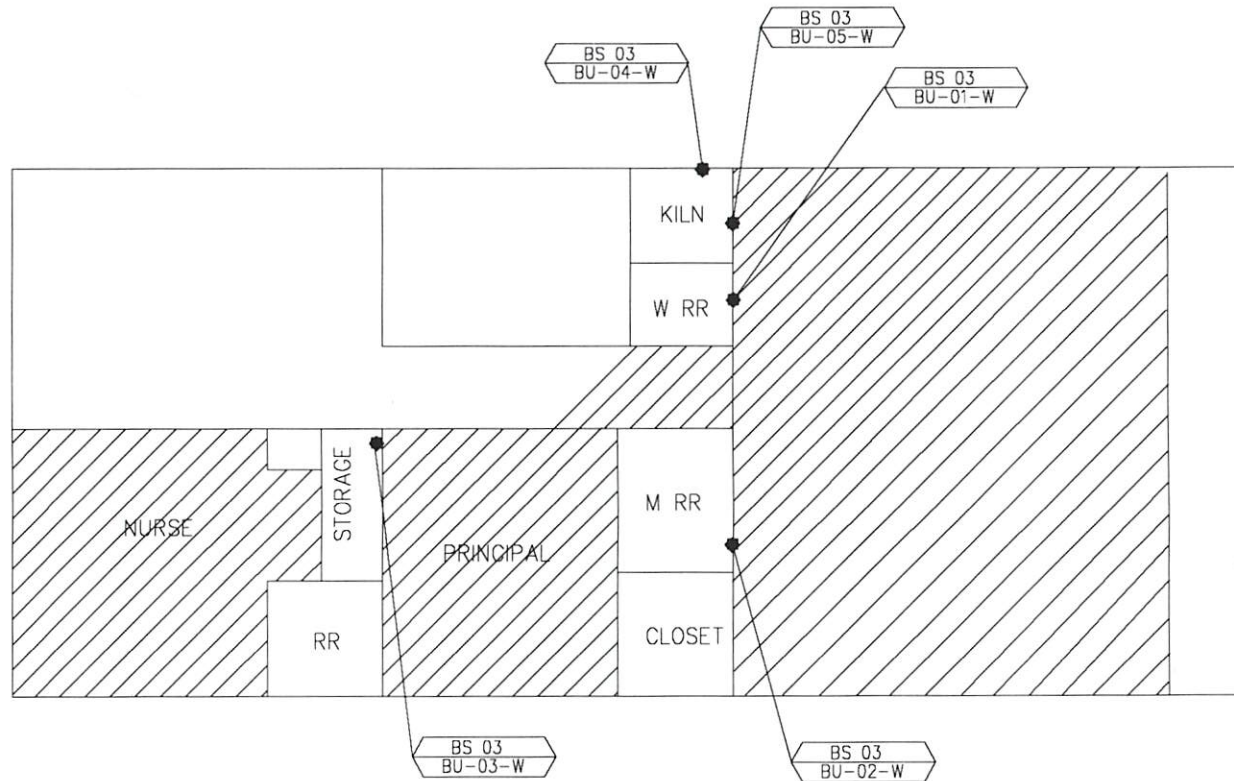
**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:      Response Action Schedule

	-----	-----
	Start Date	Completion Date
	=====	=====
	-----	-----

Inspector's Comments:



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001012

**AHERA  
COMPLIANCE PROGRAM**

050123-001-012  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
ADMINISTRATION



**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTARY SCHOOL  
Building #: 013 - ROOMS 1-2, DISTRICT OFFICE, AND LOUNGE  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 4,399

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: MISCELLANEOUS      Location: THROUGHOUT ON WALLS      Material Description: ACOUSTICAL TILE (1X1)

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
23	0	04/28/1988	JAMES HOLLINGSHEAD				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

864 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

Start Date

Completion Date

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **013 - ROOMS 1-2, DISTRICT OFFICE, AND LOUNGE**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **4,399**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 002 \*\*\***

Material Category: **MISCELLANEOUS**                      Location: **CLASSROOMS - SOME TILE UNDER CARPET**                      Material Description: **VINYL FLOOR TILE**

Damage Category: **ACBM WITH POTENTIAL FOR DAMAGE**                      Reason for Damage Category: **The material is observed to be in good condition.**                      Potential for Disturbance: **SLIGHT**

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
24	2	04/28/1988	JAMES HOLLINGSHEAD				

Asbestos: **Y**                      Friable: **N**                      ACM Status: **Non-Friable ACBM**

**MATERIAL QUANTITIES**

1920 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action: **O&M MAINTAIN AND MONITOR**                      Priority: **3**                      Preventative Measures: **USED W/MISC. & CEMENTITIOUS MATERIAL INCL. VAFT, TRANSITE, TILE UNDERLAY & SCRATCH COATS**

Action Election:	Response Action Schedule	
	Start Date	Completion Date
<b>SAME AS RECOMMENDED</b>	<b>JULY 9, 1989</b>	<b>ONGOING</b>

Inspector's Comments:  
 Only in Room 3 was the VAFT abated.  
 12"x12" tile over asbestos containing mastic.



**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 013 - ROOMS 1-2, DISTRICT OFFICE, AND LOUNGE  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 4,399

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 003 \*\*\***

Material Category: MISCELLANEOUS      Location: STAFF LOUNGE      Material Description: LINOLEUM

Damage Category: ACBM WITH POTENTIAL FOR DAMAGE      Reason for Damage Category: The material is observed to be in good condition.      Potential for Disturbance: SLIGHT

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
25	45	09/12/1988	JAMES HOLLINGSHEAD				

Asbestos: Y      Friable: N      ACM Status: Non-Friable ACBM

**MATERIAL QUANTITIES**

136 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action: O&M MAINTAIN AND MONITOR      Priority: 3      Preventative Measures: USED W/MISC. & CEMENTITIOUS MATERIAL INCL. VAFT, TRANSITE, TILE UNDERLAY & SCRATCH COATS

Action Election:	Response Action Schedule	
SAME AS RECOMMENDED	Start Date	Completion Date
Inspector's Comments: Linoleum is under wood floor and carpet.	JULY 9, 1989	ONGOING

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
 Project #: 050123 - BUELLTON  
 Campus #: 001 - JONATA ELEMENTARY SCHOOL  
 Building #: 013 - ROOMS 1-2, DISTRICT OFFICE, AND LOUNGE  
 Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
 Certification#: 810  
 State: CA  
 Gross Square Ft: 4,399

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 004 \*\*\***

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: WALLBOARD

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BU-06-	0	08/09/1991	JOHN COSTA				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

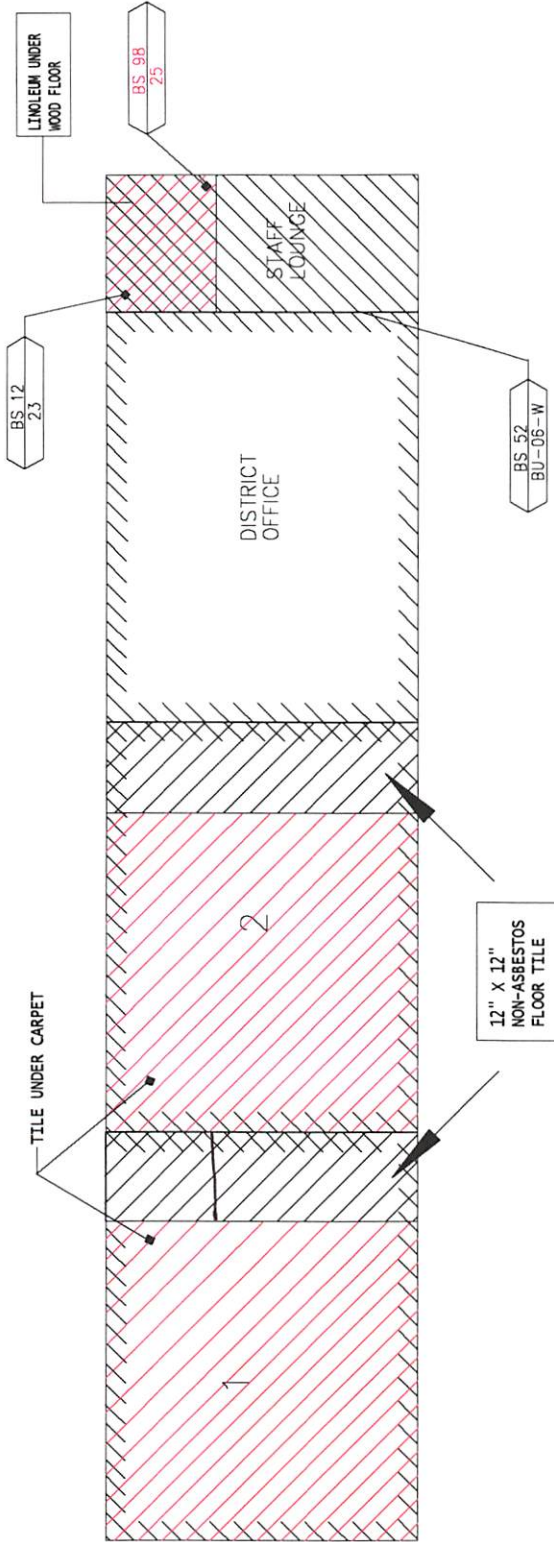
**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

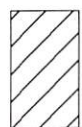
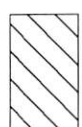


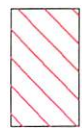

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:      Response Action Schedule

	Start Date	Completion Date
Inspector's Comments:	=====	=====



**LEGEND**

-  NON-ASBESTOS VINYL FLOOR TILE
-  NON-ASBESTOS CEILING TILES
-  NON-ASBESTOS SPRAY / TROWEL APPLIED MATERIAL
-  ASBESTOS CONTAINING VINYL FLOOR TILE
-  ASBESTOS CONTAINING CEILING TILES
-  ASBESTOS CONTAINING SPRAY / TROWEL APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION DATE 10/06/00  
DRAWING NUMBER 001013

**AHERA**  
COMPLIANCE PROGRAM

050123-001-013  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
ROOMS 1 - 2, DISTRICT OFFICE, LOUNGE

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 014 - ROOMS 11-13  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 4,254

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\*

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: ACOUSTICAL TILE (1X1)

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
26	0	09/12/1988	JAMES HOLLINGSHEAD				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

864 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

Start Date

Completion Date

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **014 - ROOMS 11-13**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **4,254**

\*\*\* **INSPECTION RESULTS UNIFIED SAMPLING AREA - 002** \*\*\*

Material Category: **MISCELLANEOUS**                      Location: **IN ROOM 13 ONLY**                      Material Description: **VINYL FLOOR TILE**

Damage Category: **ACBM WITH POTENTIAL FOR DAMAGE**                      Reason for Damage Category: **The material is observed to be in good condition.**                      Potential for Disturbance: **SLIGHT**

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
27	2	09/12/1988	JAMES HOLLINGSHEAD				

Asbestos: **Y**                      Friable: **N**                      ACM Status: **Non-Friable ACBM**

**MATERIAL QUANTITIES**

960 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action: **O&M MAINTAIN AND MONITOR**                      Priority: **3**                      Preventative Measures: **USED W/MISC. & CEMENTITIOUS MATERIAL INCL. VAFT, TRANSITE, TILE UNDERLAY & SCRATCH COATS**

Action Election:	Response Action Schedule	
	Start Date	Completion Date
<b>SAME AS RECOMMENDED</b>	<b>JULY 9, 1989</b>	<b>ONGOING</b>

Inspector's Comments: **9x9 tile, partially under carpet.**

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 014 - ROOMS 11-13  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 4,254

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 003 \*\*\***

Material Category: MISCELLANEOUS      Location: THROUGHOUT CLASSROOMS      Material Description: WALLBOARD

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BU-16-W	0	08/09/1991	JOHN COSTA				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

Start Date      Completion Date

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **014 - ROOMS 11-13**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **4,254**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 004 \*\*\***

Material Category: **SURFACING MATERIALS**      Location: **RESTROOMS**      Material Description: **HARDWALL/CEILING PLASTER**

Damage Category: **N/A**      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BBR1	0	07/12/1990	JOHN COSTA	BBR2	0	07/12/1990	JOHN COSTA
GBR3	0	07/12/1990	JOHN COSTA	GBR4	0	07/12/1990	JOHN COSTA

Asbestos: **N**      Friable: **N/A**      ACM Status: **No Suspect Material**

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

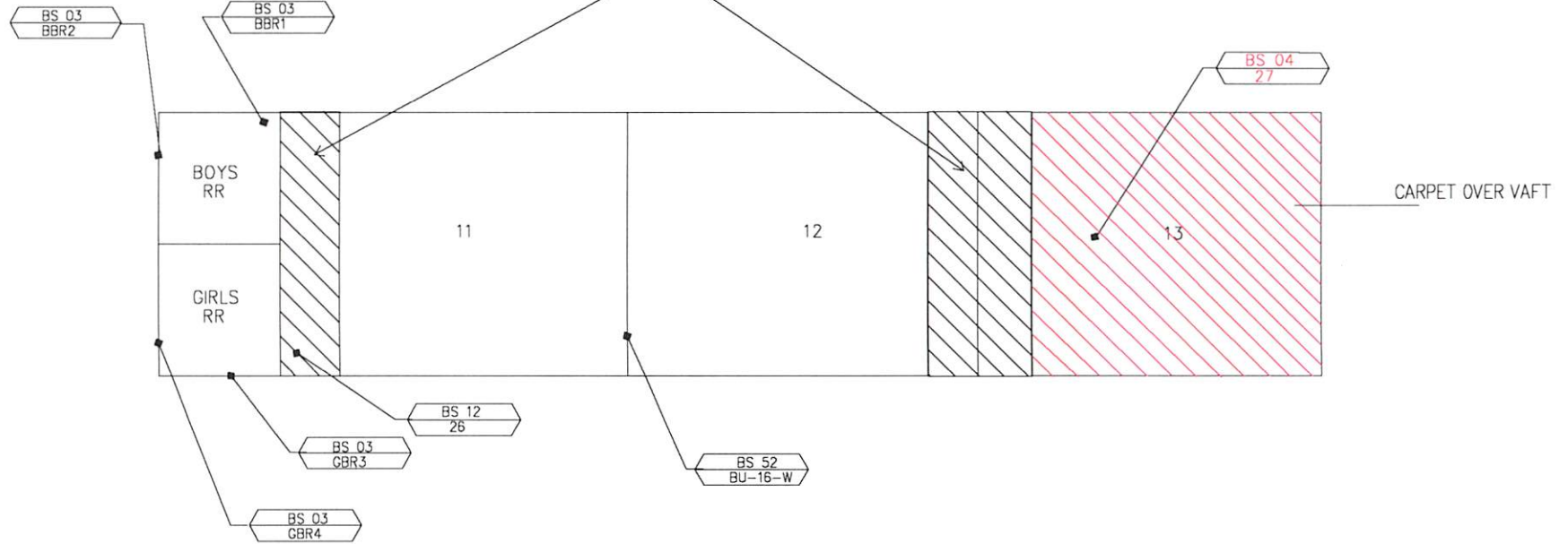
Start Date

Completion Date

Inspector's Comments:



12" X 12" NON-ASBESTOS  
FLOOR TILE IN  
INDICATED AREAS



**LEGEND**

-   
 NON-ASBESTOS  
VINYL FLOOR TILE
-   
 NON-ASBESTOS  
CEILING TILES
-   
 NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL
-   
 ASBESTOS  
CONTAINING  
VINYL FLOOR TILE
-   
 ASBESTOS  
CONTAINING  
CEILING TILES
-   
 ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

<b>SISC</b>	
<b>SAFETY &amp; LOSS CONTROL</b>	
INSPECTION DATE	DRAWING NUMBER
10/06/00	001014

<b>AHERA COMPLIANCE PROGRAM</b>
050123-001-014 BUELLTON UNION SCHOOL DISTRICT JONATA ELEMENTARY SCHOOL ROOMS 11-13



**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
 Project #: 050123 - BUELLTON  
 Campus #: 001 - JONATA ELEMENTRY SCHOOL  
 Building #: 015 - ROOMS 3 - 6  
 Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
 Certification#: 810  
 State: CA  
 Gross Square Ft: 4,366

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\*

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: ACOUSTICAL TILE (1X1)

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
28	0	09/12/1988	JAMES HOLLINGSHEAD				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

648 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

Start Date

Completion Date

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
Project #: **050123 - BUELLTON**  
Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
Building #: **015 - ROOMS 3 - 6**  
Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
Certification#: **810**  
State: **CA**  
Gross Square Ft: **4,366**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 002 \*\*\***

Material Category: **MISCELLANEOUS**                      Location: **BY CLASSROOM 4**                      Material Description: **VINYL FLOOR TILE**

Damage Category: **ACBM WITH POTENTIAL FOR DAMAGE**                      Reason for Damage Category: **The material is observed to be in good condition.**                      Potential for Disturbance: **SLIGHT**

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
29	2	09/12/1988	JAMES HOLLINGSHEAD				

Asbestos: **Y**                      Friable: **N**                      ACM Status: **Non-Friable ACBM**

**MATERIAL QUANTITIES**

1920 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action: **O&M MAINTAIN AND MONITOR**                      Priority: **3**                      Preventative Measures: **USED W/MISC. & CEMENTITIOUS MATERIAL INCL. VAFT, TRANSITE, TILE UNDERLAY & SCRATCH COATS**

Action Election: **SAME AS RECOMMENDED**

Response Action Schedule	
Start Date	Completion Date
<b>JULY 9, 1989</b>	<b>ONGOING</b>

Inspector's Comments: **VAFT REMOVED BY REMTEC, SUMMER OF 1998. SOME VAFT REMAINS. SEE DRAWING FOR DETAILS.**

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 015 - ROOMS 3 - 6  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 4,366

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 004 \*\*\***

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: WALLBOARD

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BU-12-W	0	08/09/1991	JOHN COSTA				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

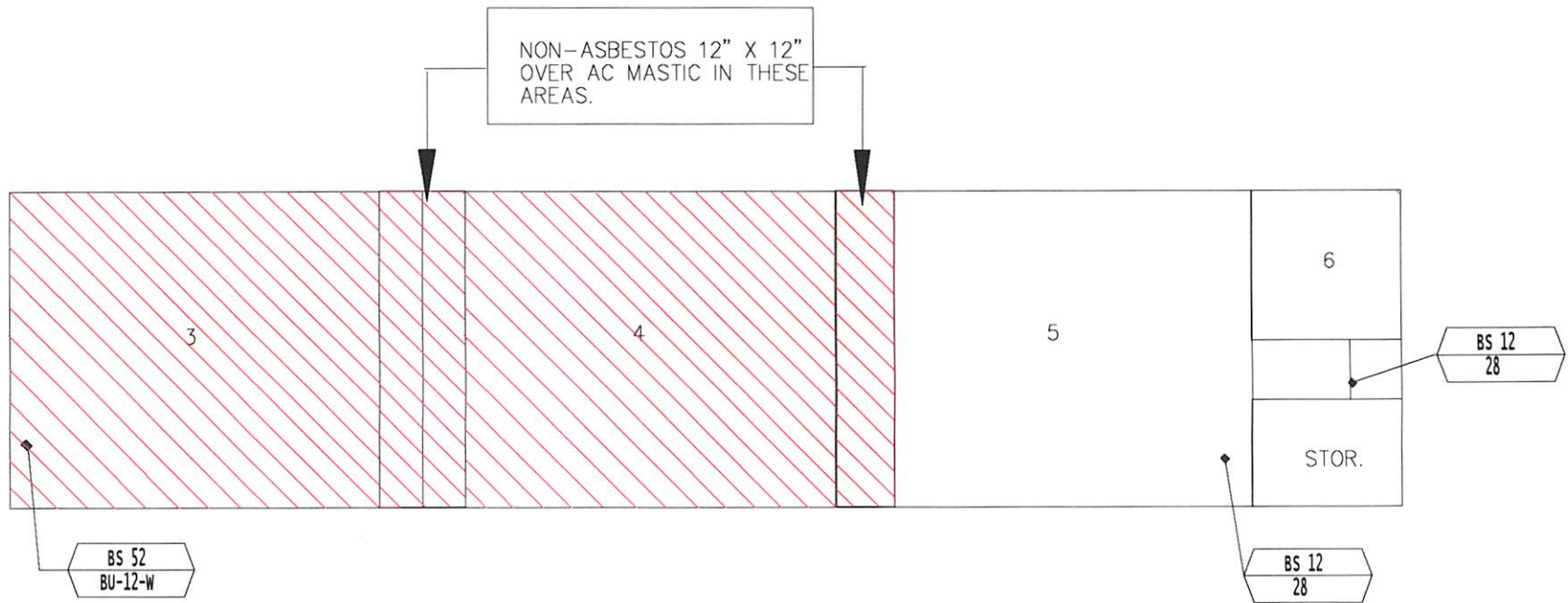
Action Election:

Response Action Schedule

Start Date

Completion Date

Inspector's Comments:



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001015

**AHERA  
COMPLIANCE PROGRAM**

050123-001-015  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
ROOMS 3-6

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **016 - ROOMS 14 - 16**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **4,334**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: **SURFACING MATERIALS**      Location: **RESTROOMS**      Material Description: **HARDWALL/CEILING PLASTER**

Damage Category: **N/A**      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BU-23-W	0	08/09/1991	JOHN COSTA	BU-24-W	0	08/09/1991	JOHN COSTA
BU-25-W	0	08/09/1991	JOHN COSTA				

Asbestos: **N**      Friable: **N/A**      ACM Status: **No Suspect Material**

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

Start Date

Completion Date

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **016 - ROOMS 14 - 16**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **4,334**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 003 \*\*\***

Material Category: **MISCELLANEOUS**                      Location: **THROUGHOUT**                      Material Description: **DRYWALL**

Damage Category: **N/A**                      Reason for Damage Category:                      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BU-20-W	0	08/09/1991	JOHN COSTA	BU-21-W	0	08/09/1991	JOHN COSTA
BU-22-W	0	08/09/1991	JOHN COSTA				

Asbestos: **N**                      Friable: **N/A**                      ACM Status: **No Suspect Material**

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:                      Priority:                      Preventative Measures:

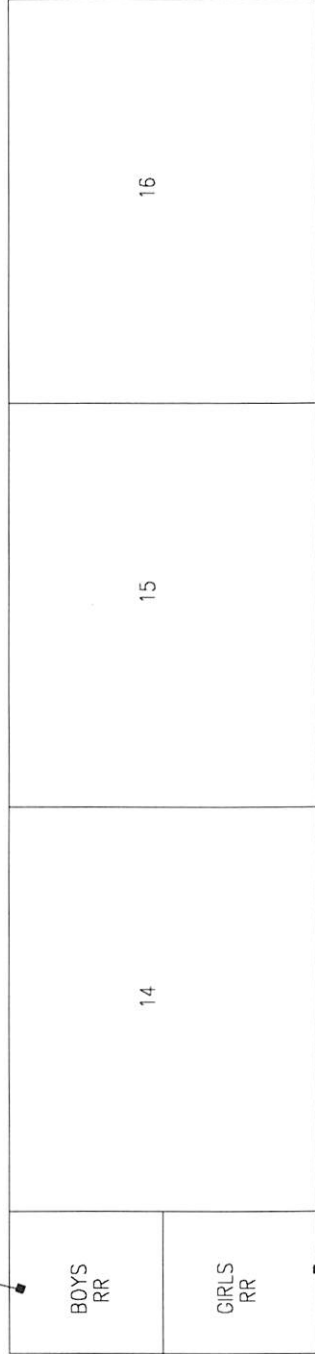
Action Election:

Response Action Schedule

-----  
 Start Date                      Completion Date  
 -----

Inspector's Comments:

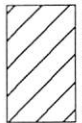
BS 03  
BU-25-W



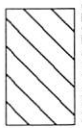
BS 03  
BU-24-W



### LEGEND



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

### SISC

SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001016

AHERA  
COMPLIANCE PROGRAM

050123-001-016  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
ROOMS 14-16

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 017 - ROOMS 7 - 10  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 5,106

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: ACOUSTICAL TILE (1X1)

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
33	0	09/12/1988	JAMES HOLLINGSHEAD				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

4140 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

-----  
Start Date

-----  
Completion Date  
-----

Inspector's Comments:



**SISC - AHERA COMPLIANCE PROGRAM**

County: **SANTA BARBARA**  
 Project #: **050123 - BUELLTON**  
 Campus #: **001 - JONATA ELEMENTRY SCHOOL**  
 Building #: **017 - ROOMS 7 - 10**  
 Inspection Dates: **10/06/2000 To 10/06/2000**

Inspected by: **JOHN COSTA**  
 Certification#: **810**  
 State: **CA**  
 Gross Square Ft: **5,106**

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 002 \*\*\***

Material Category: **MISCELLANEOUS**      Location: **THROUGHOUT CLASSROOMS**      Material Description: **VINYL FLOOR TILE**

Damage Category: **ACBM WITH POTENTIAL FOR DAMAGE**      Reason for Damage Category: **This material appears to be in good condition.**      Potential for Disturbance: **SLIGHT**

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
34	0	09/12/1988	JAMES HOLLINGSHEAD	6438	1	06/24/1992	DONNA HARRIS

Asbestos: **Y**      Friable: **N**      ACM Status: **Non-Friable ACBM**

**MATERIAL QUANTITIES**

4500 Square Feet

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

-----  
 Start Date

-----  
 Completion Date

Inspector's Comments:

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
 Project #: 050123 - BUELLTON  
 Campus #: 001 - JONATA ELEMENTRY SCHOOL  
 Building #: 017 - ROOMS 7 - 10  
 Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
 Certification#: 810  
 State: CA  
 Gross Square Ft: 5,106

\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 003 \*\*\*

Material Category: MISCELLANEOUS      Location: THROUGHOUT      Material Description: WALLBOARD

Damage Category: N/A      Reason for Damage Category:      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
BU-26-W	0	08/09/1991	JOHN COSTA				

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

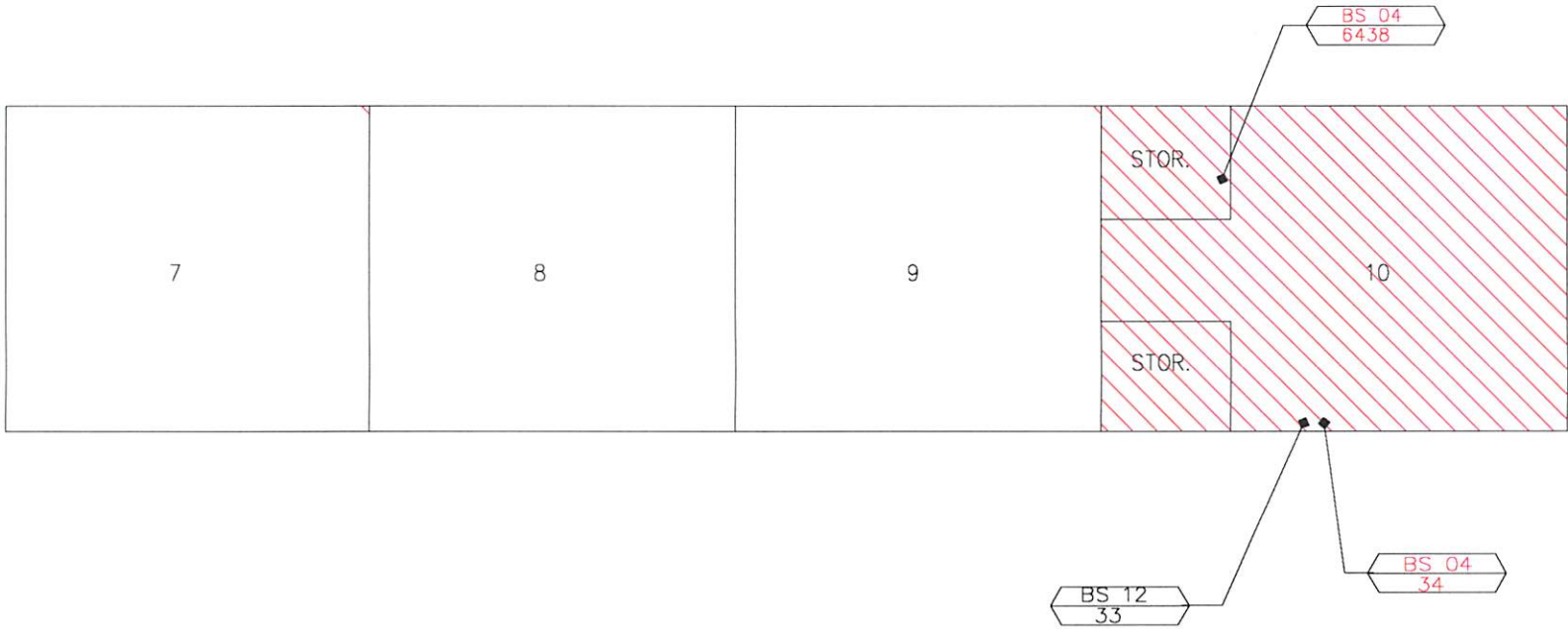
Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

Response Action Schedule

Start Date      Completion Date

Inspector's Comments:



CARPET OVER  
ASBESTOS MASTIC



**LEGEND**

-   
 NON-ASBESTOS  
VINYL FLOOR TILE
-   
 NON-ASBESTOS  
CEILING TILES
-   
 NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL
-   
**ASBESTOS  
CONTAINING  
VINYL FLOOR TILE**
-   
**ASBESTOS  
CONTAINING  
CEILING TILES**
-   
**ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL**

<b>SISC</b>	
<b>SAFETY &amp; LOSS CONTROL</b>	
INSPECTION DATE	DRAWING NUMBER
10/06/00	001017

<b>AHERA COMPLIANCE PROGRAM</b>
050123-001-017 BUELLTON UNION SCHOOL DISTRICT JONATA ELEMENTARY SCHOOL ROOMS 7-10

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
 Project #: 050123 - BUELLTON  
 Campus #: 001 - JONATA ELEMENTRY SCHOOL  
 Building #: 018 - READING / WORK ROOM  
 Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
 Certification#: 810  
 State: CA  
 Gross Square Ft: 960

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category:  
 MISCELLANEOUS

Location:

Material Description:  
 OTHER-SEE COMMENTS

Damage Category:  
 N/A

Reason for Damage Category:

Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
=====	=====	=====	=====	=====	=====	=====	=====

Asbestos: N      Friable: N/A      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

Recommended Response Action:      Priority:      Preventative Measures:

Action Election:

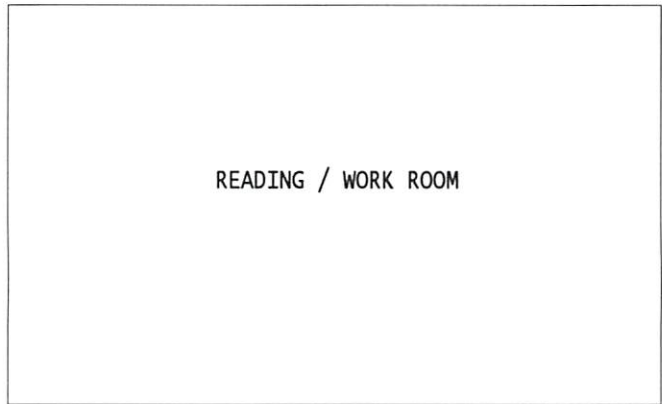
Response Action Schedule

-----  
 Start Date

-----  
 Completion Date

Inspector's Comments:

SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC  
 ASBESTOS INFORMATION ON THIS BUILDING.

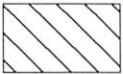


READING / WORK ROOM

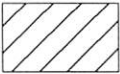
SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC ASBESTOS INFORMATION ON THIS BUILDING.



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001018

**AHERA  
COMPLIANCE PROGRAM**

050123-001-018  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
READING / WORK ROOM

**SISC - AHERA COMPLIANCE PROGRAM**

County: SANTA BARBARA  
Project #: 050123 - BUELLTON  
Campus #: 001 - JONATA ELEMENTRY SCHOOL  
Building #: 019 - PORTABLE ROOM 17  
Inspection Dates: 10/06/2000 To 10/06/2000

Inspected by: JOHN COSTA  
Certification#: 810  
State: CA  
Gross Square Ft: 960

**\*\*\* INSPECTION RESULTS UNIFIED SAMPLING AREA - 001 \*\*\***

Material Category: MISCELLANEOUS                      Location:                      Material Description: OTHER-SEE COMMENTS

Damage Category: N/A                      Reason for Damage Category:                      Potential for Disturbance:

Sample#	% Asb	Date	Inspector	Sample#	% Asb	Date	Inspector
=====	=====	=====	=====	=====	=====	=====	=====

Asbestos: N                      Friable: N/A                      ACM Status: No Suspect Material

**MATERIAL QUANTITIES**

**MANAGEMENT PLAN RECOMMENDATION**

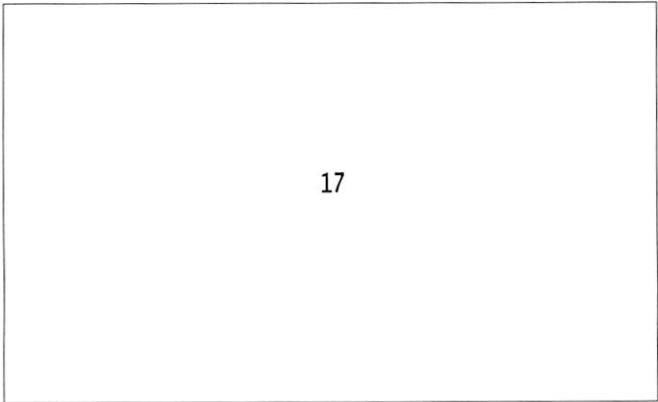
Recommended Response Action:                      Priority:                      Preventative Measures:

Action Election:                      Response Action Schedule

Start Date	Completion Date
=====	=====

Inspector's Comments:

SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC ASBESTOS INFORMATION ON THIS BUILDING.



17

SEE DISTRICT DESIGNATED PERSON FOR SPECIFIC ASBESTOS INFORMATION ON THIS BUILDING.



**LEGEND**



NON-ASBESTOS  
VINYL FLOOR TILE



NON-ASBESTOS  
CEILING TILES



NON-ASBESTOS  
SPRAY / TROWEL  
APPLIED MATERIAL



ASBESTOS  
CONTAINING  
VINYL FLOOR TILE



ASBESTOS  
CONTAINING  
CEILING TILES



ASBESTOS  
CONTAINING  
SPRAY / TROWEL  
APPLIED MATERIAL

**SISC**  
SAFETY & LOSS CONTROL

INSPECTION  
DATE

10/06/00

DRAWING  
NUMBER

001019

**AHERA  
COMPLIANCE PROGRAM**

050123-001-019  
BUELLTON UNION SCHOOL DISTRICT  
JONATA ELEMENTARY SCHOOL  
PORTABLE ROOM 17



Inc.

2830 BARRETT AVENUE • P.O. BOX 1240 • PERRIS, CALIFORNIA 92572

(909) 943-4014 • FAX (909) 940-0427 • Administration / Contracts  
Estimating / Engineering / Sales / Purchasing / Service / Field

Manufacturers of Relocatable and Modular Commercial Buildings

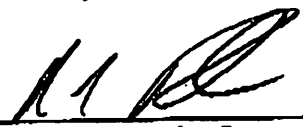
**CONTRACTOR'S CERTIFICATE REGARDING NON-USE  
OF ASBESTOS CONTAINING MATERIALS**

**BUELLTON UNIFIED SCHOOL DISTRICT  
301 SECOND STREET  
BUELLTON, CA 93427**

**RE: Modtech Job #2223  
Jonata Elementary School  
(3) 24'x40' Bldgs., Ser.#17280-17285  
(1) 36'x40' Bldg., Ser.#17286-17288**

*Modtech, Inc. hereby, certifies that no asbestos containing products or materials were used in the construction of any of the buildings supplied under the above referenced project.*

**Modtech, Inc.**

  
\_\_\_\_\_  
**Michael G. Rhodes, President**

**cc: File #2223**





Inc.

2830 BARRETT AVENUE • P.O. BOX 1240 • PERRIS, CALIFORNIA 92572

(909) 943-4014 • FAX (909) 940-0427 • Administration / Contracts  
Estimating / Engineering / Sales / Purchasing / Service / Field

Manufacturers of Relocatable and Modular Commercial Buildings

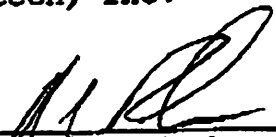
**CONTRACTOR'S CERTIFICATE REGARDING NON-USE  
OF ASBESTOS CONTAINING MATERIALS**

**BUELLTON UNIFIED SCHOOL DISTRICT  
301 SECOND STREET  
BUELLTON, CA 93427**

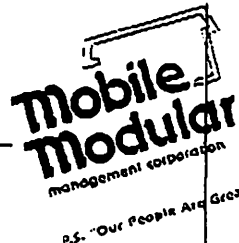
**RE: Modtech Job #3518  
New Elementary School  
(12) 30'x32' Bldgs., Ser.#47197-47232**

Modtech, Inc. hereby, certifies that no asbestos containing products or materials were used in the construction of any of the buildings supplied under the above referenced project.

Modtech, Inc.

  
\_\_\_\_\_  
Michael G. Rhodes, President

cc: File #3518



Rental and Sale of Modular Buildings, Classrooms and Field Offices

email: [info@MobileModularRents.com](mailto:info@MobileModularRents.com)  
[www.MobileModularRents.com](http://www.MobileModularRents.com)  
800-944-3442

October 9, 2000

Self Insurance of Southern California  
402 Farnel Road Suite M  
Santa Maria, CA 63454

ATTN: Donna Scott

RE: Asbestos-free modular buildings  
Buelton Union School District

Dear Donna:

In response to your inquiry regarding asbestos content in our modular buildings, they are, to the best of my knowledge, asbestos-free. The following is a list of the serial numbers on buildings that are covered under this letter: 3019, 3020, 3021, 3022, 5577, 5578.

If you have any questions or if I can be of further assistance, please feel free to give me a call.

Thank you.

Sincerely,

Richard Brown  
Sales Manager

RB/jab

No. California Inventory Center  
5700 Las Positas Road  
Livermore CA 94550  
925-606-9000  
Fax 925-453-3201

So. California Inventory Center  
11450 Mission Boulevard  
Mira Loma, CA 91752  
909-360-6600  
Fax 909-360-6622

Texas Inventory Center  
4445 East Sam Houston Parkway South  
Pasadena, TX 77505  
281-487-9222  
Fax 281-487-1289

**CERTIFICATION OF ASBESTOS-FREE PRODUCTS**


To Whom It May Concern:

I hereby certify that to the best of my knowledge no asbestos-containing products or materials were used or substituted in the manufacture of the O.S.A. approved relocatable buildings purchased from our firm by Mobile Modular/McGrath RentCorp.

MODULAR STRUCTURES INT'L, INC.

DATE:

8-17-94

  
\_\_\_\_\_  
Ron Brewer  
Vice President

**AURORA**  
MODULAR INDUSTRIES

FACTORY & ADMINISTRATIVE OFFICE: 1320 W. OLEANDER AVENUE, PERRIS, CA  
(714) 922-0071 • FAX (714) 922-0216

02871-79

CERTIFICATION OF ASBESTOS FREE PRODUCTS

-----

DATE: JULY 30, 1991

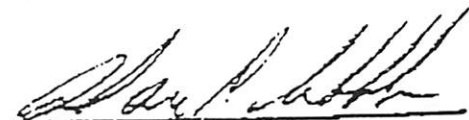
TO: MOBILE MODULAR/MC GRATH RENTCORP  
2500 GRANT AVE.  
SAN LORENZO, CA 94590

FROM: AURORA MODULAR INDUSTRIES  
1320 W. OLEANDER AVE.  
PERRIS, CA 92571-7583

-----

I hereby certify that to the best of my knowledge, no asbestos-containing products or materials were used or substituted in the manufacture of the U.S.A. approved relocatable buildings, purchased from our firm, by Mobile Modular/Mc Grath Rentcorp.

AURORA MODULAR INDUSTRIES

  
Alan C. Webb  
Vice President

**AURORA**  
MODULAR INDUSTRIES

FACTORY & ADMINISTRATIVE OFFICE: 1320 W. OLEANDER AVENUE, PERRIS, CALIFORNIA 92377  
P.O. BOX 4218, RIVERSIDE, CALIFORNIA 92514 (714) 943-2671

May 24, 1989

Buellton Union Elementary  
301 Second St.  
Buellton, Ca. 93427

MAY 26 1989

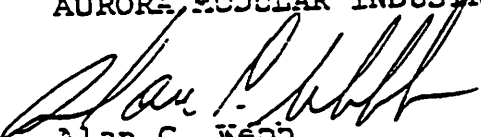
Re: Relocatable classrooms  
6511-12, 7158-59, 7150-51

Gentlemen:

This is to advise you that the relocatable classrooms  
built by Aurora Modular Industries are free of asbestos  
and asbestos products.

Very truly yours,

AURORA MODULAR INDUSTRIES

  
Alan C. Webb  
Vice president

ACW/den

***DISTRICT SUMMARY***

**INSPECTION REPORT  
AND  
MANAGEMENT PLAN SUMMARY  
DISTRICT SUMMARY**

**Buellton Union School District**

In order to comply with Section 763.85 (b) Reinspection, SISC Safety and Loss Control representatives have conducted the required Three-Year Reinspection. SISC personnel conducted the reinspection on (Insert Date of Inspection). SISC conducted the reinspection based on information from the initial inspection and Management Plan. The reinspection encompassed the building space including steam tunnels, out-building, sheds, warehouses, administrative offices, etc.

**LEA:** Buellton Union School District  
**ADDRESS:** P. O. Box 75, 301 Second Street  
**CITY:** Buellton      **STATE:** CA    **ZIP CODE:** 93427

**SCHOOL DISTRICT TYPE:**

Public: Elementary and Intermediate

**DESIGNATED PERSON:**

**NAME:** Dave Hutt  
**TITLE:** Superintendent  
**Phone:** 805-688-4222  
**DATE:** October 6, 2000  
**SIGNATURE:** \_\_\_\_\_



The Three Year Reinspection was conducted by the following SISC personnel:

**NAME:** John Costa  
**AHERA ACCREDITATION:** 810  
**STATE ACCREDITATION:**                      **STATE:** CA

**SIGNATURE:** John Costa

Management Plan revised by:

**NAME:** Catherine Wilson Jones  
**AHERA ACCREDITATION:** 876  
**STATE ACCREDITATION:**                      **STATE:** CA

**SIGNATURE:** Catherine Wilson Jones

***INSPECTION DATA  
AND  
DIAGRAMS***



# NOTICE

AHERA required sampling and assessment of all suspect materials during the initial inspection. However, some materials were not sampled either because they were not considered suspect by the inspector, or because of uncertainty in interpreting the regulations.

The Environmental Protection Agency (EPA) has since clarified the intent and requirements of the AHERA regulation to consider all of the following materials suspect:

- Drywall joint compound
- Baseboards (except wood)
- Mastics (carpet, baseboards, ceiling tile)

If any of the above materials are present in a building, they must be assumed to contain asbestos until/unless sampled and shown to be otherwise.

Also, if any other suspect materials are discovered in a building that have not been sampled, they too must be assumed to contain asbestos.

## **AHERA INSPECTION RESULTS**

The following pages illustrate the results of the AHERA Asbestos Assessment conducted as a part of this SISC Management Plan. A brief description of these elements follows to assist you in interpreting the results.

### ***Unified Sampling Area #:***

A unified sampling area (USA) is analogous to the AHERA defined homogeneous area consisting of identifiably similar suspect asbestos-containing materials.

### ***System:***

This defines the actual type or name of the mechanical system or material type identified by the USA. For example, it may be "Thermal Systems Insulation" (TSI), Surfacing Material, or Miscellaneous.

### ***Location:***

This record details the locations in the structure where the USA was observed to exist at the time of the inspection.

### ***Type of Material:***

Identifies the type of material in the system, for example "Corrugated Pipe Covering" or "Vinyl Floor Tile."

### ***Damage Category:***

Each material type is assigned one of the AHERA required damage categories and the applicable category is shown here.

### ***Reason for Damage Category:***

This record details the reason why the damage category was chosen for this material.

### ***Potential for Disturbance:***

None, slight, moderate, or high depending on the likelihood of the material being contacted or damaged during regular daily activities in the building.

### ***Sample Number and Percent of ASB:***

Shows the assigned sample number and total asbestos found in the sample for all samples collected from the USA.

### ***Material Quantities:***

Estimated amounts of all materials in the USA with units appropriate to the material type. For example, pipe insulation would be expressed as 80 ft. of 6 inch outside diameter, mudded joints as 19-4 inch outside diameter, and applied materials as total square feet of material.

### ***Costs:***

SISC will assist the LEA in obtaining estimates as needed to carry out response actions that reflect "Current Market Value".

***Recommended Response Action:***

Details the recommended response action as defined by the Management Planner. These actions are recommended as required by the AHERA Regulations.

***Priority:***

Provides a relative ranking of the materials so that those materials with a high probability of producing an asbestos exposure condition may be identified. The lower the number, the higher the priority and thus the more severe the condition.

- Priority 1 reflects high priority areas.
- Priority 2 reflects areas that require non-urgency attention.
- Priority 3 reflects areas that need minor repair and/or ongoing surveillance only.
- Priority 0 is equivalent to “not applicable” as it applies to non-asbestos materials.

***Preventive Measures:***

Details procedures recommended to be followed during any involvement with the material. Definitions of O & M codes are found in the Operations and Maintenance Program contained in the Management Plan.

***LEA Response Action Election:***

Input from the LEA is necessary here following review of our recommended response action for the USA. Acceptance of one of eight provided alternatives is appropriate.

***Response Action Schedule:***

Outlines the planned start and completion dates for all response actions whether determined by SISC or by the LEA.

## Sample / Material Location Diagrams

As part of the AHERA Asbestos Inspection, the locations of samples collected are recorded on building diagrams.

The title block contains the specific state, district, campus, and building or code with a 12-digit number. Next are the District Name, the Campus Name, and finally the Building Name. The next block provides the date the drawing was made, the street number, and finally the SISC drawing number.

The drawing uses several symbols and cross-hatching patterns to illustrate the key elements of the survey information.

### ***Sample Location:***

The specific locations of samples are found on a point on the drawing leading to a symbol indicating the sample number and the Bulk Sample (BS) Code, which represents the type of material sampled. The Bulk Sample Code descriptions used are as follows:

<b>BS CODE</b>	<b>DESCRIPTION</b>	<b>BS CODE</b>	<b>DESCRIPTION</b>
0	Unknown	30	Asbestos Rope
1	Acoustical Plaster	31	Raw Asbestos
2	Acoustical/Thermal Insulation	32	Electrical Wiring/Insulation
3	Hardwall/Ceiling Plaster	33	Fire Hose
4	Vinyl Floor Tile	34	Fire Door
5	Pipe Covering	35	Fire Suit
6	Corrugated Pipe Covering	36	Fire Brick
7	Wrapped Paper Pipe Cover	37	Lab Counter Top
8	Boiler/Tank Insulation	38	Fiber Frack Kiln
9	Breeching/Exhaust Packing	39	Tongs
10	Woven Paper/Tape	40	Poured in Insulation
11	Drop or Lay-in Panel	41	Contaminated Soil
12	Acoustical Tile (1x1)	42	Tectum
13	Fire or Stage Curtain	43	Floor Underlayment
14	MJP on Non-Suspect Pipe	44	Hard Grout
15	MJP on Pipe Covering	45	Mortar
16	MJP on Corr. Pipe Cover	46	Blown or Scratch Coat
17	MJP on Wrapped Pipe Cover	47	Oven/Autoclave Lining
18	Fireproofing	48	Brake Lining
19	Vibration Joint Cloth	49	Theater Curtain
20	Interior Duct Insulation	50	Transite Panel/Siding
21	Exterior Duct Insulation	51	Drywall
22	Blown-in Insulation	52	Wallboard
23	Stored Insulation	53	Stucco/Plaster
24	Debris	54	Mastic
25	Gasket	55	Fiber Board
26	Transite Pipe	56	Exterior Stucco
27	Transite Hood	58	Acoustical Tile (2x2)
28	Asbestos Pads	97	No Suspect Material
29	Asbestos Glove	98	Linoleum
		99	Other (See Comments)

***Type of material:***

The BS Code of the material is indicated so that the type of material can be determined. See the previous section of the listing of the BS codes used.

***Quantity:***

The quantity of material, which was found to be damaged, is also indicated.

***Response Action:***

This indicates the recommended AHERA response action specific to each material/area. The following response actions are used:

1. Remove
2. Encapsulate
3. Enclose
4. Repair and O&M
5. O&M, Maintain, and Monitor

***Crosshatching:***

Crosshatching patterns are used to detail the location of ceiling and floor material suspected of containing asbestos. There are three patterns used:

***Floor Tile:***

This pattern is used to indicate floor tile and sheet flooring material suspected of containing asbestos.

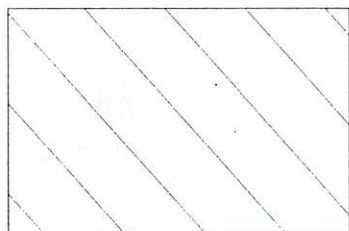
***Drop/Lay-in, Acoustical:***

This pattern is used to indicate the locations of a variety of ceiling tiles including, but not limited to, 1' x 1' and 2' x 4' lay-in panels.

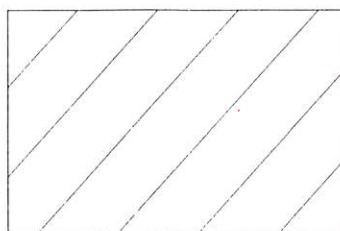
***Spray/Trowel Applied Materials:***

This pattern is used to indicate the presence of spray and trowel applied materials such as fireproofing and acoustical plaster.

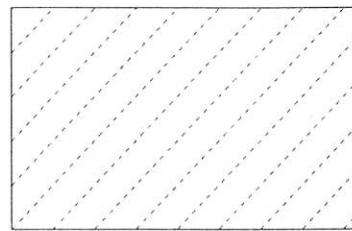
**SUSPECT MATERIAL WHICH DOES NOT CONTAIN ASBESTOS:**



**NON ASBESTOS  
VINYL FLOOR  
TILE**

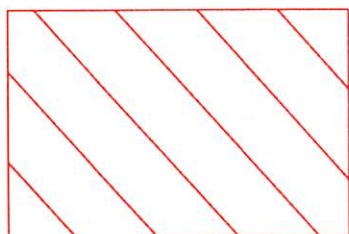


**NON ASBESTOS  
DROP, LAY IN,  
ACOUSTICAL**

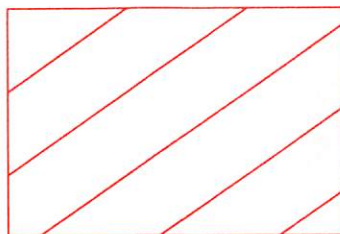


**NON ASBESTOS  
SPRAY/TROWEL  
APPLIED MATERIAL**

**SUSPECT MATERIAL WHICH CONTAINS ASBESTOS:**



**ASBESTOS  
VINYL FLOOR  
TILE**



**ASBESTOS  
DROP, LAY IN,  
ACOUSTICAL**



**ASBESTOS  
SPRAY/TROWEL  
APPLIED MATERIAL**

***INSPECTION REPORT***

***INTRODUCTION***

# **Inspection Report Introduction**

## **Inspection Procedures**

The accredited inspector began the inspection by performing a preliminary walk-through of the entire building. During the walk-through, the inspector identified the existence and approximate locations of all suspect ACBM including spray-applied, troweled materials, mechanical system insulation, ceiling and floor tiles, and miscellaneous and cementitious materials such as transite.

During the walk-through, a determination was made regarding the different Unified Sampling Areas in the building. A Unified Sampling Area (USA) is analogous to the homogeneous area as defined by 40 CFR 763. In general, a USA is identified as that area containing suspect ACMs which are consistent throughout the entire area. For example, the pipe runs of a domestic hot water system would be a single USA providing the material does not differ visibly or tactually throughout the system. When the system appears to consist of dissimilar materials, then the system is separated into as many USAs as necessary to define all materials present. All accessible areas of a building, including areas above drop ceilings, are inspected.

Other areas of the initial walk-through are used to determine the friability of materials, those materials which are going to be sampled and analyzed, and which materials are going to be assumed to contain asbestos and, therefore, not require sampling. All inspections were performed in accordance with 40 CFR 763.85 through 40 CFR 763.87.

## **Sampling Procedures**

Following the initial walk-through, the inspector collected samples of all materials indicated as necessary from the walk-through. Sampling methods employed were generally more intensive, but were in no case less intensive than those prescribed in 40 CFR 763.86.

For surfacing materials, 40 CFR 763.86(a) indicates that at least three samples must be collected from each homogeneous area of less than or equal to 1,000 square feet; at least five samples from areas between 1,000 square feet and 5,000 square feet; and at least seven samples from areas greater than 5,000 square feet (3-5-7 Rule). SISC used a sampling system that included this protocol but also required the collection of an additional sample for every additional 5,000 square foot area over 10,000 square feet defined (3-5-7+1 Rule).

Three samples are required to be collected from each homogeneous area of thermal system insulation as per 40 CFR 763.86(b). The inspectors followed this rule, with one exception. Generally, when a Unified Sampling Area consisted of an entire system, such as the domestic hot water system, then four samples of the material were collected, three from randomly selected locations throughout the building and one from within the boiler room whenever possible. In most instances in larger buildings, four samples were collected from each Unified Sampling Area. At least one sample was also collected from each identified area of patched thermal system insulation where the area was less than six linear or square feet.



For more extensive patched or reworked areas, the material was designated as a separate Unified Sampling Area and three samples were collected.

During the inspection, the inspector also quantified and located all miscellaneous and non-friable suspected ACM. In most cases, these materials were assumed to be asbestos and samples were not collected. The only exception to this is in the case of lay-in, drop-in, or paste-on acoustical ceiling tiles where a sample(s) was collected from each identifiably different type of suspect material.

#### *Use of Accredited Laboratory*

All bulk samples collected were analyzed by an accredited microscopy laboratory. The laboratory meets all requirements for 40 CFR 763.87.

#### *Use of Accredited Inspector(s)*

SISC utilized only inspectors accredited as per the EPA Model Contractor Accreditation Plan, 40 CFR 763 (amended), Subpart E, Appendix C at a minimum.

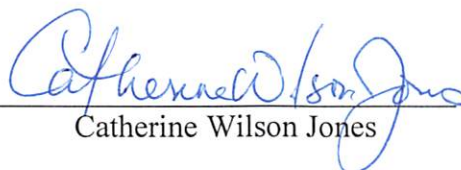
## Inspection / Sample Extraction

I hereby certify that all facilities surveyed and all bulk sample collections were done in accordance with 40 CFR Part 763 by the undersigned on the dates indicated in this report. The Management Plan components were completed in accordance with 40 CFR 763.93 and 40 CFR 763.85.

**District:** Buellton Union School District

<u>Type of Accreditation</u>	<u>State of Accreditation</u>	<u>Accreditation Number</u>
Inspector/Management Planner	CA	810 – UC Berkeley
Inspector/Management Planner	CA	876 – UC Berkeley

  
\_\_\_\_\_  
John Costa

  
\_\_\_\_\_  
Catherine Wilson Jones

***MANAGEMENT PLAN***  
***INTRODUCTION***

## **MANAGEMENT PLAN INTRODUCTION**

The Asbestos Hazard Emergency Response Act of 1986 required that EPA establish a method by which the local education agency can establish a procedure or plan for managing the asbestos-containing materials found as a result of an inspection undertaken in all buildings under its direction. In its final rule, published October 30, 1987, in 40 CFR 763.93, the EPA mandated that on or before October 12, 1988, each local education agency (LEA) shall develop an asbestos Management Plan for each school building including all buildings that they lease, own, or otherwise use as school buildings and submit the plan to an agency designated by the Governor of the state in which the local education agency is located.

The EPA also mandated that at least once every three years after a Management Plan is in effect, each local education agency shall conduct a reinspection of all friable and non-friable known or assumed ACBM in each school building that they lease, own or otherwise use as a school building. This document (three-year reinspection) represents upgraded information recorded in this Management Plan in accordance with 40 CFR 763.85(E)(b). A more detailed description of the process by which this plan was developed, a description of the response actions recommended by the accredited Management Planner, and the description of preventative measures to be used as part of the Management Plan is found in Part I accompanying this document.

This document has been formatted in such a manner that results of the inspection and the various components required for the Management Plan are integrated together for each unified sampling area and contained in the section "Inspection/Management Plan Data".

This method of listing the inspection data first allows the reader to have at a ready glance all information reported and recommended concerning each material in the facility. For each homogeneous area addressed are the recommended response actions based on the Management Planner's professional judgment, and in most cases associated with the damage category determined by the SISC accredited inspector; the response action elected and planned by the LEA; an estimated period or date for commencing such response action, and finally an estimated date or period for completion of that response action.

### **Reinspection Plan**

In accordance with 40 CFR 763.93(a)(9) the following information is provided as to the School District's plan for compliance with the reinspection portion of 763.85.

The School District understands the need for at least tri-annual reinspections and intends to have a reinspection as per 763.85(b) of all facilities they own, lease, or otherwise use as a school building at least once every three years after the Management Plan is in effect. The LEA will utilize EPA-accredited SISC personnel or other EPA-accredited inspectors for this task. The results of each reinspection will be used to upgrade and revise the Management Plan. The reinspection will be conducted in accordance with 40 CFR 763.85 and will be performed at least tri-annually until all ACBM is removed.

### **Plan for Periodic Surveillance**

On a semi-annual basis, a walk-through inspection of each building that contains ACBM or assumed ACBM under the direction of the LEA will be undertaken.

The surveillance program will consist of a visual inspection of all materials in all areas of the facility that are identified in the Management Plan as ACBM or assumed ACBM. Materials will be inspected by individual Unified Sampling Areas, and comparisons will be made between existing conditions and the conditions of the material at the time of the previous inspection. Whenever a difference is observed to exist, it shall be recorded on the Periodic Surveillance Letter issued after each inspection.

During the inspection, the following conditions and situations will be addressed:

- Age related deterioration
- Physical damage to material due to accidental contact or vandalism
- Vibration-related deterioration
- Water damage

Note will also be made of any conditions observed that may have an effect on the ACBM in the future. These notes will include observations of roof leaks in the vicinity of ACBM, physical damage to the structure or other areas in the vicinity of the ACBM and damage to any previously installed enclosures or encasements on or around the ACBM that may increase the potential for damage of the ACBM.

A permanent record will be kept of all forms completed during the surveillance. These records will include the date of the surveillance, the name and position of the individuals performing the surveillance and a summary of all changes in condition of ACBM and other observations made during the surveillance. These records will be included in the Management Plan files.

When the periodic surveillance indicates the need for some repair or maintenance activity, the LEA designated person will proceed to implement any actions necessary to correct the situation. Records will be maintained for all such operations and maintenance activities undertaken as a result of the periodic surveillance.

### **Operations and Maintenance Plan**

In accordance with 40 CFR 763.91, the School District will implement the Operations and Maintenance Plan as set forth in the section "O&M Program" of this document. The O&M Program will begin with an initial asbestos cleaning in those areas indicated in the plan and the provisions will be carried out on a continuing basis until all friable and non-friable ACBM as applicable are removed. The O&M Program may be modified as necessary or the materials abated as necessary for the maximum efficiency and function ability of the program.

### **Notifications [40 CFR 763.93(e)(10)]**

The Local Education Agency (LEA) in accordance with AHERA regulations requires that workers, building occupants, or the children's legal guardians be notified as to various activities associated with the rule and this plan. They must be notified once each year as to inspections, reinspections, response actions, and post-response action activity including periodic reinspections and surveillance activities that are planned or in progress.

### **Warning Labels**

In accordance with 40 CFR 763.95 in order to further notify employees of the locations of asbestos-containing materials, a warning sticker has been placed adjacent to ACM in routine maintenance areas of each school building.

### **Inspection Report/Diagrams**

The LEA has on file as part of its Management Plan a report of the inspection describing the location of the ACM as well as other information concerning each material. In addition, included in the Inspection Report/Management Plan are diagrams of the floors of each school building indicating material sample locations, and material location for those materials assumed to contain ACM.

### **Resources Evaluation**

The AHERA regulation in 40CFR 763.93 (e)(11) requires the LEA and Management Planner to evaluate the resources needed to carry out the provisions planned in this program. This includes the O & M activities, various response actions, semi-annual surveillance, tri-annual reinspections, and training. The resources required can be divided into three categories:

- ***Personnel Required:*** including consultants, abatement contractors, janitorial and maintenance staff, equipment and supplies, and administrative staff. A description of these resources is outlined in Part I, "Resource Evaluation", by School District size. That portion is included in this evaluation by reference.
- ***Estimates of Abatement/O&M Costs:*** SISC will assist the LEA in obtaining estimates as needed to carry out response actions that reflect "Current Market Value".
- ***Source of Abatement Funding:*** can only be determined by the LEA, since the LEA and/or its governing board or agency has authority over its fiscal budgetary matters.

# Self-Insured Schools of California

## *Locations by District & County*

**District:** 69138 Buellton Union Elementary SANTA BARBARA  
P.O. Box 75  
301 2nd Street  
Buellton CA 93427

Loc ID	Location Name & Address
6045280	JONATA ELEMENTARY 301 Second Street Buellton, CA 93427



The presence of ACM is indicated by an X under the appropriate classification. If blank, then no materials that were accessible were found to contain asbestos based on PLM/DS analysis or were assumed to contain asbestos. This information is presented as required by 40 CFR 763.93 (e) (i).

Specific Selection Criteria: Project = 50123;

## Safety & Loss Control List of School Buildings and ACM Status

Page Number 1  
System Date 05/29/2001  
Time of Day 08:00 AM

County	42 SANTA BARBARA	Friable ACBM	Non-Friable ACBM	Friable Assumed	Non-Friable Assumed	No Suspect Material
<b>Project:</b>	<b>50123 BUELLTON</b>					
<b>Campus:</b>	<b>1 JONATA ELEMENTRY SCHOOL</b>					
	301 Second Street					
	P. O. Box 75					
	Buellton, CA 93427					
Building: (001)	LIBRARY, COMPUTER LAB, CLASSROOMS			X		X
Building: (002)	BUS GARAGE					X
Building: (003)	ROOMS 22 & 23					X
Building: (004)	PORTABLE ROOM 29					X
Building: (005)	PORTABLE ROOM 30					X
Building: (006)	PORTABLE ROOM 19					X
Building: (007)	BOOKKEEPING TRAILER					X
Building: (008)	STUDENT STORE					X
Building: (009)	PORTABLE ROOM 31					X
Building: (010)	PORTABLE ROOM 32					X
Building: (011)	KINDERGARTEN			X		X
Building: (012)	ADMINISTRATION					X
Building: (013)	ROOMS 1-2, DISTRICT OFFICE, AND LOUNGE			X		X
Building: (014)	ROOMS 11-13			X		X
Building: (015)	ROOMS 3 - 6			X		X
Building: (016)	ROOMS 14 - 16					X
Building: (017)	ROOMS 7 - 10			X		X
Building: (018)	READING / WORK ROOM					X
Building: (019)	PORTABLE ROOM 17					X

# Safety & Loss Control

## AHERA Compliance Program

### List of Materials Addressed by Category

In accordance with 40 CFR 763.85, a list of the homogeneous materials was addressed by unified sampling areas (USA) and are classified into one of the following three categories: surfacing material, thermal insulation, and miscellaneous material.

**County: 42 SANTA BARBARA**  
**Project: (050123) BUELLTON (State ID:69138)**

		Material Description	Category	Friable	
<b>Campus:</b>	(001)	JONATA ELEMENTRY SCHOOL			
<b>Building:</b>	(001)	LIBRARY, COMPUTER LAB, CLASSROOMS			
<b>Area:</b>	(001)	IN MP ROOM UNDER RUBBER TILES	VINYL FLOOR TILE	MISCELLANEOUS	N
<b>Area:</b>	(002)	THROUGHOUT ON WALLS	ACOUSTICAL TILE (1X1)	MISCELLANEOUS	N/A
<b>Area:</b>	(003)	THROUGHOUT	HARDWALL/CEILING PLASTER	SURFACING MATERIALS	N/A
<b>Building:</b>	(002)	BUS GARAGE			
<b>Area:</b>	(001)		OTHER-SEE COMMENTS	MISCELLANEOUS	N/A
<b>Building:</b>	(003)	ROOMS 22 & 23			
<b>Area:</b>	(001)	THROUGHOUT	DROP OR LAY-IN PANEL	MISCELLANEOUS	N/A
<b>Building:</b>	(004)	PORTABLE ROOM 29			
<b>Area:</b>	(001)		NO SUSPECT MATERIAL	MISCELLANEOUS	N/A
<b>Building:</b>	(005)	PORTABLE ROOM 30			
<b>Area:</b>	(001)		NO SUSPECT MATERIAL	MISCELLANEOUS	N/A
<b>Building:</b>	(006)	PORTABLE ROOM 19			
<b>Area:</b>	(001)	THROUGHOUT	DROP OR LAY-IN PANEL	MISCELLANEOUS	N/A
<b>Building:</b>	(007)	BOOKKEEPING TRAILER			
<b>Area:</b>	(001)	THROUGHOUT	DROP OR LAY-IN PANEL	MISCELLANEOUS	N/A
<b>Building:</b>	(008)	STUDENT STORE			
<b>Area:</b>	(001)	THROUGHOUT	ACOUSTICAL TILE (1X1)	MISCELLANEOUS	N/A
<b>Building:</b>	(009)	PORTABLE ROOM 31			
<b>Area:</b>	(001)		OTHER-SEE COMMENTS	MISCELLANEOUS	N/A
<b>Building:</b>	(010)	PORTABLE ROOM 32			
<b>Area:</b>	(001)		OTHER-SEE COMMENTS	MISCELLANEOUS	N/A
<b>Building:</b>	(011)	KINDERGARTEN			
<b>Area:</b>	(001)	GROUND FLOOR	ACOUSTICAL TILE (1X1)	MISCELLANEOUS	N/A
<b>Area:</b>	(002)	THROUGHOUT EXCEPT 2 STORAGE R	VINYL FLOOR TILE	MISCELLANEOUS	N
<b>Area:</b>	(003)	THROUGHOUT	DRYWALL	MISCELLANEOUS	N/A
<b>Building:</b>	(012)	ADMINISTRATION			
<b>Area:</b>	(002)	GROUND FLOOR	ACOUSTICAL TILE (1X1)	MISCELLANEOUS	N/A
<b>Area:</b>	(003)	NURSE'S RESTROOM AND ENTRY	LINOLEUM	MISCELLANEOUS	N/A
<b>Area:</b>	(004)	THROUGHOUT	HARDWALL/CEILING PLASTER	SURFACING MATERIALS	N/A
<b>Building:</b>	(013)	ROOMS 1-2, DISTRICT OFFICE, AND LOUNGE			
<b>Area:</b>	(001)	THROUGHOUT ON WALLS	ACOUSTICAL TILE (1X1)	MISCELLANEOUS	N/A
<b>Area:</b>	(002)	CLASSROOMS - SOME TILE UNDER	VINYL FLOOR TILE	MISCELLANEOUS	N
<b>Area:</b>	(003)	STAFF LOUNGE	LINOLEUM	MISCELLANEOUS	N
<b>Area:</b>	(004)	THROUGHOUT	WALLBOARD	MISCELLANEOUS	N/A
<b>Building:</b>	(014)	ROOMS 11-13			
<b>Area:</b>	(001)	THROUGHOUT	ACOUSTICAL TILE (1X1)	MISCELLANEOUS	N/A
<b>Area:</b>	(002)	IN ROOM 13 ONLY	VINYL FLOOR TILE	MISCELLANEOUS	N
<b>Area:</b>	(003)	THROUGHOUT CLASSROOMS	WALLBOARD	MISCELLANEOUS	N/A
<b>Area:</b>	(004)	RESTROOMS	HARDWALL/CEILING PLASTER	SURFACING MATERIALS	N/A
<b>Building:</b>	(015)	ROOMS 3 - 6			
<b>Area:</b>	(001)	THROUGHOUT	ACOUSTICAL TILE (1X1)	MISCELLANEOUS	N/A
<b>Area:</b>	(002)	BY CLASSROOM 4	VINYL FLOOR TILE	MISCELLANEOUS	N

# Safety & Loss Control AHERA Compliance Program

## List of Materials Addressed by Category

In accordance with 40 CFR 763.85, a list of the homogeneous materials was addressed by unified sampling areas (USA) and are classified into one of the following three categories: surfacing material, thermal insulation, and miscellaneous material.

County: 42 SANTA BARBARA  
Project: (050123) BUELLTON (State ID:69138)

	Material Description	Category	Friable
<b>Campus:</b> (001) JONATA ELEMENTRY SCHOOL			
<b>Building:</b> (015) ROOMS 3 - 6			
Area: (004) THROUGHOUT	WALLBOARD	MISCELLANEOUS	N/A
<b>Building:</b> (016) ROOMS 14 - 16			
Area: (001) RESTROOMS	HARDWALL/CEILING PLASTER	SURFACING MATERIALS	N/A
Area: (003) THROUGHOUT	DRYWALL	MISCELLANEOUS	N/A
<b>Building:</b> (017) ROOMS 7 - 10			
Area: (001) THROUGHOUT	ACOUSTICAL TILE (1X1)	MISCELLANEOUS	N/A
Area: (002) THROUGHOUT CLASSROOMS	VINYL FLOOR TILE	MISCELLANEOUS	N
Area: (003) THROUGHOUT	WALLBOARD	MISCELLANEOUS	N/A
<b>Building:</b> (018) READING / WORK ROOM			
Area: (001)	OTHER-SEE COMMENTS	MISCELLANEOUS	N/A
<b>Building:</b> (019) PORTABLE ROOM 17			
Area: (001)	OTHER-SEE COMMENTS	MISCELLANEOUS	N/A

**MISCELLANEOUS**

## **Additional Cleaning Schedule**

District Name: Buellton Union School District

Inspection Date: October 6, 2000

No additional cleaning schedule is necessary for the Buellton Union School District.

Refer to pages 11-12 in the Operations and Maintenance Program section of this Management Plan for further explanation.

1988

FROM ORIGINAL MANAGEMENT PLAN 1988

LIST OF MATERIALS ADDRESSED BY CATEGORIES

In accordance with 40 CFR 763.85, a list of the homogeneous materials was addressed by unified sampling areas (USA) and are classified into one of the following three categories: surfacing material, thermal insulation, and miscellaneous material.

050123 BUELLTON UNION DISTRICT

CAMPUS: (001) JONATA ELEMENTARY SCHOOL

BUILDING: (001) MULTI USE BLDG.

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material
02	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material
03	Ground Floor - Surfacing Material	Hardwall/Ceiling Plaster	Surfacing Material
95	All Floors in Building - Mech. Insulation	Vibration Joint Cloth	Miscellaneous Material

BUILDING: (002) C-TRAIN #1

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material

BUILDING: (003) TRAILER

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Drop or Lay-in Panel	Miscellaneous Material

BUILDING: (006) BLDG K

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Drop or Lay-in Panel	Miscellaneous Material

BUILDING: (007) BOOKKEEPING

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Other	Miscellaneous Material

BUILDING: (008) STUDENT STORE

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material

BUILDING: (009) C-TRAIN #2

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Miscellaneous	Other	Miscellaneous Material

BUILDING: (011) KINDERGARTEN

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material
02	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material

FROM ORIGINAL MANAGEMENT PLAN 1988

03 Ground Floor - Surfacing Material Hardwall/Ceiling Plaster Surfacing Material

BUILDING: (012) ADMINISTRATION

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material
02	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material
03	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material
04	Ground Floor - Surfacing Material	Hardwall/Ceiling Plaster	Surfacing Material
05	Ground Floor - Mech. Insulation	Interior Duct Insulation	Thermal Insulation

BUILDING: (013) BLDG A

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material
02	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material
03	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material

BUILDING: (014) BLDG B

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material
02	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material

BUILDING: (015) BLDG C

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material
02	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material
03	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material

BUILDING: (016) BLDG D

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Mech. Insulation	Boiler/Tank Insulation	Thermal Insulation
02	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material

BUILDING: (017) BLDG M

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY
01	Ground Floor - Ceiling Material	Acoustical Tile (1x1)	Miscellaneous Material
02	Ground Floor - Floor Material	Vinyl Floor Tile	Miscellaneous Material

LIST OF SCHOOL BUILDINGS AND ACM STATUS

The list of school buildings inspected for asbestos-containing materials (ACM) is per Hall-Kimbrell's contract with the district. The presence of ACM is indicated by an 'X' under the appropriate classification. If blank, then no materials that were accessible were found to contain asbestos based on PLM/DS analysis or were assumed to contain asbestos. This information is presented as required by 40 CFR 763.93 (e)(1).

05-0123 Buellton Union School

	Friable ACBM	Non-Friable ACBM	Friable Assumed	Non-Friable Assumed	No Suspect Material
<b>CAMPUS: (001) JONATA ELEMENTARY SCHOOL</b>					
301 SECOND ST. ,POBOX:S					
BUELLTON, CA 93427					
BUILDING: (001) MULTI USE BLDG.		X		X	
BUILDING: (002) C-TRAIN #1					X
BUILDING: (003) TRAILER					X
BUILDING: (004) Trailer #2					X
BUILDING: (005) Trailer #3					X
BUILDING: (006) BLDG K					X
BUILDING: (007) BOOKKEEPING					X
BUILDING: (008) STUDENT STORE					X
BUILDING: (009) C-TRAIN #2					X
BUILDING: (010) Trailer					X
BUILDING: (011) KINDERGARTEN		X			
BUILDING: (012) ADMINISTRATION		X			
BUILDING: (013) BLDG A		X			
BUILDING: (014) BLDG B		X			
BUILDING: (015) BLDG C		X			
BUILDING: (016) BLDG D		X			
BUILDING: (017) BLDG M					X
BUILDING: (018) Trailer					X



LIST OF SCHOOL BUILDINGS AND ACM STATUS

The list of school buildings inspected for asbestos-containing materials (ACM) is per Hall-Kimbrell's contract with the district. The presence of ACM is indicated by an "X" under the appropriate classification. If blank, then no materials that were accessible were found to contain asbestos based on PLM/DS analysis or were assumed to contain asbestos. This information is presented as required by 40 CFR 763.93 (e)(i).

050123 BUELLTON UNION DISTRICT

	Friable ACBM	Non-Friable ACBM	Friable Assumed	Non-Friable Assumed	No Suspect Material
CAMPUS: (001) JONATA ELEMENTRY SCHOOL 301 SECOND ST. ,POBOX:S BUELLTON, CA 93427					
BUILDING: (001) MULTI USE BLDG.		X		X	
BUILDING: (002) C-TRAIN #1					X
BUILDING: (003) TRAILER					X
BUILDING: (004) Trailer #2					X
BUILDING: (005) Trailer #3					X
BUILDING: (006) BLDG K					X
BUILDING: (007) BOOKKEEPING					X
BUILDING: (008) STUDENT STORE					X
BUILDING: (009) C-TRAIN #2					X
BUILDING: (010) Trailer					X
BUILDING: (011) KINDERGARTEN	<del>X</del>	<del>X</del>			
BUILDING: (012) ADMINISTRATION	X				
BUILDING: (013) BLDG A		X			
BUILDING: (014) BLDG B		X			
BUILDING: (015) BLDG C		X			
BUILDING: (016) BLDG D		X			
BUILDING: (017) BLDG M					X
BUILDING: (018) Trailer					X

LIST OF MATERIALS ADDRESSED BY CATEGORIES

In accordance with 40 CFR 763.85, a list of the homogeneous materials was addressed by unified sampling areas (USA) and are classified into one of the following three categories: surfacing material, thermal insulation, and miscellaneous material.

05-0123 Buellton Union School  
 Campus: (001) JONATA ELEMENTARY SCHOOL

Building: (001) MULTI USE BLDG.				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Floor Matl. - Ground Floor	Vinyl Floor Tile	Miscellaneous Material	N
02	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB
03	Surfacing Mat. - Ground Floor	Hardwall/Ceiling Plaster	Surfacing Material	N
95	Miscellaneous - All Floors in Building	Vibration Joint Cloth	Miscellaneous Material	N
Building: (002) C-TRAIN #1				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB
Building: (003) TRAILER				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Drop or Lay-in Panel	Miscellaneous Material	No ASB
Building: (006) BLDG K				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Drop or Lay-in Panel	Miscellaneous Material	No ASB
Building: (007) BOOKKEEPING				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Other	Miscellaneous Material	No ASB
Building: (008) STUDENT STORE				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB
Building: (009) C-TRAIN #2				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Miscellaneous - Ground Floor	Other	Miscellaneous Material	No ASB
Building: (011) KINDERGARTEN				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB
02	Floor Matl. - Ground Floor	Vinyl Floor Tile	Miscellaneous Material	N
03	Surfacing Mat. - Ground Floor	Hardwall/Ceiling Plaster	Surfacing Material	N
Building: (012) ADMINISTRATION				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Floor Matl. - Ground Floor	Vinyl Floor Tile	Miscellaneous Material	N
02	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB
03	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB
04	Surfacing Mat. - Ground Floor	Hardwall/Ceiling Plaster	Surfacing Material	N
05	Mech. Insul. - Ground Floor	Interior Duct Insulation	Thermal Insulation	N
Building: (013) BLDG A				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB
02	Floor Matl. - Ground Floor	Vinyl Floor Tile	Miscellaneous Material	N
03	Floor Matl. - Ground Floor	Vinyl Floor Tile	Miscellaneous Material	N
Building: (014) BLDG B				
AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB

**LIST OF MATERIALS ADDRESSED BY CATEGORIES**

In accordance with 40 CFR 763.85, a list of the homogeneous materials was addressed by unified sampling areas (USA) and are classified into one of the following three categories: surfacing material, thermal insulation, and miscellaneous material.

05-0123 Buellton Union School

02 Floor Matl. - Ground Floor

Vinyl Floor Tile

Miscellaneous Material

N

Building: (015) BLDG C

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB
02	Floor Matl. - Ground Floor	Vinyl Floor Tile	Miscellaneous Material	N
03	Floor Matl. - Ground Floor	Vinyl Floor Tile	Miscellaneous Material	No ASB

Building: (016) BLDG D

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Mech. Insul. - Ground Floor	Boiler/Tank Insulation	Thermal Insulation	No ASB
02	Floor Matl. - Ground Floor	Vinyl Floor Tile	Miscellaneous Material	N

Building: (017) BLDG M

AREA	SYSTEM	MATERIAL DESCRIPTION	CATEGORY	FRIABLE
01	Ceiling Matl. - Ground Floor	Acoustical Tile (1x1)	Miscellaneous Material	No ASB
02	Floor Matl. - Ground Floor	Vinyl Floor Tile	Miscellaneous Material	No ASB

**OPERATIONS  
AND  
MAINTENANCE  
ACTIVITY FORMS**



**OPERATIONS  
AND  
MAINTENANCE  
PROGRAM**

# OPERATIONS AND MAINTENANCE PLAN

## TABLE OF CONTENTS

A.	Introduction.....	1
B.	Definitions.....	1
C.	Scope of Work .....	3
D.	Training.....	4
E.	Air Monitoring.....	5
F.	Medical Monitoring .....	6
G.	Building Inventory .....	7
H.	Warning Labels.....	7
I.	Methods of Compliance.....	7
J.	Regulated Areas.....	8
K.	Protective Clothing .....	9
L.	Equipment List.....	9
M.	Waste Disposal.....	10
N.	Emergency Response.....	10
O.	Recordkeeping .....	10
P.	Initial/Additional Cleaning .....	11
Q.	Operations and Maintenance Activities.....	13
R.	Operations and Maintenance Codes.....	15

## **A: INTRODUCTION**

With the enactment of the Asbestos Hazard Emergency Response Act regulations, Local Education Agencies are charged with producing a plan of action that will facilitate the safe and effective management of asbestos materials in their school systems. The most effective way of managing the problem is to completely remove all asbestos-containing materials from the building, thus removing the problem in its entirety. In some cases, however, this wholesale removal is not economically feasible or even desirable from a building usage standpoint. Therefore, when asbestos-containing materials are not completely removed, a comprehensive Operations and Maintenance Program as required by 40 CFR 763.91 will allow the local education agency to control the asbestos problem until removal of the materials is feasible.

Self-Insured Schools of California as well as Environmental Protection Agency (EPA) advocates "manage-in-place" as an effective and appropriate way to manage asbestos in schools.

## **B: DEFINITIONS**

Several definitions pertinent to an Operations and Maintenance Program are identified in 40 CFR 763.83. These are as follows:

*Asbestos-Containing Material (ACM)* when referring to school buildings means any material that contains more than one tenth of one percent asbestos.

*Asbestos-Containing Building Material (ACBM)* means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

*Asbestos Debris* means pieces of ACBM that can be identified by color, texture, or composition; or means dust, if the dust is determined by an accredited inspector to be ACM.

*Asbestos Hazard Emergency Response Act (AHERA)* refers to 40 CFR 763.

*Authorized Person* means any person authorized by the employer and trained according to this program and required by work duties to be present in regulated areas.

*Competent Person* means in addition to one who is capable of identifying existing and predictable hazards in the surrounding or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them, one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them. For Class III work, one who is trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92(a)(2).

*Disturbance* means activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris from ACM or PACM. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount which can be contained in



one standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in one glove bag or waste bag which shall not exceed 60 inches in length and width.

**Excursion Limit** an airborne concentration of asbestos in excess of 1.0 fiber per cubic centimeter of air (1 f/cc) as averaged over a sampling period of thirty (30) minutes.

**Fiber Release Episode** means any uncontrolled or unintentional disturbance of ACBM resulting in visible emissions.

**Friable** when referring to material in a school building, means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. Included are previously non-friable materials after such materials become damaged to the extent that, when dry, they may be crumbled, pulverized or reduced to powder by hand pressure.

**Glove Bag** means an impervious plastic bag like enclosure affixed around not more than 60 x 60 inch asbestos-containing material, with glove-like appendages through which material and tools may be handled.

**High-Efficiency Particulate Air (HEPA)** refers to a filtering system capable of trapping and retaining at least 99.97% of all non-dispersed particles 0.3 microns in diameter or larger.

**Intact** means that the ACM has not crumbled, been pulverized, or otherwise deteriorated so the asbestos is no longer likely to be bound with its matrix.

**Local Education Agency (LEA)** is the equivalent to "School District" for the purpose of this program.

**Miscellaneous Material** is any material that is neither surfacing material or thermal system insulation.

**Negative Initial Exposure Assessment** means a demonstration by the employer, that employee exposure during an operation is expected to be consistently below the PEL.

**Operations and Maintenance (O&M) Program** means a program of work practices to maintain friable ACBM in good condition, to insure cleanup of asbestos fibers previously released, and to prevent further release by minimizing and controlling damage to friable ACBM. An O&M program is also essential in preventing nonfriable materials from becoming damaged or friable.

**Permissible Exposure Limit (PEL)** a concentration 0.1 fiber per cubic centimeter of air as an eight (8) hour time weighted average (TWA).

**Presumed Asbestos Containing Material (PACM)** means thermal system insulation and surfacing material found in buildings constructed no later than 1980.

**Removal** means the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogenous area in a school building.

**Repair** means returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

**Response Action** means a method, including removal, encapsulation, enclosure, repair, operations and maintenance that protects human health and the environment from friable ACBM.

**Routine Maintenance Area** is an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

**Surfacing Material** means 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 purpose).

**Thermal System Insulation (TSI)** means ACM applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain.

## **C: SCOPE OF WORK**

The California Occupational Safety and Health Administration (Cal-OSHA) governs worker protection as it applies to asbestos abatement as well as small scale asbestos disturbance or clean up. Maintenance and repair activities involving ACM are also covered. Specifically, Cal-OSHA identifies four work classes, which include:

- **Class I:** activities that involve the removal of TSI, surfacing ACM and PACM where the waste debris involves more than one waste or glove bag.
- **Class II:** activities involving the removal of ACM which is not TSI or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
- **Class III:** repair and maintenance operations, where ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed.
- **Class IV:** maintenance and custodial activities during which employees contact but do not disturb ACM or PACM, and activities to clean up dust, waste and debris resulting from Class I, II, and III.

Small-scale repair and maintenance activities involving materials identified under Class II work shall be considered Class III work under this program. School personnel are only authorized to conduct small-scale short duration activities as well as respond to minor fiber release episodes. (See Section Q). For the purpose of this program, only Class III work shall be addressed. School personnel are not trained nor authorized to conduct Class I and II activities which are considered removal and/or response actions. Class IV activities involving debris /waste cleanup from Class I or II work.

## **D: TRAINING**

Prior to the implementation of any operations and maintenance provisions of the Management Plan, all members of the maintenance and custodial staff who, during the performance of their duties, may work in a building containing ACBM will receive general awareness training of not less than two hours in duration. Such training will be given to all new maintenance/custodial personnel within 60 days of their start date. As per 40 CFR 763.92, the training shall include as a minimum:

- Information on asbestos, its forms, and uses.
- Information on the health affects of asbestos exposure.
- Locations of ACBM in the school buildings in which they work.
- Recognition of damage, deterioration, and delamination of ACBM.
- Name and telephone number of the person designated to carry out LEA responsibilities under 40 CFR 763.84.
- Availability and location of the Management Plan.

The above training is meant as awareness training only, and does not authorize an individual to remove or disturb ACM or PACM, or to clean up asbestos containing debris.

All members of the maintenance/custodial staff who are likely to conduct any activities that may disturb ACBM will receive the previously described general awareness training and an additional 14 hours as required by 40 CFR 763.92 (2)(i-iv). This level of training shall include as a minimum:

- Descriptions of proper methods of handling ACBM
- Information on the use of respiratory protection as contained in the EPA/NIOSH Guide to Respiratory Protection for the Asbestos Abatement Industry, September 1986 (EPA 560-OPTS-86-001), and other personal protective equipment and measures.
- The provisions of the following pieces of legislation:
- 40 CFR 763.91, Appendices A, B, C, D of Subpart E
- EPA regulations in 40 CFR Part 763, Subpart G
- EPA regulations in 40 CFR Part 61, Subpart M
- OSHA regulations in 29 CCR Title 8 1529
- Information regarding the nature of operations that could result in exposure to asbestos

- Information regarding necessary protective controls to minimize exposure, as applicable, engineering controls, work practices, respirators, housekeeping procedures, hygiene, protective clothing, decontamination procedures, emergency procedures, and waste disposal procedures
- Information regarding medical surveillance/monitoring
- Information regarding signs and labels

The combination of all training described above authorizes an individual to perform operations and maintenance work (Class III work) involving ACM and PACM pursuant to 40 CFR 763 and CCR Title 8 1529.

All types of training will emphasize the necessity to not disturb ACBM or assumed ACBM during routine maintenance activities. Employees will be instructed on the following at a minimum:

- Avoid performing any activities on ACM or assumed ACM that may cause abrasion or physical deterioration of the material. This includes sanding, nailing, drilling, cutting, or otherwise damaging the material.
- Avoid damaging ACM during maintenance activities NOT directly involving the ACM such as installing drapes, installing and/or removing carpets, moving furniture, etc.
- To always use a HEPA-vacuum and wet methods to clean up asbestos dust or debris. NEVER use a regular vacuum or dry method.
- To avoid any activities that may inadvertently release asbestos fibers into the air such as removing ventilation filters, drying and/or shaking the filters, and removing suspended ceiling tiles below ACM without taking the proper precautions and using the proper personal protective equipment.

## **E: Air Monitoring**

A requirement of 40 CFR 763.91 is that the LEA ascertain, through monitoring or historical data, the airborne concentration of asbestos fibers during all maintenance and repair activities involving ACBM or assumed ACBM. This same requirement is addressed in Title 8 1529(f) "exposure assessments and monitoring".

### **Exposure Assessments and Monitoring**

It is essential for LEAs to conduct exposure assessments to ascertain expected, and actual, airborne concentrations of asbestos to which employees may be exposed. Exposure determinations shall be representative of an 8 hour time-weighted average (TWA) representing full-shift exposures. Samples representing 30-minute exposures, which are identified as most likely to produce exposures above the excursion limit, shall also be conducted.

Assessments shall be conducted pursuant to Title 8 1529(f).

It is not anticipated, nor intended, that any work conducted within the scope of this program will expose employees above the PEL.

All air monitoring will be done in accordance with 40 CFR 763.121 including collection on 0.8-micron 25-millimeter filters mounted in an open-face filter holder and analysis using the NIOSH 7400 method. The samples will be taken for the determination of the 8-hour time weighted average concentrations and ceiling concentrations of asbestos fibers.

Following analysis of the air filters, results of all analyses should be recorded on the Operations and Maintenance Activity Form for inclusion in the Management Plan.

Exposure assessment forms are included in the "Operation and Maintenance Activity Forms" section of the Management Plan.

## **F: Medical Monitoring**

Medical monitoring will be provided for all employees who conduct Class III work pursuant to this program. The examinations shall be performed under the supervision of a licensed physician, according to the requirements of CCR Title 8 1529(m).

This medical monitoring will be provided to all persons at the cost of the LEA as required by the regulations. The program will consist of the following elements:

- **Preplacement Examination** - will be provided within 30 days of commencement of employment, unless records show the employee has been examined pursuant to the standard within the past one year period.
- **Annual examinations** - will be provided at least annually.
- **Termination Examination** - will be provided within 30 days pre- or post-termination date.

Where determined by medical examination that an individual cannot work while wearing a respirator, that person will not be required or allowed to perform maintenance activities involving ACBM.

Medical records will be maintained in the personnel files and be made available to the Environmental Protection Agency, the Assistant Secretary of Labor for Occupational Safety and Health, the Director of NIOSH, authorized physicians, and upon the request of the employee (or former employee) to his physician. All records will be maintained for the duration of an individual's employment plus thirty (30) years.

**G: BUILDING INVENTORY - All ACM and PACM**

See "List of School Buildings and ACM Status" in Section: Management Plan Introduction, for the inventory of ACM and PACM at district locations.

**H: WARNING LABELS**

Warning labels should be attached immediately adjacent to any friable and non-friable ACBM and assumed ACM located in routine maintenance areas as per 40 CFR 763.95. The labels will be of a size, print, and color which is readily visible to persons entering an area containing ACBM. The labels must read as follows:

\*\*\*\*\*

**CAUTION**

**ASBESTOS. HAZARDOUS.**

**DO NOT DISTURB WITHOUT PROPER**

**TRAINING AND EQUIPMENT**

\*\*\*\*\*

**I: METHODS OF COMPLIANCE**

The LEA shall use the following methods, for all Class III activities, regardless of the levels of exposure.

- Vacuum cleaners equipped with HEPA filters.
- Wet methods, or wetting agents, to control employee's exposures (except where wet methods are infeasible).
- Prompt clean up and disposal of wastes and debris in leak-tight containers.
- Where the disturbance involves drilling, cutting, abrading, sanding, chipping, breaking or sawing of TSI or surfacing material, impermeable drop cloths shall be used, and the operation shall be conducted in a glove bag system pursuant to Section Q-3.
- Where there is no "negative exposure assessment" or where monitoring results reveal the PEL has been exceeded the LEA shall use impermeable drop cloths and isolation controls as listed above.

In addition to the above, the LEA shall use the following control methods to achieve compliance with the PEL and excursion limit as necessary.

- Local exhaust ventilation equipped with HEPA filter dust collection
- Enclosure or isolation of process that produces asbestos dust
- Ventilation of the regulated area to move contaminated air away from the breathing zone of the employee and toward a HEPA equipped filtration device

Regardless of the exposure levels, the following work practices and controls are prohibited:

- High-speed abrasive disc saws that are not equipped with a point-of-cut ventilator or enclosures with HEPA filtered exhaust
- Compressed air to remove asbestos, or asbestos materials, unless it is part of a system specifically designed to capture the dust cloud created by the use of compressed air
- Dry sweeping, shoveling of the dry clean up of asbestos containing dust and/or debris
- Employee rotation as a means of reducing employee exposure to asbestos

## **J: REGULATED AREAS**

All Class III work conducted under this program shall be done within a regulated area. For the purpose and scope of this program, the regulated area shall include:

- **Signage:** The work area shall be posted in a manner sufficient to notify untrained/unauthorized person's form entering the area. At a minimum, the warning sign shall bear the following information:

**DANGER  
ASBESTOS  
CANCER AND LUNG DISEASE HAZARD  
AUTHORIZED PERSONNEL ONLY**

**RESPIRATORS AND PROTECTIVE CLOTHING  
ARE REQUIRED IN THIS AREA**

- **Access:** Access to regulated areas shall be limited to trained and authorized persons.
- **Respirators:** Although some instances do not require the use of respiratory protection, it is nonetheless desirable to reduce exposure to asbestos fibers as much as possible. Therefore, all Class III work shall require the use of respiratory protection. All such use shall be pursuant to the districts Respiratory Protection Program.

- **Prohibited Activities:** The following activities are prohibited in regulated areas: eating, drinking, smoking, chewing tobacco, gum , or applying cosmetics.
- **Competent Persons:** All work performed in regulated areas shall be supervised by a Competent Person as defined in Section B.
- **Decontamination area:** An area adjacent to the regulated area shall be established for the decontamination of employees and their equipment. The area shall be covered with an impermeable drop cloth. All equipment, protective clothing, tools, containers, etc., shall be cleaned and decontaminated (if not disposed of) prior to the items leaving the area.

## **K: PROTECTIVE CLOTHING**

The LEA shall provide protective clothing such as coveralls or similar whole-body clothing, head covering, gloves, and foot coverings for work conducted where there is no negative exposure assessment.

Although some instances do not require the use of respiratory protection, it is nonetheless desirable to reduce exposure to asbestos fibers as much as possible. Therefore, all Class III work shall require the use of respiratory protection. All such use shall be pursuant to the district's Respiratory Protection Program.

## **L: EQUIPMENT LIST**

An Operations and Maintenance Plan involves "specialized" equipment and supplies to resolve and/or control the problems. The materials can be purchased from a number of asbestos or industrial safety supply houses and some can be found in hardware stores. The following materials and equipment are commonly associated with successful operations and maintenance planning.

### **Operations and Maintenance Planning Materials and Equipment List:**

- |  |  |
|--|--|
| 1. Tyvek disposable coveralls  | 10. Asbestos disposal bags (six-mil)     |
| 2. Rubber gloves   | 11. Fiber or metal disposal drums        |
| 3. Half-face dual cartridge negative pressure respirators with NIOSH-approved cartridges | 12. Glove bags                           |
| 4. Safety goggles  | 13. HEPA vacuum with attachments         |
| 5. Surfactant  | 14. Duct tape                            |
| 6. Misting spray bottle  | 15. Hand tools                           |
| 7. Misting spray tank  | 16. Warning signs and labels             |
| 8. Dust mop/broom  | 17. Scrim cloth for pipe wrap            |
| 9. Polyethylene sheeting (six-mil)   | 18. Foil tape for pipe wrap              |
|  | 19. Encapsulant-bridging and penetrating |
|  | 20. Smoke tubes                          |



## **M: WASTE DISPOSAL**

All asbestos containing or contaminated materials shall be disposed of in sealed, labeled, impermeable bags (or containers). Such materials include asbestos waste, scrap, debris and/or other contaminated items.

The waste shall be stored in a controlled location until disposal. Disposal of wastes shall be conducted according to local, state, and federal hazardous waste regulations.

## **N: EMERGENCY RESPONSE**

In the event of the occurrence of an asbestos-related emergency in a facility under the direction of the LEA, the following procedures will be employed:

1. Immediately upon notice of the emergency, the party involved will vacate the area of involvement and immediately contact the LEA Coordinator and/or the designee at the facility.
2. If the person(s) observing the incident is trained to handle ACM activities, that person(s) will take action to immediately isolate the area of involvement from the rest of the building by evacuating any unnecessary personnel from the area, turning off or isolating all air-moving equipment in the area, isolating the area by closing all entryways, and posting warning signs indicating the presence of a hazardous area.
3. If the person(s) observing the incident is not trained to handle ACM activities, that person will immediately contact a member of the staff who has the appropriate training and alert that person to the problem. The trained staff member will then proceed to take the actions indicated in number 2 above.
4. If the occurrence is of such a size that a response action must be designed by an accredited designer, no further work will be done and the area will remain isolated as in number 2, until the appropriate response action can be determined. Otherwise, the appropriate repair/maintenance activity will commence pursuant to this program.
5. Following completion of the repair/maintenance activities, the appropriate forms will be completed. These forms will become a part of the permanent operations and maintenance records.

## **O: RECORDKEEPING**

Permanent records will be kept regarding operations and maintenance activities in facilities under the control of the LEA. These include:

1. Whenever any cleaning activity as prescribed in 40 CFR 763.91 (c) is undertaken, records will contain the name of the individuals performing the cleaning, the dates of the cleaning, the locations cleaned, the methods utilized, and any other information pertinent

to that particular cleaning episode. A copy of the form is located in the "Operations and Maintenance Forms section of the Management Plan.

2. Whenever any Operations and Maintenance activity is undertaken as outlined in 40 CFR 763.91 (d) records will contain the name and duties of each person involved; the start and completion date and time of the activity; the locations where the activity occurred; a description of the activity; preventive measures used; amount (if any) of ACM removed; and the name and location of the storage or disposal site for the ACM. A copy of the form is located in the "Operations and Maintenance Activity Forms" section of the Management Plan.
3. For every fiber release episode described in 40 CFR 763.91 (f), the records will detail the date, time, and location of the episode; the method of repair; preventive measures or response action taken; the names of those persons doing the work; whether ACBM was removed; and the name and location of the storage or disposal site for the removed material. A copy of the form is located in the Operations and Maintenance" section of the Management Plan.
4. Current lists of all custodians and maintenance personnel including name, address, date of hire, asbestos training course, and dates, as well as copies of certificates from any special related courses taken by the employees. The LEA may use any format desired to document training.
5. A current inventory of equipment available for operations and maintenance activities.
6. Copies of ACM disposal records and/or chain of custody documentation.

All records will be maintained in a single location at the LEA site. Copies of all records and information pertinent to individual facilities will also be maintained at those facilities by the designated campus asbestos coordinator.

## **P: INITIAL/ADDITIONAL CLEANING**

**(Supplement to O&M Plan)**

### **Initial Cleaning**

In accordance with 40 CFR 763.91, all buildings under the direction of the School District will undergo an initial cleaning process prior to commencing with any response actions, with the exception of operations and maintenance and repair. The initial cleaning will be done in all areas of all buildings where friable ACBM, damaged or significantly damaged thermal system ACM, or friable suspected ACBM assumed to be ACM, were determined to be present following the completion of an inspection, sampling and analysis program performed in accordance with 40 CFR 763.85 through 40 CFR 763.87.

The following procedures will be followed for the initial cleaning of all appropriate areas of each building:

1. All carpets will be HEPA vacuumed and/or steam cleaned.
2. All horizontal surfaces including sills, frames, door tops, wall protrusions, signs, air vents, suspended light fixtures, and other immovable fixtures will be HEPA vacuumed. Following HEPA vacuuming, the same areas will be wet cleaned in order to remove any residual fibers not picked up during the vacuuming process.

All walls will be wet wiped, except for those with sprayed-on or trowelled-on materials or with other applications with high liquid absorption potential.

4. All uncarpeted floors will be wet mopped.
5. All debris, filters, wet mop heads, dust mops, cloths, etc., will be sealed, while still wet, in leak-tight containers. Disposal containers will be six-mil polyethylene bags labeled in such a fashion that they illustrate their usage as asbestos storage containers. These bags will be kept in a single location, in a routine maintenance area in each building and will always be kept closed and tied. When the bag becomes full, it will be tied shut and placed into another six-mil bag and tied again. Full bags may be placed in a 55-gallon steel or fiberboard drum. When full, the drum (or appropriate container) will be transported to an EPA-approved asbestos landfill site and the material will be disposed of as asbestos-containing waste.

### **Additional Cleaning**

Additional cleaning may be necessary in some areas where friable ACM exists to prevent the accumulation of asbestos fibers in the environment. The cleaning schedule shall be established by an accredited management planner.

Initial cleaning is necessary in order to collect and remove as much of the settled asbestos dust and fibers as possible that have been deposited over the past months or years. However, initial cleaning does not prevent such dust and fibers from being re-deposited as they become released from existing friable materials. Therefore, an accredited management planner shall consider such issues as exposure potential, condition of material, asbestos content, and friability to establish an additional cleaning schedule. The additional cleaning schedule can be found in the "Miscellaneous" section of the Management Plan.

## **Q: OPERATIONS AND MAINTENANCE ACTIVITIES**

### **Small-Scale, Short Duration Activities and Minor Fiber Release Episodes**

Appendix B to Subpart E of 40 CFR 763.91 defines small-scale, short duration maintenance activities as, but not limited to:

- Removal of ACM insulation on pipes
- Removal of small quantities of ACM insulation on beams or above ceilings
- Removal of ACM gaskets on a valve
- Removal or installation of a small section of drywall
- Installation of electrical conduits through or proximate to ACM.
- Removal of small quantities of ACM only if required as part of maintenance activity not intended as asbestos abatement
- Removal of ACM thermal system insulation in quantities no greater than can be contained in one glove bag
- Minor repairs to damaged thermal system insulation requiring no removal
- Repairs to ACM wallboard

Removal of small sections of ACM performed within the scope of routine maintenance and not intended solely as asbestos abatement.

The above tasks shall be considered Class III work for the purposes of this program, and therefore subject to the requirements prescribed for Class III work.

### **Maintenance Activities other than Small-Scale, Short-Duration and Major Fiber Release Episodes**

Section 40 CFR 763.91 (f)(2) defines a major fiber release episode as the falling or dislodging of more than three square or linear feet of friable ACM.

For those maintenance activities other than small-scale, short-duration or for a major fiber release episode, all response actions will be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.

LEA personnel who are not accredited to perform activities beyond operations and maintenance tasks, or to respond to major fiber release episodes. However, LEA personnel (who have had the appropriate training) may seal off areas involving the work, restrict access, shut off HVAC systems, and otherwise secure the work area. The asbestos response action shall then be conducted by accredited persons.

### **Glove Bag Techniques**

The glove bag techniques will be used for removal of ACM on small-scale activities mainly involving pipes, valves, fixtures, or other small components of mechanical systems as detailed in Appendix B of Subpart E of 40 CFR 763. Prior to installation and use of the glove bag, signs will be posted and the work area will be sealed off and prepared pursuant to Section J. The worker(s) performing the glove bag operation will be equipped with a

disposable Tyvek-type suit and a personal respirator equipped with disposable cartridge filters NIOSH-approved for use with asbestos dust.

After performing all preparatory work and donning personal protective equipment, the glove bag is cut along the sides to fit around the pipe or fixture to be worked on. All tools necessary to perform the work, as well as a quantity of bridging encapsulant, are inserted into the attached inside pocket of the bag.

The glove bag is then attached around the work area by folding the open edges together and sealing with staples and tape. The side edges of the glove bag are then sealed using duct tape and/or Velcro ties to form a tight seal. The bottom seam of the bag is also taped to ensure its integrity. Once a tight seal is obtained, the end of a smoke tube is inserted through the marked entry port and a small amount of smoke is squeezed into the bag. After tape sealing the port (and removing the smoke tube), the bag is gently squeezed to allow the smoke to exit through any available leak holes. Leaks identified in this way are sealed with more duct tape, the entry port is opened, and the bag is squeezed lightly to remove excess smoke. Next, the portable sprayer nozzle is put through the port and the work area is completely wetted with amended water. The nozzle is removed and the HEPA vacuum hose is inserted into the port and sealed tightly with duct tape.

The worker's arms are inserted into the armholes and gloves and the ACM is removed from the work area. When necessary, the amended water spray nozzle is inserted into the bag during removal to ensure that the ACM is kept wet at all times.

When all necessary ACM is removed and the item cleaned of all visible material, a spray nozzle from the encapsulant sprayer is inserted and the pipe fixtures, etc., are sprayed with encapsulant. The rough edges of the cut ACM are then coated/sealed with the bridging encapsulant.

The worker then removes his arms from the armholes and turns on the HEPA vacuum, to remove air from the bag. As the air is being removed from the bag, the bag is squeezed near the top, and twist sealed and taped closed. The HEPA vacuum is turned off, the nozzle removed, and the entry port is sealed tightly. Then the bag is cut along the top and removed from the working area, then placed in a six-mil polyethylene bag for disposal with other contaminated waste materials.

### **Mini-Enclosures**

This methodology is employed in areas where glove bags are not practical, such as for the removal of asbestos from a small ventilation system or a short length of duct as detailed in Appendix B of Subpart E of 40 CFR 763.

The mini-enclosure will vary in construction, shape, and size, depending upon the specific requirement of an individual activity. In general, all mini-enclosures will be constructed according to the following criteria:

- The structure will consist of six-mil polyethylene plastic sheeting supported by a preconstructed framework formed around the work area. The plastic will be stapled

and/or taped to the framework. Two layers of sheeting will be used, one attached to the studs on the inside of the mini-enclosure and the other on the outside.

- The structure will be minimized in size so as to allow entry to only the number of workers directly involved with the maintenance activity. Where possible, the number of workers will be restricted to one or two maximum.
- The floor inside the mini-enclosure will be covered with two layers of six-mil plastic and will extend no less than one foot up each wall where it will be tape sealed to the wall's plastic. All penetrations into or through the mini-enclosure, such as pipe runs, will be sealed with duct tape.
- After completing the maintenance or repair activity, the worker will HEPA vacuum his disposable coveralls, and remove them prior to leaving the area. He will then wet wipe his respirator, leaving it on until his suit is removed.
- All debris in the mini-enclosure will be placed in double six-mil polyethylene bags labeled appropriately for disposal of ACM. The bags will be wet cleaned before removal from the work area. All interior surfaces of the mini-enclosure will then be cleaned using HEPA vacuum and/or wet cleaning techniques.

## **R: OPERATIONS AND MAINTENANCE CODES**

The following codes are intended for use as reference to the general requirements for Preventive Measures by material types. The codes are referenced in the inspection results section of the Management Plan and are presented here for convenience.

The codes given are for all friable ACBM and non-friable ACBM that have the potential to become friable during school maintenance activities involving the material. In all cases, the description of activities in the Operations and Maintenance Codes refers back to the specific requirements detailed in this program and 40 CFR 763.

### **OMA - Pipe Insulation's and Mudded Joint Fittings**

Repair minor dents and tears in the protective jacket with duct tape, bridging encapsulant with glass cloth reinforcement, or lag cloth. Duct tape should only be used for temporary control until more permanent repairs can be made.

For small-scale, short-duration activities, if glove bag removal is not feasible, wrap uncovered pipe insulation with protective jackets consisting of a bridging encapsulant with glass cloth reinforcement. If a glove bag is used, it must be used in accordance with Section Q-3 of Operations and Maintenance Activities.

Wrap moderately water damaged or contact damaged pipe insulation's with new protective jackets, or re-insulate affected areas.

Eliminate the source of the water damage. Any activity other than small-scale, short-duration requires design by a person accredited to design response actions, and undertaken by accredited workers. Therefore, those types of activities will not be undertaken within the scope of this program.

#### **OMB - Insulation on Boilers, Breeching, Ducts, etc.**

Repair minor dents and tears in insulation on boilers and breeching with a bridging encapsulant with glass cloth reinforcement. Duct tape or non-asbestos mastic should only be used for temporary control until the protective jacket is applied.

Wrap uncovered insulation's with new protective jackets or coverings consisting of a bridging encapsulant with glass cloth reinforcement.

Minor damage to duct work insulated with ACM should be repaired with a bridging encapsulant with glass cloth reinforcement. Duct tape or non-asbestos mastic should only be used for temporary control until the protective jacket is applied.

Where work involves drilling, cutting, abrading, sanding, chipping, breaking or sawing of TSI the LEA shall use impermeable drop cloths and shall isolate the area using a mini-enclosure or glove bag system.

#### **OMC - Fireproofing**

If the fireproofing is water damaged and/or is becoming delaminated from the substrate, it should be removed rather than encapsulated. Encapsulation can make the condition worse by increasing the rate of delamination.

Use caution when work involves hanging ducts, conduit or pipes, etc., from surfaces sprayed with fireproofing. If installation of such items is required, it is preferable to remove a small section of the fireproofing revealing a clean surface beneath rather than penetrate through the fireproofing.

#### **OMD - Acoustical Plasters (Sprayed On/Trowelled On)**

If the plaster is water damaged and/or is becoming delaminated from the substrate, it should be removed rather than encapsulated. Encapsulation can make the condition worse by increasing the rate of delamination. The source of the water damage must be eliminated.

Unless the required removal is part of a required small-scale, short-duration maintenance activity then the removal/repair must be designed and performed by an accredited person.

Avoid disturbing acoustical plaster by not hanging plants, drilling holes in the ceiling, moving furniture, etc. When the plaster must be disturbed, mist the affected area with water, a wetting agent, shaving cream, etc. and use a HEPA vacuum to collect fibers being released.

### **OMF - Debris**

Small amounts can be cleaned up using a HEPA vacuum and wet wiping or wet mopping. Dispose of larger pieces by misting and carefully moving the pieces to an asbestos disposal bag to be properly discarded. Debris removal and cleanup is limited to less than three square or three linear feet of ACM within the scope of this program.

### **OMG - Ceiling Tiles**

When ceiling tiles are noted as asbestos-containing materials, precautions can be taken to greatly minimize exposure from the tiles.

Whenever the tiles are cut, broken, or damaged, they should be disposed of properly and replaced by new tiles. Replacement tiles should be asbestos-free. Tiles should not be broken to fit into an asbestos disposal bag whenever possible. Any activity other than small-scale, short-duration maintenance activities must be designed and performed by accredited persons.

### **OMH - Tape/Woven Paper**

Asbestos-containing tape is used primarily for sealing seams on duct work. Loose or frayed ends of the tape must be wetted with amended water, cut, and disposed of properly. Care must be taken not to damage the tape by ripping or tearing it during this procedure.

Damaged tape should be carefully painted with a bridging encapsulant with minimal over spray or over brushing. When the tape must be disturbed, mist it with water or a wetting agent (unless the disturbance is due to the encapsulation process) and use a HEPA vacuum to collect fibers being released.

### **OMI - Miscellaneous/Cementitious Materials**

Fiber release from cementitious (non-friable) materials is normally extremely low, unless these materials are broken, drilled, sanded or otherwise disturbed. During disturbance, the material should be thoroughly dampened and a HEPA vacuum used to collect fibers being released. Some examples of cementitious materials that may contain asbestos are:

- Floor tiles
- Tile underlay
- Wall plasters (some)
- Transite pipes
- Scratch coats
- Drywall plaster (some)
- Transite paneling
- Linoleum
- Asbestos cement pipes



## **OMZ - Other Materials**

This code applies to miscellaneous ACM that rarely creates a significant problem but can pose an exposure risk when damaged or being removed. Listed are some of the asbestos-containing materials that fall into this classification. If an asbestos-containing material is not directly addressed in the operations and maintenance codes, an operations and maintenance procedure may be applied using one or more of the codes that involve similar materials. All disposals must be in accordance with Section M of Waste Disposal.

**Batt Insulation:** Cutting or tearing the asbestos-layered paper backing can cause fiber release. Wet the backing with amended water or wetting agent and wear appropriate protective clothing if batting needs to be cut or moved.

**Vibration Joint Cloth:** Vibration joint cloth is most often found on duct work near air handlers. Loose or frayed ends should be wet with water, a wetting agent or a diluted encapsulant. Carefully cut and remove the joint cloth and dispose of properly.

**Earth Floors:** When mechanical insulation's located in crawl spaces or tunnels deteriorate or are damaged, the earth floors beneath them can become contaminated. Often the asbestos materials are broken up and ground into the loose earth by maintenance workers performing work in these areas. All work involving the remediation of contaminated soil must be designed and performed by accredited persons.

**Floor Tiles:** Asbestos-containing floor tile is common throughout school districts and is generally considered to be non-friable. However, when non-friable ACM is subjected to such forces as mechanical force, weather, aging, and from the removal of adhered carpeting, it can be weakened to the point of becoming friable. Furthermore, the AHERA rule recognized the potential for non-friable material to become friable as a result of activities performed in the school building.

Therefore, management of asbestos flooring material becomes very important so as not to render the material friable. Once the material is rendered friable, or if it will become friable during the scope of work, or if the disturbance will release fibers in excess of the PEL, the in such work must be designed by an accredited designer and conducted by accredited workers. Such work falls outside the scope of this program.

Because improperly performed floor maintenance procedures could result in an increase in asbestos exposure, EPA strongly recommends that the following guidelines be used to protect building occupants.

## Stripping Asbestos-Containing Floors

The Environmental Protection Agency (EPA) recommends that school officials, building owners, and custodial/maintenance staff consider the following basic guidelines when stripping wax or finish coat from asbestos-containing floor coverings.

- **Avoid Stripping Floors:** Stripping of floors should be done as infrequently as possible - perhaps once or twice or less per year depending on circumstances. The frequency should be carefully considered as floor maintenance schedules or contracts are written or renewed.
- **Properly Train Staff:** Custodial or maintenance staff who strip floors should be trained to operate properly and safely the machines, pads, and floor care chemicals used at the facility.
- **Follow Appropriate Work Practices:** Custodial or maintenance staff who strip floors should follow appropriate work practices, such as those recommended here, under informed supervision. Directions from floor tile and floor wax product manufactures on proper maintenance procedures should be consulted.
- **Strip Floors While Wet:** The floor should be kept adequately wet during the stripping operation. Do NOT perform dry stripping. Prior to machine operation, an emulsion of chemical stripper in water is commonly applied to the floor with a mop to soften the wax or finish coat. After stripping and before application of the new wax, the floor should be thoroughly cleaned, while wet.
- **Run Machine at Slow Speed:** If the machine to remove the wax or finish coat has variable speeds, it should be run at slow speed (about 175-190 rpm) during the stripping operation.
- **Select The Least Abrasive Pad Possible:** EPA recommends that the machine be equipped with the least abrasive pad possible to strip wax or finish coat from asbestos-containing floors.
- **Do Not Overstrip Floors:** Stop stripping when the old surface coat is removed. Overstripping can damage the floor and may cause the release of asbestos fibers. Do NOT operate a floor machine with an abrasive pad on unwaxed or unfinished floors.

**REMEMBER:** Improperly removing asbestos-containing floor covering could result in the release of high levels of asbestos. EPA recommends that you leave asbestos-containing floor covering in place, provided the material is in good condition. However, proper maintenance procedures, such as those outlined above, should always be followed.

**PERIODIC SURVEILLANCE  
REPORTS**



# SISC II

SELF-INSURED SCHOOLS OF CALIFORNIA

**SAFETY & LOSS CONTROL**

March 30, 2001

Mickey Thompson, Supervisor Maintenance and Transportation  
Buellton School District  
P.O. Box 75  
Buellton CA 93427-0075

Dear Mickey:

The Buellton Union School District six-month inspection for asbestos was completed on March 30, 2001. The only remaining asbestos containing material in your school is in floor tile and much of that is under carpet. What remains appears to be in good condition and you informed me that there were no repairs or replacement of asbestos containing material (floor tile) performed at your school in the last six months. Since you had no changes to report, the district asbestos management plan is current and accurate.

As a reminder, the Asbestos Hazard Emergency Response Act (AHERA) continues to require that school districts annually notify parents, staff members and other non-school district workers of the availability for review of your schools asbestos management plan. The notification should indicate if the condition of asbestos has changed in any way over the previous year. Please keep copies of letters, memos, etc. regarding notifications on file. A copy of this letter should be filed in your asbestos management plan. It is a legal document showing your compliance with AHERA regulations. Please feel free to contact me at 349-0206 if you have any questions. Thank you.

John Costa  
SISC Safety and Loss Control Specialist  
U.C. Berkeley Certification #810

P. O. Box 1847 ♦ Bakersfield, CA 93303-1847 ♦ <http://www.kern.org/sisc/>  
1300 17th Street - CITY CENTRE ♦ Bakersfield, CA ♦ (805) 636-4710 ♦ FAX (805) 636-4156

A Joint Powers Authority administered by the Kern County Superintendent of Schools Office. Kelly F. Blanton, Superintendent

**PETROGRAPHIC  
ANALYSIS**

## ***PETROGRAPHIC ANALYSIS REPORT***

SISC selected laboratories utilize Polarized Light Microscopy with dispersion staining for the analysis of bulk asbestos samples of suspect ACM. This analysis results in the quantification of all types of asbestos minerals as well as the other components of the material to be analyzed. The results are recorded as the following Petrographic Analysis Record; this record contains the following information:

### **US Group:**

This identifies the Unified Sampling Area number as assigned by our field staff during the inspection.

### **SAM #:**

Details the sample number assigned to each sample.

### **CONT:**

(Y)es or (N)o depending on whether all samples collected in a USA were visibly similar upon initial observation. This information is used by the laboratory and field Quality Control Staff.

### **ASB:**

(Y)es or (N)o depending on whether or not the sample was determined to contain any asbestos minerals.

### **Asbestos:**

- **CHRY** % of Chrysotile Asbestos in the sample
- **AMOS** % of Amosite Asbestos in the sample
- **CROC** % of Crocidolite Asbestos in the sample
- **ANTH** % of Anthophyllite Asbestos in the sample
- **ACT/TRM** % of Actinolite/Tremolite in the sample

### **% ASB:**

Total percentage of all types asbestos in the sample.

### **Other Materials::**

- **WOOL** % of mineral, rock wool and fiberglass in the sample
- **CELL** % of Cellulose in the sample
- **MICA** % of Mica and Vermiculite in the sample
- **PUMC** % of Pumice or perlite in the sample
- **BIND** % of Binder in the sample
- **OTHER** % of other materials in the sample. A complete listing of other materials is found in Part I of the Management Plan.

### **TOT%:**

Total percent of all materials making up the sample. Must be 100%.

### **Date:**

The actual date when the sample was analyzed by the laboratory.

### **Microscopist:**

The name of the microscopist who actually analyzed the sample in question.

LABORATORY:  
HALL-KIMBRELL ENVIRONMENTAL SERVICES  
4840 W. 15th Street  
Lawrence, Kansas 66044

PETROGRAPHIC ANALYSIS FOR ASBESTOS  
Buellton Union School  
05-0123

LAB SUPERVISOR: Thomas Bergin

USGROUP	SAM#	CONT	ASB	CHRY	A S B E S T O S				SASB	O T H E R M A T E R I A L S							TOT%	DATE	MICROSCOPIST	
					AMOS	CROC	ANTH	ACT/TRM		MIN	WOOD	VERM	PUMC	BIND	OTHER1	OTHER2				
--- USA # 01 ---																				
05012300100101	00	N	Y	4%	0%	0%	0%	0%	4%	0%	6%	0%	0%	30%	CAL 60%	0%	100%	09/01/88	Mary Holland	
--- USA # 02 ---																				
05012300100102	01	N	N	0%	0%	0%	0%	0%	0%	0%	80%	0%	0%	10%	PT 10%	0%	100%	09/01/88	Mary Holland	
--- USA # 03 ---																				
05012300100103	02	Y	Y	12%	0%	0%	0%	0%	12%	0%	20%	10%	0%	48%	GM 10%	0%	100%	09/01/88	Mary Holland	
05012300100103	03	Y	Y	11%	0%	0%	0%	0%	11%	0%	20%	15%	0%	44%	GM 10%	0%	100%	09/01/88	Mary Holland	
05012300100103	04	Y	Y	10%	0%	0%	0%	0%	10%	0%	20%	10%	0%	50%	GM 10%	0%	100%	09/01/88	Mary Holland	
--- USA # 01 ---																				
05012300100201	05	N	N	0%	0%	0%	0%	0%	0%	40%	30%	0%	10%	10%	PT 10%	0%	100%	09/01/88	Mary Holland	
--- USA # 01 ---																				
05012300100301	06	N	N	0%	0%	0%	0%	0%	0%	35%	25%	0%	10%	20%	GM 10%	0%	100%	09/01/88	Mary Holland	
--- USA # 01 ---																				
05012300100601	07	N	N	0%	0%	0%	0%	0%	0%	35%	20%	0%	10%	15%	PT 10% GM 10%	10%	100%	09/01/88	Mary Holland	
--- USA # 01 ---																				
05012300100701	08	N	N	0%	0%	0%	0%	0%	0%	10%	70%	0%	0%	10%	PT 10%	0%	100%	09/01/88	Mary Holland	
--- USA # 01 ---																				
05012300100801	09	N	N	0%	0%	0%	0%	0%	0%	0%	80%	0%	0%	10%	PT 10%	0%	100%	09/01/88	Mary Holland	
--- USA # 01 ---																				
05012300100901	10	N	N	0%	0%	0%	0%	0%	0%	10%	10%	10%	0%	0%	GM 30% TAR 40%	40%	100%	09/01/88	Mary Holland	
--- USA # 01 ---																				
05012300101101	11	N	N	0%	0%	0%	0%	0%	0%	0%	80%	0%	0%	10%	PT 10%	0%	100%	09/01/88	Mary Holland	
--- USA # 02 ---																				
05012300101102	12	N	Y	5%	0%	0%	0%	0%	5%	0%	15%	0%	0%	20%	CAL 30% GM 30%	30%	100%	09/01/88	Mary Holland	
--- USA # 03 ---																				
05012300101103	13	Y	Y	15%	4%	0%	0%	0%	19%	0%	10%	20%	0%	51%	0%	0%	100%	09/01/88	Mary Holland	
05012300101103	14	Y	Y	13%	3%	0%	0%	0%	16%	0%	10%	20%	0%	54%	0%	0%	100%	09/01/88	Mary Holland	
05012300101103	15	Y	Y	12%	4%	0%	0%	0%	16%	0%	10%	20%	0%	54%	0%	0%	100%	09/01/88	Mary Holland	
--- USA # 01 ---																				

LABORATORY: PETROGRAPHIC ANALYSIS FOR ASBESTOS

4840 W. 15th Street  
 Buellton Union School

05-0123

LAB SUPERVISOR: Thomas Berglin

USGRP#	SAM#	CONT ASB	CHRY	AMOS	CROC	ANTH	ACT/TRM	ASB	MIN	WOOD	VERM	PUMC	BIND	OTHER1	OTHER2	LOT#	DATE	MICROSCOPIST
05012300101201	16	N	Y	3%	0%	0%	0%	3%	0%	0%	20%	0%	22%	CAL	55%	100%	09/01/88	Mary Holland
05012300101202	17	N	N	0%	0%	0%	0%	0%	10%	70%	0%	0%	10%	PT	10%	100%	09/01/88	Mary Holland
05012300101203	18	N	N	0%	0%	0%	0%	0%	10%	70%	0%	0%	10%	PT	10%	100%	09/01/88	Mary Holland
05012300101204	19	X	Y	25%	5%	0%	0%	30%	0%	0%	20%	0%	50%	0%	0%	100%	09/01/88	Mary Holland
05012300101204	20	Y	Y	25%	5%	0%	0%	30%	0%	0%	25%	0%	45%	0%	0%	100%	09/01/88	Mary Holland
05012300101204	21	Y	Y	25%	4%	0%	0%	29%	0%	0%	25%	0%	46%	0%	0%	100%	09/01/88	Mary Holland
05012300101205	22	N	Y	17%	0%	0%	0%	17%	30%	0%	10%	33%	0	10%	0%	100%	09/01/88	Mary Holland
05012300101301	23	N	N	0%	0%	0%	0%	0%	10%	70%	0%	0%	10%	PY	10%	100%	09/01/88	Mary Holland
05012300101302	24	N	Y	2%	0%	0%	0%	2%	0%	0%	0%	38%	CAL	60%	0%	100%	09/01/88	Mary Holland
05012300101303	25	N	Y	45%	0%	0%	0%	45%	0%	15%	0%	0%	40%	0%	0%	100%	09/01/88	Mary Holland
05012300101401	26	N	N	0%	0%	0%	0%	0%	0%	70%	0%	0%	10%	GM	10% PT	100%	09/01/88	Mary Holland
05012300101402	27	N	Y	2%	0%	0%	0%	2%	0%	0%	0%	58%	GM	40%	0%	100%	09/01/88	Mary Holland
05012300101501	28	N	N	0%	0%	0%	0%	0%	0%	80%	0%	0%	10%	PT	10%	100%	09/01/88	Mary Holland
05012300101502	29	N	Y	2%	0%	0%	0%	2%	0%	0%	0%	38%	GM	60%	0%	100%	09/01/88	Mary Holland
05012300101503	30	N	N	0%	0%	0%	0%	0%	0%	10%	0%	0%	30%	GM	60%	100%	09/01/88	Mary Holland
05012300101601	31	N	N	0%	0%	0%	0%	0%	10%	70%	0%	0%	10%	PT	10%	100%	09/01/88	Mary Holland



LABORATORY: PETROGRAPHIC ANALYSIS FOR ASBESTOS  
 HALL-KIMBELL ENVIRONMENTAL SERVICES  
 4840 W. 15th Street  
 Lawrence, Kansas 66044

LAB SUPERVISOR: Thomas Bergin

USGROUP	SAMP	CONT	ASB	A S B E S T O S				O T H E R				M A T E R I A L S				TOT%	DATE	MICROSCOPIST				
				CHRY	AMOS	CBOC	ANTH	ACT/TRM	\$ASB	MIN	WOOD	VERM	FUMC	BIRD	OTHER1				OTHER2			
USA # 02	05012300101602	32	N	4%	0%	0%	0%	0%	0%	0%	4%	0%	10%	0%	0%	26%	GR	60%	0%	100%	09/01/88	Mary Holland
USA # 01	05012300101701	33	N	0%	0%	0%	0%	0%	0%	0%	0%	0%	85%	0%	0%	15%		0%	0%	100%	09/01/88	Mary Holland
USA # 02	05012300101702	34	N	0%	0%	0%	0%	0%	0%	0%	0%	10%	10%	0%	0%	30%	GR	50%	0%	100%	09/01/88	Mary Holland

The following Microscopists performed the analysis for this project:

05-0123 Buellton Union School

Signature

Mary Holland

Thomas F. Bergin for the firm.

Phone: (805) 922-8003  
 Pager: (805) 542-5037  
 FAX: (805) 922-6543

402 Farnel Rd., Suite A  
 Santa Maria, CA 93454

BULK MATERIAL ANALYSIS REQUEST		
<b>SISK</b>		Date: <u>AUG-9-1991</u>
Kern Co. Superintendent of Schools P.O. Box 9939 Bakersfield, CA 93389		Contact: Rod Williams
P.O.#/BILLING INSTRUCTIONS:		Telephone: (805) 321-4821
SISK/ROD WILLIAMS		ANALYSIS REQUESTED: PLM/48 Hours
P.O. BOX 9939 BAKERSFIELD, CA 93389		DISTRICT: <u>BUELLTON SCH. DIST.</u>
SPECIAL INSTRUCTIONS: STOP ANALYSIS AFTER FIRST POSITIVE SAMPLE		SCHOOL: <u>JONATA SCHOOL</u>
Sample Number	Date Collected	Material Description/Location
89451 → BU-01-W	AUG-9-1991	PLASTER / OFFICE
89452 → BU-02-W	"	" / "
89453 → BU-03-W	"	" / "
Sample Number	Date Collected	Material Description/Location
89454 → BU-04-W	"	" / KILN RM.
89455 → BU-05-W	"	" / KILN RM.
Sample Number	Date Collected	Material Description/Location
89456 → BU-06-W	"	WOOD / RM #3 COMP. LAB
		<del>WOOD / RM #2</del>
		<del>" / #1</del>
Sample Number	Date Collected	Material Description/Location
89457 → BU-07-W	"	PLASTER / M.P. RM. CUST. CLOSET
89458 → BU-08-W	"	" / M.P. RM. KITCHEN
89459 → BU-09-W	"	" / " BAND RM.

PDT. Proj. 10992

213

89451  
89452  
89453

89454  
89455

89456

89457

89458

89459

**BUELLTON**

**ON**

**BULK MATERIAL ANALYSIS REQUEST**

Continued...

Sample Number	Date Collected	Material Description/Location
89461 84461 ✓ BU-10-W	AUG-9-1991	PLASTER / M.P. RM.
BU-11-W	"	" / "
Sample Number	Date Collected	Material Description/Location
84462 ✓ BU-12-W	" Rm. # 6	WOOD (NON-SUSPECT) ✓
	<del>13</del>	
	<del>14</del>	
Sample Number	Date Collected	Material Description/Location
89463 ✓ BU-13-W	"	PLASTER / MIKES RM.
89464 ✓ BU-14-W	"	" / " "
89465 ✓ BU-15-W	"	" / SPEECH
Sample Number	Date Collected	Material Description/Location
89466 ✓ BU-16-W	Rm 11 "	/ Rm. 11 ✓
	<del>12</del>	<del>NON-SUSPECT</del>
	<del>13</del>	
Sample Number	Date Collected	Material Description/Location
89467 ✓ BU-17-W	AUG-9-1991	DRYWALL / K-GARTEN ✓
89468 ✓ BU-18-W	"	" / " ✓
89469 ✓ BU-19-W	"	" / " ✓
Sample Number	Date Collected	Material Description/Location
89470 ✓ BU-20-W	"	DRYWALL / RM # 16 ✓
89471 ✓ BU-21-W	"	/ " 15 ✓
89472 ✓ BU-22-W	"	/ " 14 ✓

**BULK MATERIAL ANALYSIS REQUEST**

Continued...

Sample Number	Date Collected	Material Description/Location
89483 ✓ BU-23-W	AUG-9-1991	PLASTER / LADIES Rm
89484 ✓ BU-24-W	"	/ LADIES Rm
89485 ✓ BU-25-W	"	/ MENS Rm
Sample Number	Date Collected	Material Description/Location
89486 ✓ BU-26-W	"	WOOD / Rm. 8 NS.
Sample Number	Date Collected	Material Description/Location
89487 ✓ BU-27-W	"	DRYWALL / K.G. STORAGE
89488 ✓ BU-28-W	"	" / "
89489 ✓ BU-29-W	"	" / "
Sample Number	Date Collected	Material Description/Location
Sample Number	Date Collected	Material Description/Location
Sample Number	Date Collected	Material Description/Location

By

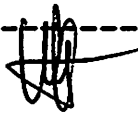
89483  
89484  
89485  
89486  
89487  
89488  
89489

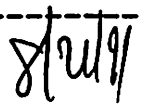
**ASBESTOS ANALYSIS SUMMARY**  
**Polarized Light Microscopy**

**Client : SISK SANTA MARIA**  
**Address : 402 FARNEL RD., SUITE A, SANTA MARIA, CA, 93454**

**Client's Description : JONATA SCHOOL**  
**Client's Project # : JONATA SCHOOL/BU PDI Project # :10992**

Sample # Lab I.D.# Homogeneity	Asbestos Content Asbestos Type Analyst/date	Fibrous Type	Fibrous Content	Non-Fibrous Type
BU-01-W 91-89451 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	1± 1%	Gypsum Quartz
BU-02-W 91-89452 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	2± 1%	Gypsum Quartz
BU-03-W 91-89453 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	1± 1%	Gypsum Quartz
BU-04-W 91-89454 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	2± 2%	Gypsum Quartz
BU-05-W 91-89455 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	< 1%	Gypsum Quartz

Laboratory Supervisor: 

Date of review: 


Analytical procedure conforms to EPA reference method 600/M4-82-020.  
 Data are reported as mean ± one standard deviation.  
 - insufficient material present, recommend recollection of sample  
 \* SEM/TEM analysis recommended due to sample interferences  
 "# of layers()" refers to discrete non-homogenous areas within each sample  
 asbestos coding: c = chrysotile, a = amosite, cr = crocidolite,  
 tr = tremolite, an = anthophyllite, nd = not detected  
 - <1% = 0.5 - 1%  
 - Trace = <0.5%


**ASBESTOS ANALYSIS SUMMARY**  
**Polarized Light Microscopy**

Client : SISK SANTA MARIA  
 Address : 402 FARNEL RD., SUITE A, SANTA MARIA, CA, 93454

Client's Description : JONATA SCHOOL  
 Client's Project # : JONATA SCHOOL/BU PDI Project # :10992

Sample # Lab I.D.# Homogeneity	Asbestos Content Asbestos Type Analyst/date	Fibrous Type	Fibrous Content	Non-Fibrous Type
BU-06-W 91-89456 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	97± 1%	Unspecified
BU-07-W 91-89457 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	< 1%	Gypsum Quartz
BU-08-W 91-89458 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	1± 1%	Gypsum Quartz
BU-09-W 91-89459 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	1± 1%	Gypsum Quartz
BU-10-W 91-89460 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	23± 5%	Gypsum Quartz

Laboratory Supervisor: 

Date of review: 

Analytical procedure conforms to EPA reference method 800/M4-82-020.

Data are reported as mean ± one standard deviation.

- insufficient material present, recommend recollection of sample

\* SEM/TEM analysis recommended due to sample interferences

"# of layers()" refers to discrete non-homogenous areas within each sample

asbestos coding: c = chrysotile, a = amosite, cr = crocidolite,  
 tr = tremolite, an = anthophyllite, nd = not detected

- <1% = 0.5 - 1%

- Trace = <0.5%

**ASBESTOS ANALYSIS SUMMARY**  
**Polarized Light Microscopy**

**Client : SISK SANTA MARIA**  
**Address : 402 FARNEL RD., SUITE A, SANTA MARIA, CA, 93454**

**Client's Description : JONATA SCHOOL**  
**Client's Project # : JONATA SCHOOL/BU PDI Project # :10992**

Sample # Lab I.D.# Homogeneity	Asbestos Content Asbestos Type Analyst/date	Fibrous Type	Fibrous Content	Non-Fibrous Type
BU-11-W 91-89461 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	1± 2%	Gypsum Quartz
BU-12-W 91-89462 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	98± 1%	Mortar
BU-13-W 91-89463 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	6± 2%	Gypsum Quartz
BU-14-W 91-89464 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	< 1%	Gypsum Quartz
BU-15-W 91-89465 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	1± 1%	Gypsum Quartz

Laboratory Supervisor:  Date of review: 

Analytical procedure conforms to EPA reference method 600/M4-82-020.

Data are reported as mean ± one standard deviation.

- insufficient material present, recommend recollection of sample

\* SEM/TEM analysis recommended due to sample interferences

"# of layers()" refers to discrete non-homogenous areas within each sample

asbestos coding: c = chrysotile, a = amosite, cr = crocidolite,  
 tr = tremolite, an = anthophyllite, nd = not detected

- <1% = 0.5 - 1%

- Trace = <0.5%





**ASBESTOS ANALYSIS SUMMARY**  
**Polarized Light Microscopy**

**Client : SISK SANTA MARIA**  
**Address : 402 FARNEL RD., SUITE A, SANTA MARIA, CA, 93454**

**Client's Description : JONATA SCHOOL**  
**Client's Project # : JONATA SCHOOL/BU PDI Project # :10992**

Sample # Lab I.D.# Homogeneity	Asbestos Content Asbestos Type Analyst/date	Fibrous Type	Fibrous Content	Non-Fibrous Type
BU-16-W 91-89466 # of layers (1)	total asbestos = nd nd JLP /19-Aug-1991	Cellulose	98± 1%	Mortar
BU-17-W 91-89467 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	Trace	Gypsum Quartz
BU-18-W 91-89468 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	7± 2%	Gypsum Quartz
BU-19-W 91-89469 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	Trace	Gypsum Quartz
BU-20-W 91-89470 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	33± 5%	Gypsum Unspecified

Laboratory Supervisor: 

Date of review: 

Analytical procedure conforms to EPA reference method 600/M4-82-020.

Data are reported as mean ± one standard deviation.

- insufficient material present, recommend recollection of sample

\* SEM/TEM analysis recommended due to sample interferences

"# of layers()" refers to discrete non-homogenous areas within each sample

asbestos coding: c = chrysotile, a = amosite, cr = crocidolite,  
 tr = tremolite, an = anthophyllite, nd = not detected

- <1% = 0.5 - 1%

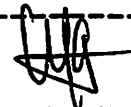
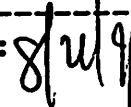
- Trace = <0.5%

**ASBESTOS ANALYSIS SUMMARY**  
**Polarized Light Microscopy**

Client : SISK SANTA MARIA  
 Address : 402 FARNEL RD., SUITE A, SANTA MARIA, CA, 93454

Client's Description : JONATA SCHOOL  
 Client's Project # : JONATA SCHOOL/BU PDI Project # :10992

Sample # Lab I.D.# Homogeneity	Asbestos Content Asbestos Type Analyst/date	Fibrous Type	Fibrous Content	Non-Fibrous Type
BU-21-W 91-89471 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	46± 6%	Gypsum Unspecified
BU-22-W 91-89472 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	37± 5%	Gypsum Quartz
BU-23-W 91-89473 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	5± 3%	Gypsum Quartz
BU-24-W 91-89474 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	Trace	Gypsum Quartz
BU-25-W 91-89475 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	5± 2%	Unspecified Quartz

Laboratory Supervisor:  Date of review: 

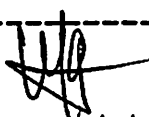
Analytical procedure conforms to EPA reference method 600/4-82-020.  
 Data are reported as mean ± one standard deviation.  
 - insufficient material present, recommend recollection of sample  
 \* SEM/TEM analysis recommended due to sample interferences  
 "# of layers()" refers to discrete non-homogenous areas within each sample  
 asbestos coding: c = chrysotile, a = amosite, cr = crocidolite,  
 tr = tremolite, an = anthophyllite, nd = not detected  
 - <1% = 0.5 - 1%  
 - Trace = <0.5%


**ASBESTOS ANALYSIS SUMMARY**  
**Polarized Light Microscopy**

**Client : SISK SANTA MARIA**  
**Address : 402 FARNEL RD., SUITE A, SANTA MARIA, CA, 93454**

**Client's Description : JONATA SCHOOL**  
**Client's Project # : JONATA SCHOOL/BU PDI Project # :10992**

Sample # Lab I.D.# Homogeneity	Asbestos Content Asbestos Type Analyst/date	Fibrous Type	Fibrous Content	Non-Fibrous Type
BU-26-W 91-89476 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	81± 5%	Unspecified
BU-27-W 91-89477 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	7± 2%	Gypsum Quartz
BU-28-W 91-89478 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	Trace	Gypsum Quartz
BU-29-W 91-89479 # of layers (1)	total asbestos = nd nd JAC /19-Aug-1991	Cellulose	4± 2%	Gypsum Quartz

Laboratory Supervisor: 

Date of review: 

Analytical procedure conforms to EPA reference Method 600/M4-82-020.

Data are reported as mean ± one standard deviation.

- insufficient material present, recommend recollection of sample

\* SEM/TEM analysis recommended due to sample interferences

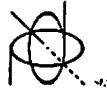
"# of layers()" refers to discrete non-homogenous areas within each sample

asbestos coding: c = chrysotile, a = amosite, cr = crocidolite,

tr = tremolite, an = anthophyllite, nd = not detected

- <1% = 0.5 - 1%

- Trace = <0.5%



# PARTICLE DIAGNOSTICS, INC.

---

## LIMITATIONS OF POLARIZED LIGHT MICROSCOPY FOR THE ANALYSIS OF "NON-FRIABLE" MATERIALS

Particle Diagnostics, Inc. (PDI) analytical procedure conforms to 40 CFR Part 763, Appendix A to Subpart F (Interim Method for the Determination of Asbestos in Bulk Insulation Samples) for friable bulk materials using Polarized Light Microscopy (PLM). Non-friable materials, such as vinyl floor tiles, mastic, roofing tars, and felts, frequently contain asbestos fibers that 1) are smaller than the minimum resolution of the method, 2) are coated with matrix materials that interfere with definitive identification, or 3) are in low percentages (<5%) that the method cannot reliably quantitate. For these reasons, PLM analysis should NOT be used alone to label a non-friable bulk material as non-asbestos containing, but should be followed by more rigorous testing using SEM, TEM, or XRD, as appropriate, before calling such materials "asbestos-free".

This data report may not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the items tested, and when endorsed with the NVLAP logo, the report contains the signature of an approved signatory. Each project report must include this page and may not be reproduced except in full.



**Bulk Material Analysis**

Client:

Kern County Superintendent of Schools  
SISK - Self-Insured Schools of Kern  
P.O. Box 9939, Attn: Jay Olsen  
Bakersfield, CA 93309

Client Number: 1469  
Report Number: 147436  
Date Received: 07/14/90  
Date Examined: 07/16/90

Lab Number: 19038785  
Sample Number: BBR1  
P.O./Job ID: Buellton Union School District  
Site: Buellton Union School District.

Analyst: DC

Location: Interior painted (Boys).

Gross Description: Brown plaster aggregate with paint.

Comments:

Microscopic Description

TOTAL ASBESTOS PRESENT:		Non-Det. %
Chrysotile	Non-Det. %	
Amosite	Non-Det. %	
Crocidolite	Non-Det. %	
	%	
	%	
TOTAL NON-ASBESTOS FIBROUS MATERIAL PRESENT:		1-5 %
Cellulose	1-5 %	
Fibrous Glass	Non-Det. %	
	%	
	%	
TOTAL NON-ASBESTOS NON-FIBROUS MATERIAL PRESENT:		95-99 %
Unspecified Particulates	20-25 %	
Other Silicates	70-75 %	
	%	
	%	

Director: \_\_\_\_\_

*Janis Teichman*

Janis Teichman

Analytical method: 40 CFR 763, Subpart F, Appendix A (AHERA)

See Reverse for Explanation of Terms and Reporting Practices



Bulk Material Analysis

Client:  
Kern County Superintendent of Schools  
SISK - Self-Insured Schools of Kern  
P.O. Box 9939, Attn: Jay Olsen  
Bakersfield, CA 93309

Client Number: 1469  
Report Number: 147436  
Date Received: 07/14/90  
Date Examined: 07/16/90

Lab Number: 19038786  
Sample Number: BBR2  
P.O./Job ID: Buellton Union School District  
Site: Buellton Union School District.

Analyst: DC

Location: Boys entrance to left.

Gross Description: Grey and brown plaster aggregate with paint.

Comments:

Microscopic Description

TOTAL ASBESTOS PRESENT:  
Chrysotile  
Amosite  
Crocidolite

Non-Det. %  
Non-Det. %  
Non-Det. %  
%  
%

Non-Det. %

TOTAL NON-ASBESTOS FIBROUS MATERIAL PRESENT:  
Cellulose  
Fibrous Glass

Trace %  
Non-Det. %  
%  
%

Trace %

TOTAL NON-ASBESTOS NON-FIBROUS MATERIAL PRESENT:  
Unspecified Particulates  
Other Silicates

20-25 %  
70-75 %  
%  
%  
%

98-99 %

Director:

*Janis Teichman*  
Janis Teichman

Analytical method: 40 CFR 763, Subpart F, Appendix A (AHERA)

See Reverse for Explanation of Terms and Reporting Practices



**Bulk Material Analysis**

Client:  
Kern County Superintendent of Schools  
ISK - Self-Insured Schools of Kern  
P.O. Box 9939, Attn: Jay Olsen  
Ardenwood, CA 93309

Client Number: 1469  
Report Number: 147436  
Date Received: 07/14/90  
Date Examined: 07/16/90

Sample Number: 19038787  
Sample Number: GBR3  
P.O./Job ID: Buellton Union School District  
Location: Buellton Union School District.

Analyst: DC

Location: Girls paint and plaster.

Cross Description: Off-White plaster aggregate with paint.

Comments:

Microscopic Description

TOTAL ASBESTOS PRESENT:		Non-Det. %
Chrysotile	Non-Det. %	
Amosite	Non-Det. %	
Crocidolite	Non-Det. %	
	%	
TOTAL NON-ASBESTOS FIBROUS MATERIAL PRESENT:		1-5 %
Cellulose	1-5 %	
Fibrous Glass	Non-Det. %	
	%	
	%	
TOTAL NON-ASBESTOS NON-FIBROUS MATERIAL PRESENT:		95-99 %
Unspecified Particulates	20-25 %	
Other Silicates	70-75 %	
	%	
	%	

Director: \_\_\_\_\_

*Janis Teichman*  
Janis Teichman

Analytical method: 40 CFR 763, Subpart F, Appendix A (AHERA)

See Reverse for Explanation of Terms and Reporting Practices



**Bulk Material Analysis**

Client:

Kern County Superintendent of Schools  
SISK - Self-Insured Schools of Kern  
P.O. Box 9939, Attn: Jay Olsen  
Bakersfield, CA 93309

Client Number: 1469  
Report Number: 147436  
Date Received: 07/14/90  
Date Examined: 07/16/90

Lab Number: 19038788  
Sample Number: GBR4  
P.O./Job ID: Buellton Union School District  
Site: Buellton Union School District.

Analyst: DC

Location: Girls plaster.

Gross Description: Brown plaster aggregate with paint.

Comments:

Microscopic Description

TOTAL ASBESTOS PRESENT:

Chrysotile  
Amosite  
Crocidolite

Non-Det. %  
Non-Det. %  
Non-Det. %  
%  
%

Non-Det. %

TOTAL NON-ASBESTOS FIBROUS MATERIAL PRESENT:

Cellulose  
Fibrous Glass

Trace %  
Non-Det. %  
%  
%

Trace %

TOTAL NON-ASBESTOS NON-FIBROUS MATERIAL PRESENT:

Unspecified Particulates  
Other Silicates

20-25 %  
70-75 %  
%  
%

98-99 %

Director:

*Janis Teichman*

Janis Teichman

Analytical method: 40 CFR 763, Subpart F, Appendix A (AHERA)

See Reverse for Explanation of Terms and Reporting Practices



**TRAINING, MEDICAL,  
& FIT TEST  
RECORDS**

# University of California, Berkeley

## UNIVERSITY EXTENSION

*This is to confirm that*

**John S. Costa**

*has attended the eight hour*

**AHERA Refresher Course for Asbestos Inspectors and Management Planners**

*and has completed the requisite training for asbestos accreditation under TSCA Title II*

*April 18, 2000*



*Certificate number: 810  
Valid until: April 18, 2001*

*Richard W. Tsina*

*Chair, Environmental Management  
UC Berkeley Extension  
1995 University Avenue  
Berkeley, CA 94720  
(510) 643-7143*

# University of California, Berkeley

U N I V E R S I T Y   E X T E N S I O N

*This is to confirm that*

**John Costa**

*has attended the eight hour*

**AHERA Refresher Course for Asbestos Abatement Project Designers**

*and has completed the requisite training for asbestos accreditation under TSCA Title II*

*April 19, 2000*

*Certificate number: CS 1337  
Valid Until: April 19, 2001*



*Richard V. Tsina*

*Chair, Environmental Management  
UC Berkeley Extension  
1995 University Avenue  
Berkeley, CA 94720  
(510) 643-7143*

# University of California, Berkeley

UNIVERSITY EXTENSION

*This is to confirm that*

**Catherine Wilson Jones**

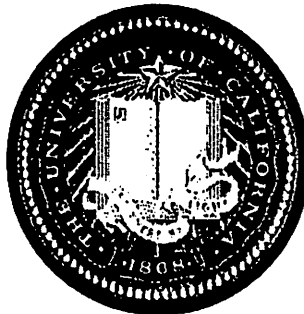
*has attended the eight hour*

**AHERA Refresher Course for Asbestos Abatement Project Designers**

*and has completed the requisite training for asbestos accreditation under TSCA Title II*

*April 19, 2000*

*Certificate number: CS 1036  
Valid Until: April 19, 2001*



*Richard V. Tsina*

*Chair, Environmental Management  
UC Berkeley Extension  
1995 University Avenue  
Berkeley, CA 94720  
(510) 643-7143*

# University of California, Berkeley

UNIVERSITY EXTENSION

*This is to confirm that*

Catherine Wilson Jones

*has attended the eight hour*

AHERA Refresher Course for Asbestos Inspectors and Management Planners

*and has completed the requisite training for asbestos accreditation under TSCA Title II*

*April 21, 2000*

*Certificate number: 876  
Valid until: April 21, 2001*



*Richard W. Tsina*

*Chair, Environmental Management  
UC Berkeley Extension  
1995 University Avenue  
Berkeley, CA 94720  
(510) 643-7143*

# University of California, Berkeley

UNIVERSITY EXTENSION

*This is to confirm that*

**Catherine Wilson Jones**

*has attended the eight hour*

**AHERA Refresher Course for Asbestos Abatement Project Designers**

*and has completed the requisite training for asbestos accreditation under TSCA Title II*

*April 19, 2000*

*Certificate number: CS 1036  
Valid Until: April 19, 2001*



*Richard V. Tsina*

*Chair, Environmental Management  
UC Berkeley Extension  
1995 University Avenue  
Berkeley, CA 94720  
(510) 643-7143*



A.J. DIANI CONSTRUCTION CO., INC.  
GENERAL BUILDING • GENERAL ENGINEERING • ENVIRONMENTAL SERVICES

July 25, 2002

Mickey Thompson, Director of M.O.T.  
Buellton Union Elementary School District  
P.O. Box 75  
Buellton, CA. 93247

Mr. Thompson:

Pursuant to the requirements contained in the Asbestos Hazard Emergency Response Act (AHERA), the Environmental Protection Agency (EPA), no asbestos or asbestos-contained products have been used in the construction of the Oak Valley Elementary School, or any tools, devices, clothing, or equipment used to effect this construction.

A handwritten signature in black ink, appearing to read 'Richard Cunningham', is written over the typed name.

Richard Cunningham  
Project Engineer

CC: David Jaworski  
Jeff Neal  
File



# **Pre-Bid RFIs**



**Buellton USD Roof Replacement**

**Pre-Bid RFIs – Official Responses:**

1. Please provide additional details regarding the thickness of the existing roofing material at both sites:

- **BEAM Professionals Response:**

- i. **For Jonata Middle School**, there is height variation at different locations of the roof.

1. It is safe to account for 1-2” of roof detail, in its entirety, from wooden roof deck to top of finished roof.

- ii. **For Oak Valley Elementary School**, it is a 2-ply system over structurally sloped wooden roof deck.

1. It is safe to account for 1” of roof detail, in its entirety, from wooden roof deck to top of finished roof.

**BEAM Professionals  
Addendum 1A:  
Jonata MS Site**

**ADDENDUM NO. 01A**  
**March 27, 2024**

To Drawings dated March 7, 2024, for Volume 2

**Buellton Union School District**  
**BUSD- Jonata MS Roof Replacement**

Prepared by: BEAM Professionals  
2600 Tenth Street, Suite 700  
Berkeley, CA 94710

BEAM Project No.: 230610.3

Notice to Proposers

- A. Receipt of this Addendum shall be acknowledged by all parties associated with the referenced project.
- B. This Addendum forms part of the Contract documents for the above referenced project and shall be incorporated integrally therewith.
- C. Contractor shall make necessary adjustments with full knowledge of all modifications, clarifications, and supplemental data included therein. Where provisions of the following supplemental data differ from those of the original Contract Documents, this Addendum shall govern.

**DRAWINGS:**

- Item No. 1 Sheet No. A2.0 – DETAILS; REPLACE 1/A2.0, 20/A2.0, 24/A2.0, 25/A2.0.  
*Details listed above to be replaced in its entirety with the attached Sheet A2.0.*
- Item No. 2 Sheet No. G0.0, A1.0, A1.1, A1.2 – TITLEBLOCK UPDATE; UPDATE “95% CD” with “100% CD”  
*All previously advertised sheets that stated “95% CD” should have stated “100% CD”.*

**END OF ADDENDUM NO. 1**

cc: Files 4A

# JONATA MIDDLE SCHOOL ROOF REPLACEMENT

BUELLTON UNIFIED SCHOOL DISTRICT

---

## Board Of Trustees

---

CHRISTY NORDGREN  
President

RYAN SULLIVAN  
Board Clerk

ELAINE ALVARADO  
Board Member

ALLISON JORDAN  
Board Member

JESSIE SKIDMORE  
Board Member

## Administration

---

DR. RANDAL HAGGARD  
Superintendent

LISA MELBY  
Principal



JONATA MS

PROJECT: 230610

BEAM Professionals  
2600 Tenth Street  
Suite 700  
Berkeley, CA 94710  
510-450-1999 P  
BEAMProf.com

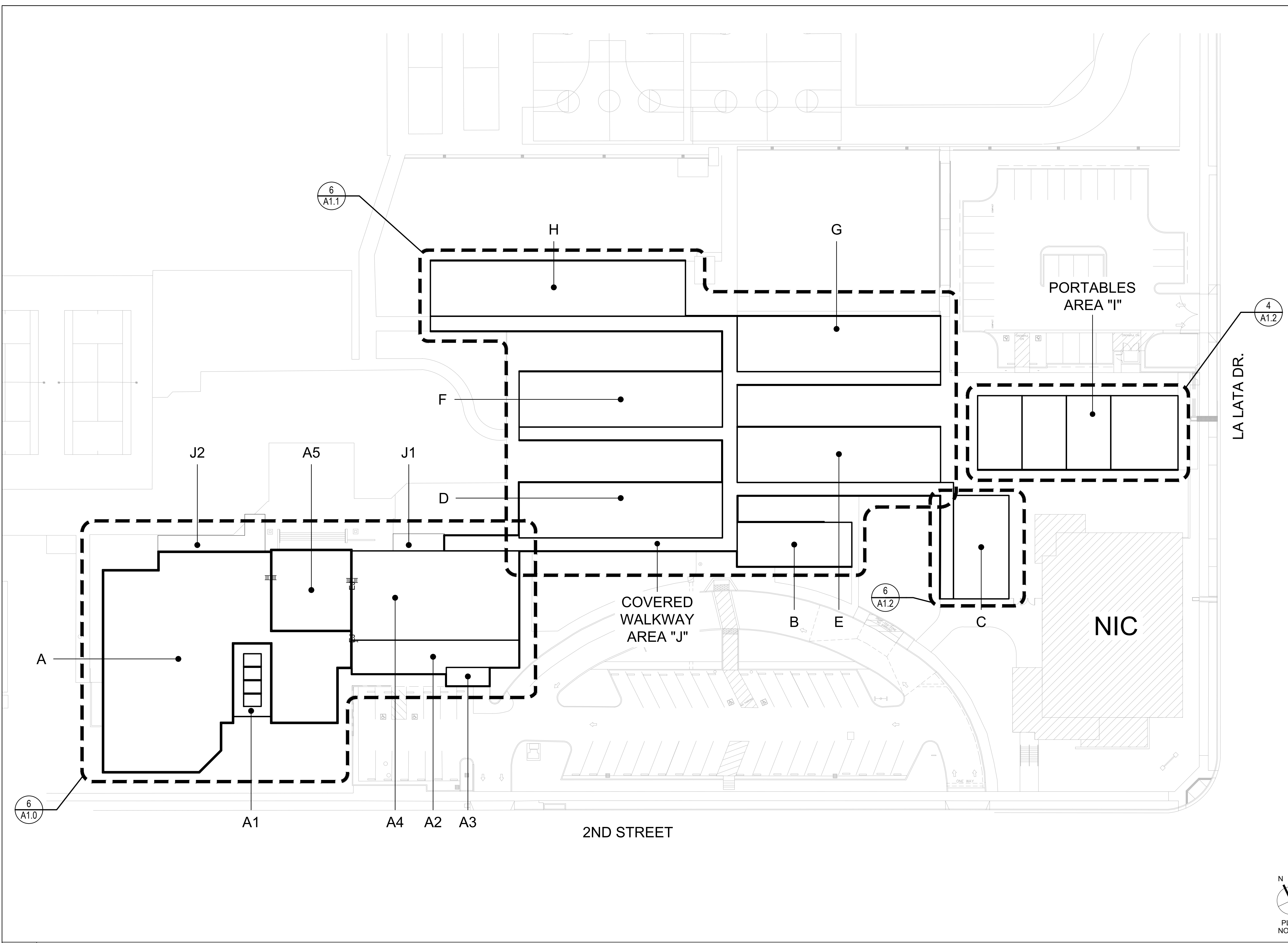
301 2ND ST  
BUELLTON, CA 93427

03/06/2024

95% CD

1





### 18 JONATA SITE MAP

1"=30'-0"

A.D. AREA DRAIN	EL. ELEVATION (HEIGHT)	M.O. MASONRY OPENING	REQ'D REQUIRED
ADA AMERICANS WITH DISABILITIES ACT	ELECT. ELECTRICAL (DRAWING)	MAS. MASONRY	RES. RESILIENT
A.F.F. ABOVE FINISH FLOOR EQUIP	ELEV. ELEVATION (DRAWING)	MATL. MATERIAL(S)	REV. REVISION(S), REVISED
A.F.G. ABOVE FINISH GRADE	EQUIP. EQUIPMENT	MAX. MAXIMUM	RF. RECREATIONAL RESILIENT FLOORING
A.H.J. AUTHORITY HAVING JURISDICTION	EXP. EXPANSION	MECH. MECHANICAL	RPG. RELOCATABLE PAINTED GYP. BOARD
A/C AIR CONDITIONING	EXT. EXTERIOR	MEM. MEMBRANE	RSS. ROD STOCK AND SEALANT
ACP. ACOUSTICAL PANEL	F.A. FULLY ADHERED	MEM. WP. MEMBRANE WATERPROOFING	S.C. SEALED CONCRETE
ACT. ACOUSTICAL TILE	F.E. FIRE EXTINGUISHER	MEP. MECHANICAL, ELECTRICAL	SCHED. SCHEDULE
ADJ. ADJUSTABLE	FB. FACE BRICK	AND PLUMBING	SCPL. SOLID CORE PLASTIC LAMINATE
ALT. ALTERNATE	FD. FLOOR DRAIN	MFR. MANUFACTURE(R)	SECT. SECTION
ALUM. ALUMINUM	FIN. FINISH(ED)	MH. MANHOLE	SHT. SHEET
ANGLE	FIXT. FIXTURE	MIN. MINIMUM	SIM. SIMILAR
B.U.R. BUILT-UP ROOF	FLR. FLOOR(ING)	MISC. MISCELLANEOUS	SPC. SPECIAL COATING SYSTEM
BD. BOARD	FLSHG. FLASHING	MOD. MODULAR	SPEC. SPECIFICATION(S)
BLDG. BUILDING	F.V. FIELD VERIFY	MTL. METAL	SQ. SQUARE
BLK. BLOCK	G.B. GRAB BAR	N.I.C. NOT IN CONTRACT	S.S. STAINLESS STEEL
BM. BEAM	G.I. GALVANIZED IRON	N.R. NOT RATED	STD. STANDARD
C. CHANNEL	G.A. GAUGE	N.T.S. NOT TO SCALE	STL. STEEL
C.J. CONTROL JOINT	GALV. GALVANIZED	NO. NUMBER	STRUC. STRUCTURAL
C.M.U. CONCRETE MASONRY UNIT	GLZD. GLAZED CONCRETE	O.C. ON CENTER	SUSP. SUSPENDED
C.W. COLD WATER	MASONRY UNIT	O.C.E.W. ON CENTER EACH WAY	SYS. SYSTEM
CFMF COLD FORMED METAL FRAMING	GEN. GENERAL	O.D. OUTSIDE DIAMETER	T.O. TOP OF
CL. CENTERLINE	GL. GLASS / GLAZING	O.F.C.I. OWNER FURNISHED, CONTRACTOR INSTALLED	T.O.B. TOP OF WOOD BLOCKING
CLG. CEILING	GR. GRADE	O.H. OPPOSITE HAND	T.O.M. TOP OF MASONRY
CLR. CLEAR	GTP. GLAZED TILE PAVER	OPNG. OPENING	T.O.S. TOP OF STEEL
COL. COLUMN	GYP. GYPSUM DRYWALL	OPP. OPPOSITE	TEL. TELEPHONE
COMP. COMPRESSIBLE CONCRETE	H.W. HOT WATER	PLUM. PLUMB	THK. THICKNESS)
COND. CONDITION	HM. HOLLOW METAL FRAME	P.L. PRECAST	TYR. TYPICAL
CORR. CORRIDOR	HORIZ. HORIZONTAL	P.P. POWER POLE	U.N.O. UNLESS NOTED OTHERWISE
C.T. CERAMIC TILE	HT. HEIGHT	P.W.B. PREFINISHED WALL BOARD	V. VENT
CTG. CLEAR TEMPERED GLASS	I.D. INSIDE DIAMETER	PR. PAIR	V.I.F. VERIFY IN FIELD
CTSK. COUNTERSINK	INT. INTERIOR	PRE-F. PRE-FINISHED	VENT. VENTILATION, VENTILATED
D.F. DRINKING FOUNTAIN	JT. JOINT	PT. POINT	VER. VERTICAL
D.P. DAMPROOFING	L.P. LIGHT POLE	PRE. PAINTED	W.P. WATER PROOFING
D.S. DOWNSPOUT	LAV. LAVATORY	R.D. RADIUS	W.S. WEATHERSTRIP
DI. DIAMETER	LT. LIGHT	R.D. ROOF DRAIN	W.W. WATER WELL
DIM. DIMENSION	LT.WT. LIGHTWEIGHT	RE., REF. REFER TO / REFERENCE / SEE	W.W.F. WELDED WIRE FABRIC
DTL. DETAIL		RECP. RECEPTACLE	WT. WITH
DWG. DRAWING		REINF. REINFORCE(ED), (ING)	WC. WATER CLOSET
E.J. EXPANSION JOINT			WD. WOOD
EQ. EQUAL			WDW. WINDOW
EA. EACH			WT. WEIGHT



### 6 ABBREVIATIONS

6 A1.1	6 A1.2	6 A1.0
--------	--------	--------

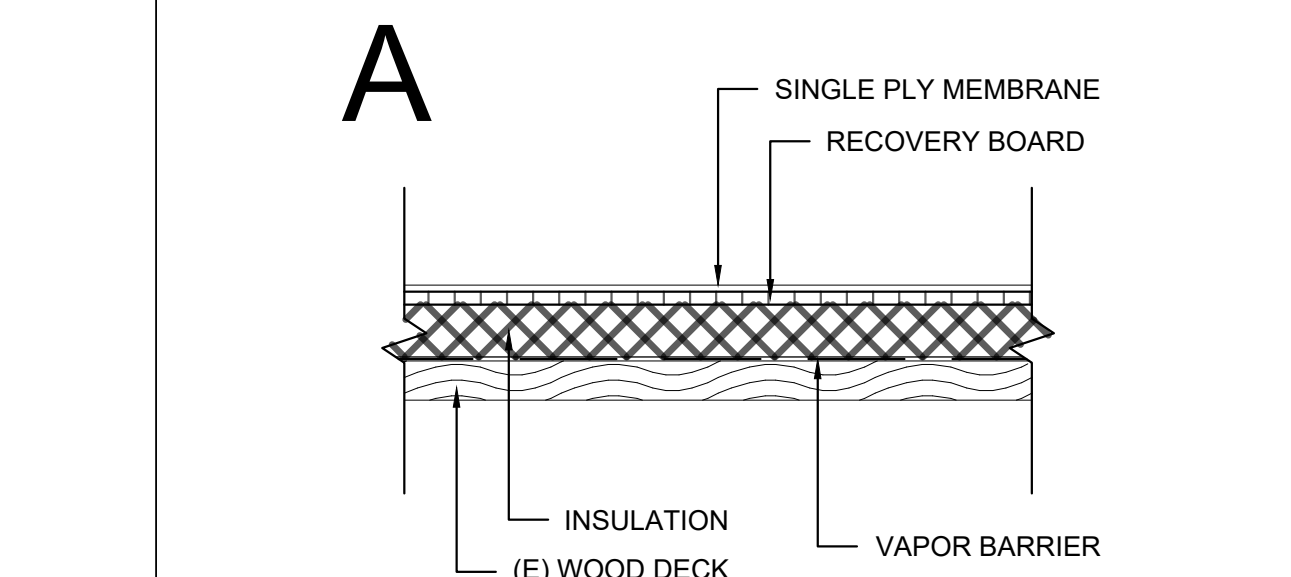
### 4 VICINITY MAP

**BASE SCOPE:**  
ROOF REPLACEMENT AT BUILDINGS "A", "A1-A5", "B", "C", "D", "E", "F", "G", "H" AND CONNECTING WALKWAY "J" AS INDICATED ON PLANS. CONTRACTOR TO REMOVE AND PROPERLY DISPOSE OF ALL COATED CORRUGATED METAL AND COATED MODIFIED BITUMEN ROOFING MATERIAL IN ITS ENTIRETY DOWN TO THE EXISTING WOOD SUBSTRATE. SITE TO BE PROTECTED AT ALL TIMES AS BUILDING IS TO BE OCCUPIED WHILE CONSTRUCTION IS UNDERWAY. REMOVE ALL ROOFING MATERIAL FROM WALL/CURB LOCATIONS ALONG WITH ASSOCIATED METALS AND COUNTER FLASHINGS. REMOVE/REPLACE ALL WOOD DECKING/TONGUE AND GROOVE/NAILERS THAT SHOW EVIDENCE OF DRY ROT. INFILL TO MATCH EXISTING DECK. AT ROOF DRAINS, ENSURE ZURN DRAIN INTEGRITY IS KEPT FOR RE-INSTALLATION WITH NEW ROOFING MEMBRANE. CLEAN AND PREP EXISTING SUBSTRATE TO RECEIVE NEW ROOFING SYSTEM. MECHANICALLY ATTACH 1/2" RECOVERY BOARD. FULLY ADHERE SPECIFIED SINGLE PLY 80 MIL PVC ROOF MEMBRANE WITH ASSOCIATED METALS. INSTALL SAWCUT RECEIVER WITH PREVIOUSLY REMOVED COUNTER FLASHING, COPING CAP, AND TRIM METALS FOR RE-INSTALLATION. EXISTING CONDUIT/ELECTRICAL/GAS LINES ARE TO BE RAISED/ATTACHED TO FIT NEW PIPE SUPPORT AT MINIMUM 10" HEIGHT ABOVE NEW ROOF HEIGHT. COORDINATE MECHANICAL UNITS AND ELECTRICAL WITH MECHANICAL PLANS AND MECHANICAL SPECIFICATIONS. REMOVE EXISTING ROOF HATCH AND REPLACE WITH NEW ROOF HATCH INCLUDING SAFETY RAILING AND TELESCOPING SAFETY POST.

**ALTERNATE #1:**  
APPLY NEW ROOF COATING PER SPECIFICATION SECTION 07 56 20 OVER BUILDING "I" FITNESS ROOMS AND CANOPY WALKWAYS "J1" & "J2" WHERE INDICATED ON PLANS.

### 26 SCOPE OF WORK

NOMENCLATURE "A"	
ROOF MEMBRANE	80 MIL PVC FULLY ADHERED
RECOVERY BOARD	1/2" FULLY ADHERED PRIME BOARD
INSULATION	MIN 1" MECHANICALLY ATTACHED POLYISO
VAPOR BARRIER	MANUFACTURER APPROVED VAPOR BARRIER



### 20 NEW NOMENCLATURE

AREA	APPROX. SQ. FT.	EXISTING NOMENCLATURE	NEW NOMENCLATURE	REMARKS
A	10,615	WD	A	-
A1	515	WD	A	-
A2	1,515	WD	A	-
A3	235	WD	A	-
A4	4,370	WD	A	-
A5	1,845	WD	A	-
B	1,485	WD	A	-
C	1,680	WD	A	-
D	3,300	WD	A	-
E	3,300	WD	A	-
F	3,300	WD	A	-
G	3,300	WD	A	-
H	4,140	WD	A	-
I	4,340	CRMTL	COATING	1
J	6,150	WD	A	-
J1	260	CRMTL	COATING	1
J2	620	CRMTL	COATING	1
TOTAL	50970			

**13 GENERAL NOTES**

CONTRACTOR SHALL VISIT SITE TO ASCERTAIN EXACT EXISTING CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUEST FOR ADDITIONAL MONEY SHALL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING THE SITE VISIT BY THE CONTRACTOR. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS AND WARRANTY REQUIREMENTS.

DIMENSIONS, DETAILS, EQUIPMENT SIZE AND LOCATION SHOWN IN THESE CONSTRUCTION DOCUMENTS ARE FOR CONVEYANCE OF DESIGN INTENT ONLY. EXIST SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF EXISTING CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN AND CONFIRM.

REFER TO NOMENCLATURE FOR TYPE OF ROOF SYSTEM. ROOF AREAS ARE MARKED WITH DESIGNATED LETTER ON ROOF PLAN.

NOTE THAT SOME OF THE DETAILS DRAWN ARE GENERIC IN NATURE AND ARE NOT NECESSARILY LOCATED AND KEYS TO THE ROOF PLANS.

INDICATED ROOF HEIGHTS ARE GENERAL IN NATURE.

ALL NEW CRICKETS AND TAPERED INSULATION SHALL BE INSTALLED WITH A FINISHED 1/4" PER FOOT MIN. SLOPE. CRICKET THE UP SLOPE SIDE OF ALL SQUARE CURBS AND PROJECTIONS OVER 20" IN WIDTH.

REMOVE ALL ABANDONED EQUIPMENT IDENTIFIED ON SITE AND WITHIN CONSTRUCTION DOCUMENTS. REFER TO MECHANICAL PLANS FOR SITE.

REPLACE ROTTEN AND / OR OTHERWISE DETERIORATED ROOF DECK MATERIAL WITH LIKE MATERIAL AND THICKNESS.

REPLACE ROTTEN AND / OR OTHERWISE DETERIORATED WOOD NAILER MATERIAL WITH LIKE MATERIAL AND THICKNESS.

PATCH EXISTING ROOF DECK FOR HOLES LESS THAN 10" WIDE BY ANCHORING 22 GA. STAINLESS STEEL SHEET METAL TO BOTTOM OF EXISTING STEEL ROOF DECK TO MATCH EXISTING THICKNESS. PATCH EXISTING ROOF DECK FOR HOLES GREATER THAN 10" WIDE BY ANCHORING 22 GA. STAINLESS STEEL SHEET METAL TO BOTTOM OF EXISTING GYPSUM ROOF DECK SPANNING FROM JOIST TO JOIST.

AS APPLICABLE, ALL HVAC AND / OR DX UNITS, ELECTRICAL TRANSFORMERS, ROOF TOP EQUIPMENT, ETC. THAT ARE ON SLEEPERS SHALL BE DISCONNECTED / REMOVED, RAISED, AND PLACED ON NEW CURBED PLATFORMS AS DETAILED AND REINSTALLED / RECONNECTED. ALL CURB MOUNTED HVAC UNITS, EQUIPMENT, ETC. SHALL HAVE A MINIMUM 8" CURB HEIGHT AND ARE TO BE RAISED AS REQUIRED.

ALL DISCONNECTS AND RECONNECTS SHALL BE PERFORMED BY A LICENSED ELECTRICIAN.

WORK TO ANY EXISTING UTILITY CONDUIT OR PIPE SHALL BE PERFORMED BY SPECIFIC LICENSED SUBCONTRACTORS SPECIALIZING IN HVAC, PLUMBING AND ELECTRICAL WORK. PERMITS AND INSPECTIONS ARE REQUIRED. REROUTE AND / OR MODIFY UTILITY CONDUIT OR PIPE AS REQUIRED TO BE INSTALLED AS DETAILED.

UNLESS INDICATED OTHERWISE ON THE CONSTRUCTION DOCUMENTS, REPLACE AND RAISE (AS REQUIRED) ALL EXISTING EXPANSION JOINTS / AREA DIVIDERS / CURB MOUNTED EQUIPMENT / EXISTING ROOF HATCH SKYLIGHTS A MIN. 10" ABOVE ROOF DECK.

ALL SOIL STACK FLASHING SHALL BE A MIN. 10" ABOVE FINISHED ROOF SURFACE. COUPLE PVC PIPE ABOVE DECK AND COUPLE CAST IRON PIPE BELOW DECK.

ALL PIPING / CONDUIT / ETC. SHALL BE A MIN. 10" ABOVE ROOF SURFACE. PROVIDE PORTABLE PIPE HANGERS WITH PROTECTION PADS.

PROVIDE SHEET METAL HOODED (WITH METAL FACE CLOSURE) CAPS, WOOD WOOD CURB, BOX COVER AT ALL GAS AND WATER PIPE ROOF PENETRATIONS AS DETAILED. PROVIDE POSITIVE SLOPE AWAY FROM FACE COVER.

PROVIDE WALKWAY PROTECTION PADS AS SPECIFIED AROUND ALL ROOF HATCHES, HVAC ROOF TOP UNITS, DOORS THAT OPEN ON ROOF AND AT TOP AND BOTTOM OF ALL ROOF TOP ACCESS LOCATIONS.

INSTALL NEW SPLASH PAN AT ALL LOCATIONS WHERE ROOF DRAINAGE DISCHARGES ONTO ROOF AREA. INSTALL NEW SPLASH BLOCKS WHERE ROOF DRAINAGE DISCHARGES ON GROUND.

ISOLATE ALL HEAT PIPES / FLUES AS DETAILED AND RECOMMENDED AND OUTLINED IN THE NRCA MANUAL FOR HOT STACK FLASHING.

ALL OUTSIDE AIR INTAKES SHALL BE COVERED TO ELIMINATE ODORS AND FUMES FROM ENTERING INTO THE BUILDING DURING CONSTRUCTION WORK.

EXAMINE AND CLEAN EXISTING DRAIN LINES OF DEBRIS AND BLOCKAGE, FLUSH WITH WATER TO ENSURE THAT DRAINS FLOW FREELY. REPAIR EXISTING DRAINS AS REQUIRED.

OWNER WILL VERIFY PROPER OPERATION OF ALL ROOF TOP EQUIPMENT BEFORE AND AFTER THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL INOPERABLE EQUIPMENT PRIOR TO RELEASE OF PROJECT.

REPLACE ALL RUSTED AND / OR DETERIORATED EXISTING METAL VENT FLASHING AND FLUES.

PRIOR TO COMMENCEMENT OF WORK, COORDINATE WITH ALL ENTIRE ROOF WITH ROOFING MANUFACTURER'S TECHNICAL REPRESENTATIVE TO IDENTIFY AND LOCATE ALL AREAS OF HIGH SLOPE OR OTHER CONDITIONS WHICH MIGHT REQUIRE SPECIAL PROCEDURES FOR SYSTEM ATTACHMENT.

PAINT ALL EXPOSED GAS PIPE PER DISTRICT STANDARD.

EXISTING OVERFLOW DRAIN LINE PIPES ARE TO BE REPLACED WITH OVERFLOW ROOF DRAIN ASSEMBLIES PER PLUMBING SPECIFICATIONS.

### 8 EXISTING NOMENCLATURE

PIPE PENETRATION (RE: 8/A2.0)	ELECTRICAL (RE: 18/A2.0)
BOILER VENT (RE: 8/A2.0)	ANTENNA (RE: 18/A2.0)
POWER VENT (RE: 25/A2.0)	DOWNSPOUT (RE: 6/A2.0)
HEATER VENT (RE: 8/A2.0)	SCUPPER (RE: 16/A2.0)
CURB MOUNTED VENT (RE: 25/A2.0)	ROOF HATCH (RE: 26/A2.0)
CURB MOUNTED VENT (RE: 25/A2.0)	ELECTRICAL LINE (RE: 3/A2.0)
PULL BOX	GAS LINE (RE: 3/A2.0)
SKYLIGHT (RE: 20/A2.0)	CONDENSATE LINE (RE: 3/A2.0)
CURB MOUNTED A/C (RE: 25/A2.0)	CROSS OVER LADDER (RE: 23/A2.0)
RETROFIT DRAIN (RE: 8/A2.0)	WALK LADDER (RE: 23/A2.0)
ROOF DRAIN OVERFLOW (RE: 30/A2.0 & 1/A2.0)	WALK PADS (RE: 7/A2.0)
MISC CURB (RE: 25/A2.0)	CRICKET

### 7 CODES & STANDARDS

APPLICABLE CODES AND STANDARDS:

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC)  
2022 CALIFORNIA BUILDING CODE (CBC)  
2022 CALIFORNIA ELECTRICAL CODE (CEC)  
2022 CALIFORNIA MECHANICAL CODE (CMC)  
2022 CALIFORNIA PLUMBING CODE (CPC)  
2022 CALIFORNIA ENERGY CODE (CEC)  
2022 CALIFORNIA FIRE CODE (CFC)  
2022 CALIFORNIA GREEN BUILDING CODE (CALGREEN)  
2022 CALIFORNIA REFERENCED STANDARDS CODE

**DSA REQUIREMENTS:**  
DSA REVIEW: EXEMPTED - ROOF REPAIR SCOPE - DSA IR A-22

**APPLICABLE LOADS (CBC 1603A.1 & ASCE 7-16)**  
BUILDING OCCUPANCY CATEGORY: E (EDUCATION)  
NON-OCCUPIED ROOF LIVE LOAD: 20PSF  
SUPERIMPOSED DEAD LOAD (ASCE 7-16): 3 PSF < 5 PSF

1/2" DENS DECK	2.1 PSF
1/2" RIGID INSULATION	0.2 PSF
2-PLY MEMBRANE	1.4 PSF
TOTAL	3.7 PSF

RAIN 100-YR: 2IN/HR  
SNOW: P<sub>s</sub> = 0  
ICE WIND: EXPOSURE CATEGORY B (CBC 2022)  
V<sub>w</sub> = 102 MPH (CBC Table 1609.3.1 & 1609.3(2))  
V<sub>ult</sub> = 85 MPH

### 1 INDEX

#	DESCRIPTION	DATE
1	PVC Termination Details & Voltage Update	3/20/24

95% CD

## G0.0

### GENERAL INFORMATION

PROJECT NUMBER	230610.3
DATE	03/07/2024
PTN NO.	XXXX-XXXX
DRAWN BY	AV



ARCHITECT PBK Architects, Inc.  
BEAM Professionals  
1110 Iron Point Road  
Suite 200  
Folsom, CA 95630  
916-358-9922  
BEAMProf.com

JONATA MIDDLE SCHOOL -  
ROOF REPLACEMENT  
301 2nd ST.  
BUELLTON, CA 93427  
95% CD



PROJECT NUMBER	230610.3
DATE	03/07/2024
PTN NO.	XXXX-XXXX
DRAWN BY	AV

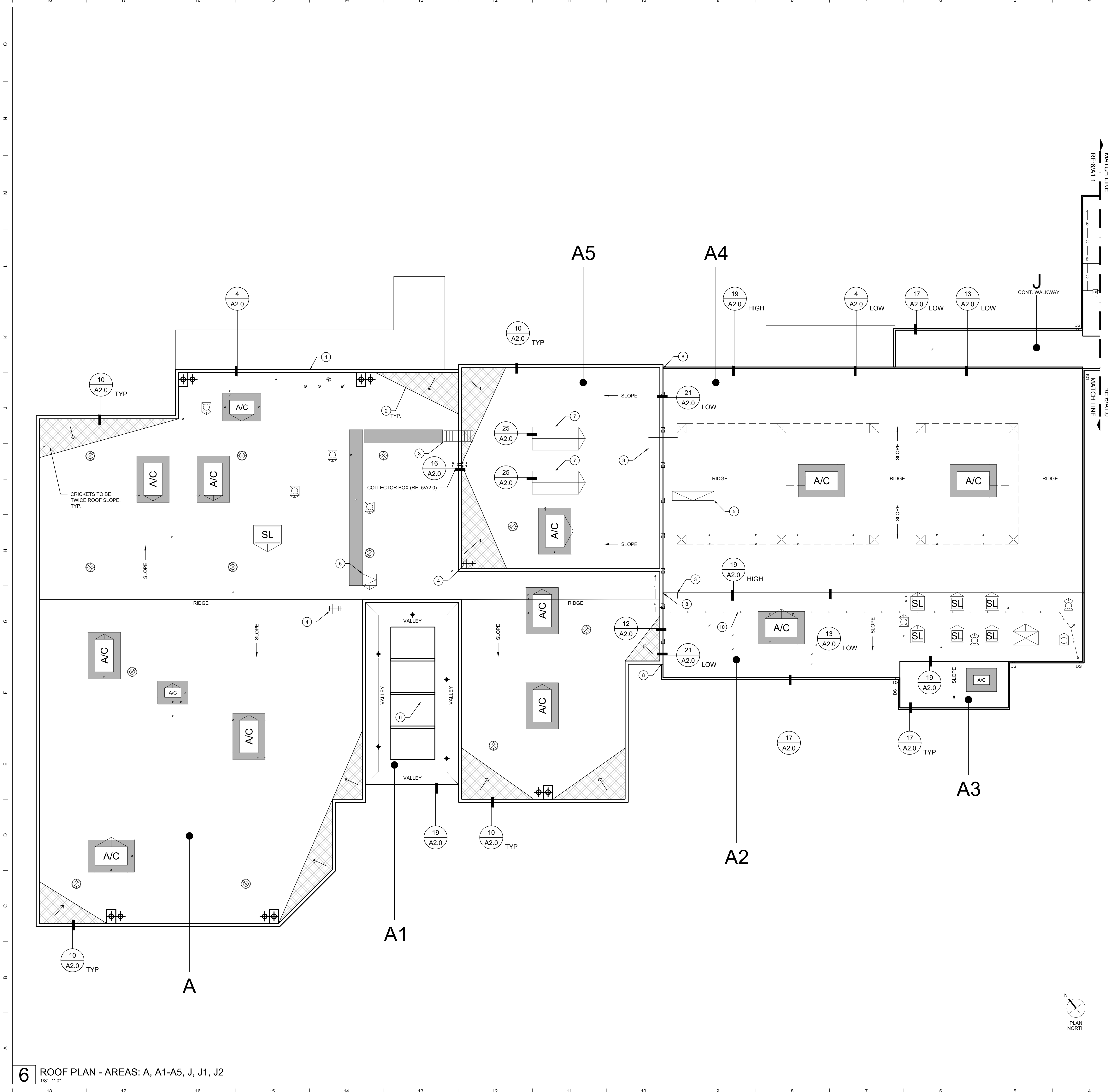
#	DESCRIPTION	DATE
1	PVC Termination Details & Voltage Update	3/20/24

95% CD

## G0.0

### GENERAL INFORMATION





**6** ROOF PLAN - AREAS: A, A1-A5, J, J1, J2  
1/8"=1'-0"

- 1 COPING METAL TO BE REMOVED AND REPLACED WITH NEW. REFERENCE 10/A2.0 FOR DETAILING.
- 2 CRICKETING TO SLOPE AS SHOWN. CONTRACTOR TO VERIFY IN FIELD LOCATIONS.
- 3 LADDER TO BE REMOVED, PROTECTED DURING DEMO AND SUBSEQUENT ROOF REPAIR, AND RE-INSTALLED. REFERENCE 23/A2.0 FOR DETAILING.
- 4 ANTENNA TO BE REMOVED, PROTECTED DURING DEMO AND SUBSEQUENT ROOF REPAIR, AND RE-INSTALLED AS EXISTING. COORDINATE WITH DISTRICT IF ANTENNA IS STILL IN OPERATION.
- 5 (N) ROOF HATCH TO BE INSTALLED WITH (N) TELESCOPING SAFETY POST AND (N) ROOF HATCH SAFETY RAILING. REFERENCE SPECIFICATIONS 07 72 33.
- 6 (N) BIRD NETTING/SCREENING TO BE COORDINATED WITH DISTRICT.
- 7 (N) SMOKE HATCH TO BE INSTALLED PER SPECIFICATIONS 07 72 36.
- 8 EXPANSION JOINT METAL COVER, PER DETAIL 21/A2.0, TO TRANSITION VERTICALLY DOWNWARD TO ENSURE EJ IS PROTECTED FROM THE ELEMENTS.
- 9 INSTALL (N) DOWNSPOUTS PER SPECIFICATIONS 07 72 00 AND DETAIL 6/A2.0. TYPICAL.
- 10 INSTALL PIPE SUPPORTS AS APPLICABLE PER SPECIFICATIONS 07 72 00 AND DETAIL 3/A2.0.

**2** KEYNOTES

⊗ PIPE PENETRATION (RE: 8/A2.0)	⊕ ELECTRICAL (RE: 18/A2.0)
⊗ BOILER VENT (RE: 8/A2.0)	⊕ ANTENNA (RE: 18/A2.0)
⊗ POWER VENT (RE: 25/A2.0)	⊕ DOWNSPOUT (RE: 6/A2.0)
⊗ HEATER VENT (RE: 8/A2.0)	⊕ SCUPPER (RE: 16/A2.0)
⊗ CURB MOUNTED VENT (RE: 25/A2.0)	⊕ ROOF HATCH (RE: 26/A2.0)
⊗ CURB MOUNTED VENT (RE: 25/A2.0)	⊕ ELECTRICAL LINE (RE: 3/A2.0)
PB PULL BOX	⊕ GAS LINE (RE: 3/A2.0)
SL SKYLIGHT (RE: 20/A2.0)	⊕ CONDENSATE LINE (RE: 3/A2.0)
A/C CURB MOUNTED A/C (RE: 25/A2.0)	⊕ CROSS OVER LADDER (RE: 23/A2.0)
⊕ RETROFIT DRAIN (RE: 8/A2.0)	⊕ WALL LADDER (RE: 23/A2.0)
⊕ ROOF DRAIN OVERFLOW (RE: 30/A2.0 & 1/A2.0)	⊕ WALK PADS (RE: 7/A2.0)
⊗ MISC CURB (RE: 25/A2.0)	⊕ CRICKET

**1** LEGEND

ARCHITECT PBK Architects, Inc.  
 BEAM Professionals  
 1110 Iron Point Road  
 Suite 200  
 Folsom, CA 95630  
 916-355-8922  
 BEAMProf.com

**JONATA MIDDLE SCHOOL -  
 ROOF REPLACEMENT**

301 2nd ST.  
 BUELLTON, CA 93427  
 95% CD

PROFESSIONAL SEAL

PROJECT NUMBER  
230610.3

DATE  
03/07/2024

PTN NO.  
XXXXX-XXXX

DRAWN BY  
AV

REVISIONS		
#	DESCRIPTION	DATE
1	PVC Termination Details & Ventage Updates	3/20/24

95% CD

**A1.0**

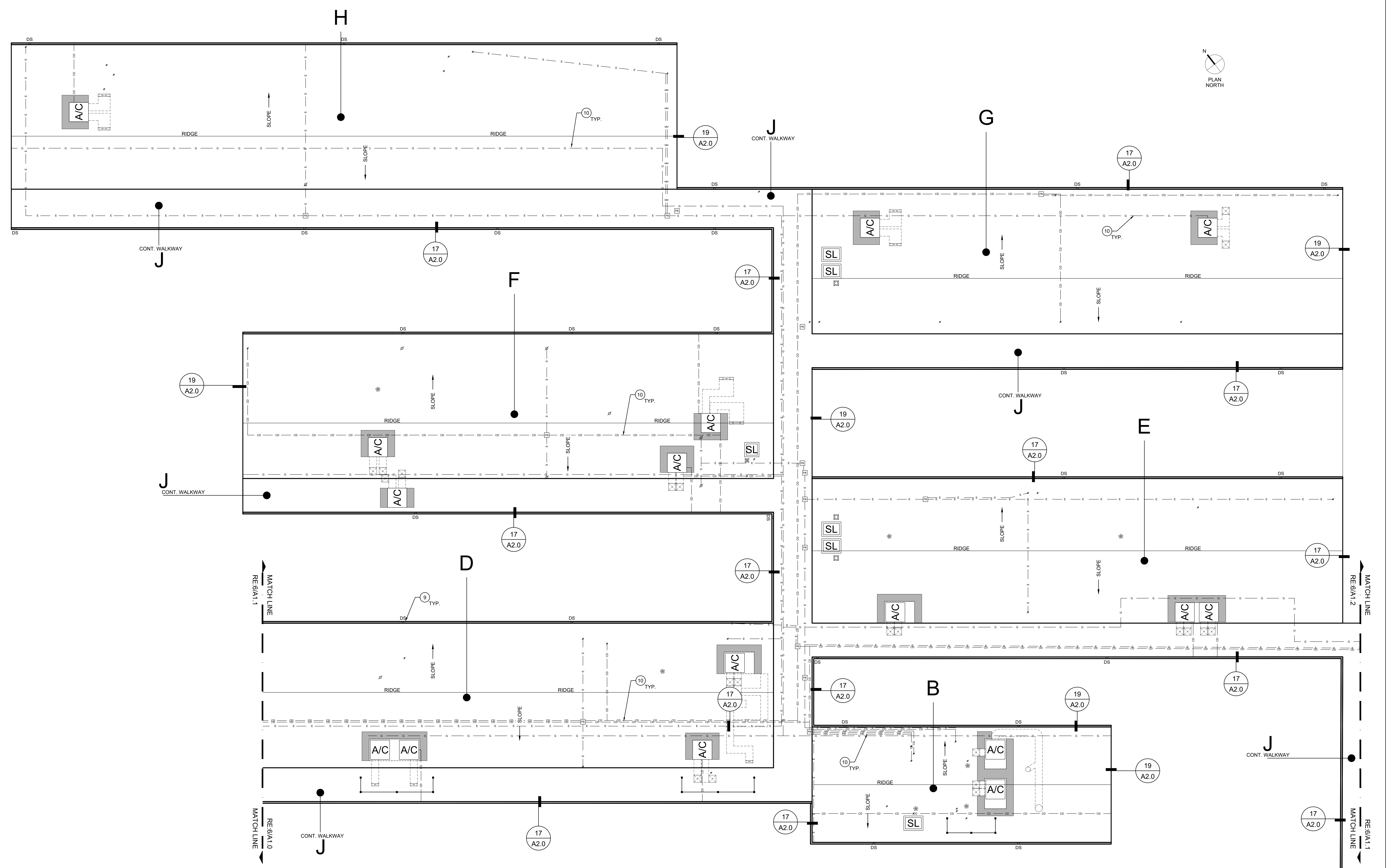
**ROOF PLAN**

- 1 COPING METAL TO BE REMOVED AND REPLACED WITH NEW. REFERENCE 10/A2.0 FOR DETAILING.
- 2 CRICKETING TO SLOPE AS SHOWN. CONTRACTOR TO VERIFY IN FIELD LOCATIONS.
- 3 LADDER TO BE REMOVED, PROTECTED DURING DEMO AND SUBSEQUENT ROOF REPAIR, AND RE-INSTALLED. REFERENCE 23/A2.0 FOR DETAILING.
- 4 ANTENNA TO BE REMOVED, PROTECTED DURING DEMO AND SUBSEQUENT ROOF REPAIR, AND RE-INSTALLED AS EXISTING. COORDINATE WITH DISTRICT IF ANTENNA IS STILL IN OPERATION.
- 5 (N) ROOF HATCH TO BE INSTALLED WITH (N) TELESCOPING SAFETY POST AND (N) ROOF HATCH SAFETY RAILING. REFERENCE SPECIFICATIONS 07 72 33.
- 6 (N) BIRD NETTING/SCREENING TO BE COORDINATED WITH DISTRICT.
- 7 (N) SMOKE HATCH TO BE INSTALLED PER SPECIFICATIONS 07 72 36.
- 8 EXPANSION JOINT METAL COVER, PER DETAIL 21/A2.0, TO TRANSITION VERTICALLY DOWNWARD TO ENSURE EJ IS PROTECTED FROM THE ELEMENTS.
- 9 INSTALL (N) DOWNSPOUTS PER SPECIFICATIONS 07 72 00 AND DETAIL 6/A2.0. TYPICAL.
- 10 INSTALL PIPE SUPPORTS AS APPLICABLE PER SPECIFICATIONS 07 72 00 AND DETAIL 3/A2.0.

- PIPE PENETRATION (RE: 8/A2.0)
- BOILER VENT (RE: 8/A2.0)
- POWER VENT (RE: 25/A2.0)
- HEATER VENT (RE: 8/A2.0)
- CURB MOUNTED VENT (RE: 25/A2.0)
- CURB MOUNTED VENT (RE: 25/A2.0)
- PULL BOX
- SKYLIGHT (RE: 20/A2.0)
- CURB MOUNTED A/C (RE: 25/A2.0)
- RETROFIT DRAIN (RE: 8/A2.0)
- ROOF DRAIN OVERFLOW (RE: 30/A2.0 & 1/A2.0)
- MISC CURB (RE: 25/A2.0)
- ELECTRICAL (RE: 18/A2.0)
- ANTENNA (RE: 18/A2.0)
- DOWNSPOUT (RE: 6/A2.0)
- SCUPPER (RE: 16/A2.0)
- ROOF HATCH (RE: 26/A2.0)
- ELECTRICAL LINE (RE: 3/A2.0)
- GAS LINE (RE: 3/A2.0)
- CONDENSATE LINE (RE: 3/A2.0)
- CROSS OVER LADDER (RE: 23/A2.0)
- WALL LADDER (RE: 23/A2.0)
- WALK PADS (RE: 7/A2.0)
- CRICKET

**2** KEYNOTES

**1** LEGEND



**6** ROOF PLAN - AREAS B, D, E, F, G, J.  
1/8"=1'-0"



ARCHITECT PBK Architects, Inc.  
BEAM Professionals  
1110 Iron Point Road  
Suite 200  
Folsom, CA 95630  
916-355-8922  
BEAMProf.com

JONATA MIDDLE SCHOOL -  
ROOF REPLACEMENT

301 2nd ST.  
BUELLTON, CA 93427  
95% CD



PROJECT NUMBER	230610.3
DATE	03/07/2024
PTN NO.	xxxxx-xxxx
DRAWN BY	AV

REVISIONS		DATE
#	DESCRIPTION	DATE
1	PVC Termination Details & Ventage Updates	3/27/24

95% CD

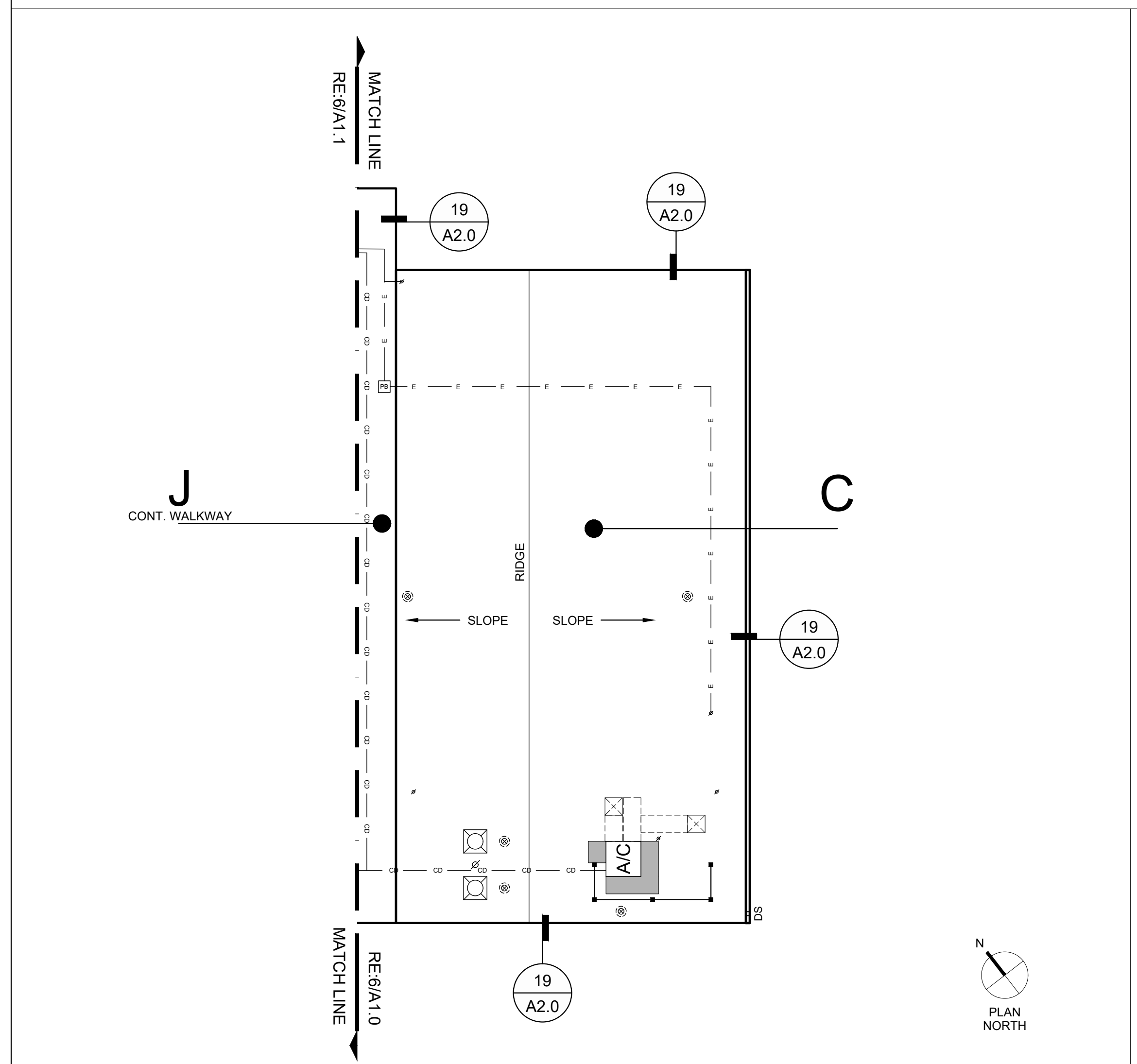
**A1.1**

ROOF PLAN CONT.

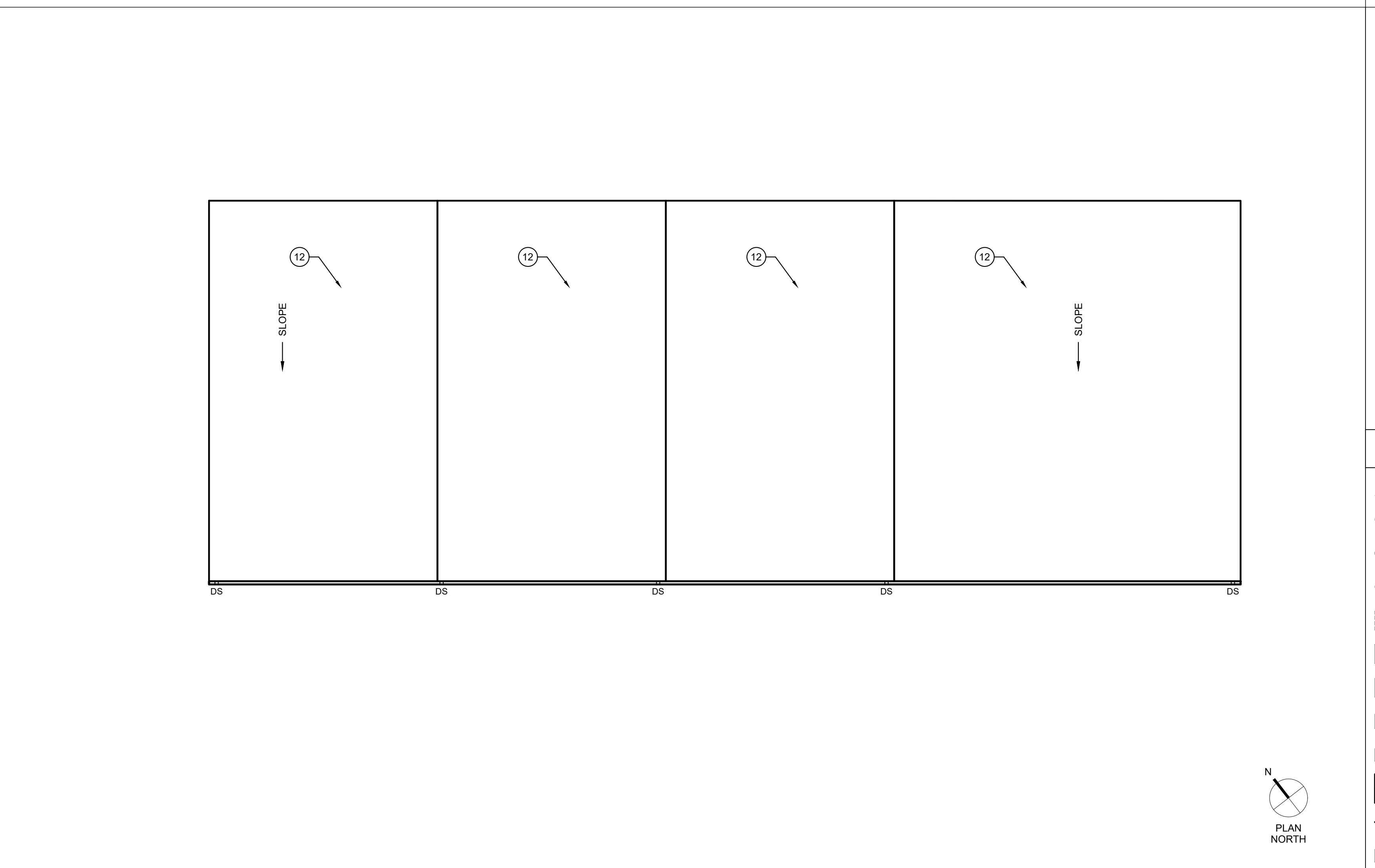


18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

O  
N  
M  
L  
K  
J  
I  
H  
G  
F  
E  
D  
C  
B  
A



**6** ROOF PLAN - AREA "C"  
1/8"=1'-0"



**4** PORTABLES ROOF PLAN - AREA "I"  
1/8"=1'-0"

- 1 COPING METAL TO BE REMOVED AND REPLACED WITH NEW. REFERENCE XIX# FOR DETAILING.
- 2 CRICKETING TO SLOPE AS SHOWN. CONTRACTOR TO VERIFY IN FIELD LOCATIONS.
- 3 LADDER TO BE REMOVED, PROTECTED DURING DEMO AND SUBSEQUENT ROOF REPAIR, AND RE-INSTALLED. REFERENCE XIX# FOR DETAILING.
- 4 ANTENNA TO BE REMOVED, PROTECTED DURING DEMO AND SUBSEQUENT ROOF REPAIR, AND RE-INSTALLED.
- 5 (N) ROOF HATCH TO BE INSTALLED WITH (N) TELESCOPING SAFETY POST AND (N) ROOF HATCH SAFETY RAILING. REFERENCE SPECIFICATIONS XX XX XX.
- 6 (N) BIRD NETTING/SCREENING TO BE INSTALLED.
- 7 (N) SMOKE HATCH TO BE INSTALLED PER SPECIFICATIONS XX XX XX.
- 8 EXPANSION JOINT METAL COVER, PER DETAIL XXX, TO TRANSITION VERTICALLY DOWNWARD TO ENSURE EJ IS PROTECTED FROM THE ELEMENTS.
- 9 INSTALL (N) DOWNSPOUTS PER SPECIFICATIONS XX XX XX AND DETAIL XXX. TYPICAL.
- 10 ENSURE GUTTERS SLOPE APPROPRIATELY TO DOWNSPOUT TO PROMOTE PROPER WATER SHEDDING TECHNIQUE.
- 11 INSTALL PIPE SUPPORTS AS APPLICABLE PER SPECIFICATIONS XX XX XX AND DETAIL XXX.
- 12 ROOF TO RECEIVE COATING PER ADD ALTERNATE #1. REFERENCE SPECIFICATIONS XX XX XX.

2 KEYNOTES	
⊗ PIPE PENETRATION (RE: 8/A2.0)	⊖ ELECTRICAL (RE: 18/A2.0)
⊗ BOILER VENT (RE: 8/A2.0)	⊕ ANTENNA (RE: 18/A2.0)
⊗ POWER VENT (RE: 25/A2.0)	⊗ DOWNSPOUT (RE: 6/A2.0)
⊗ HEATER VENT (RE: 8/A2.0)	⊗ SCUPPER (RE: 16/A2.0)
⊗ CURB MOUNTED VENT (RE: 25/A2.0)	⊗ ROOF HATCH (RE: 26/A2.0)
⊗ CURB MOUNTED VENT (RE: 25/A2.0)	⊖ ELECTRICAL LINE (RE: 3/A2.0)
PB PULL BOX	⊖ GAS LINE (RE: 3/A2.0)
SL SKYLIGHT (RE: 20/A2.0)	⊖ CONDENSATE LINE (RE: 3/A2.0)
A/C CURB MOUNTED A/C (RE: 25/A2.0)	⊗ CROSS OVER LADDER (RE: 23/A2.0)
⊗ RETROFIT DRAIN (RE: 8/A2.0)	⊗ WALL LADDER (RE: 23/A2.0)
⊗ ROOF DRAIN OVERFLOW (RE: 30/A2.0 & 1/A2.0)	⊗ WALK PADS (RE: 7/A2.0)
⊗ MISC CURB (RE: 25/A2.0)	⊗ CRICKET

**1** LEGEND


**BEAM**  
PROFESSIONALS

ARCHITECT PBK Architects, Inc.


BEAM Professionals  
1110 Iron Point Road  
Suite 200  
Folsom, CA 95630  
916-355-8922  
BEAMProf.com

**JONATA MIDDLE SCHOOL -  
ROOF REPLACEMENT**

301 2nd ST.  
BUELLTON, CA 93427  
95% CD



PROFESSIONAL SEAL



PROJECT NUMBER  
230610.3  
DATE  
03/07/2024

PTN NO.  
XXXXX-XXXX  
DRAWN BY  
AV

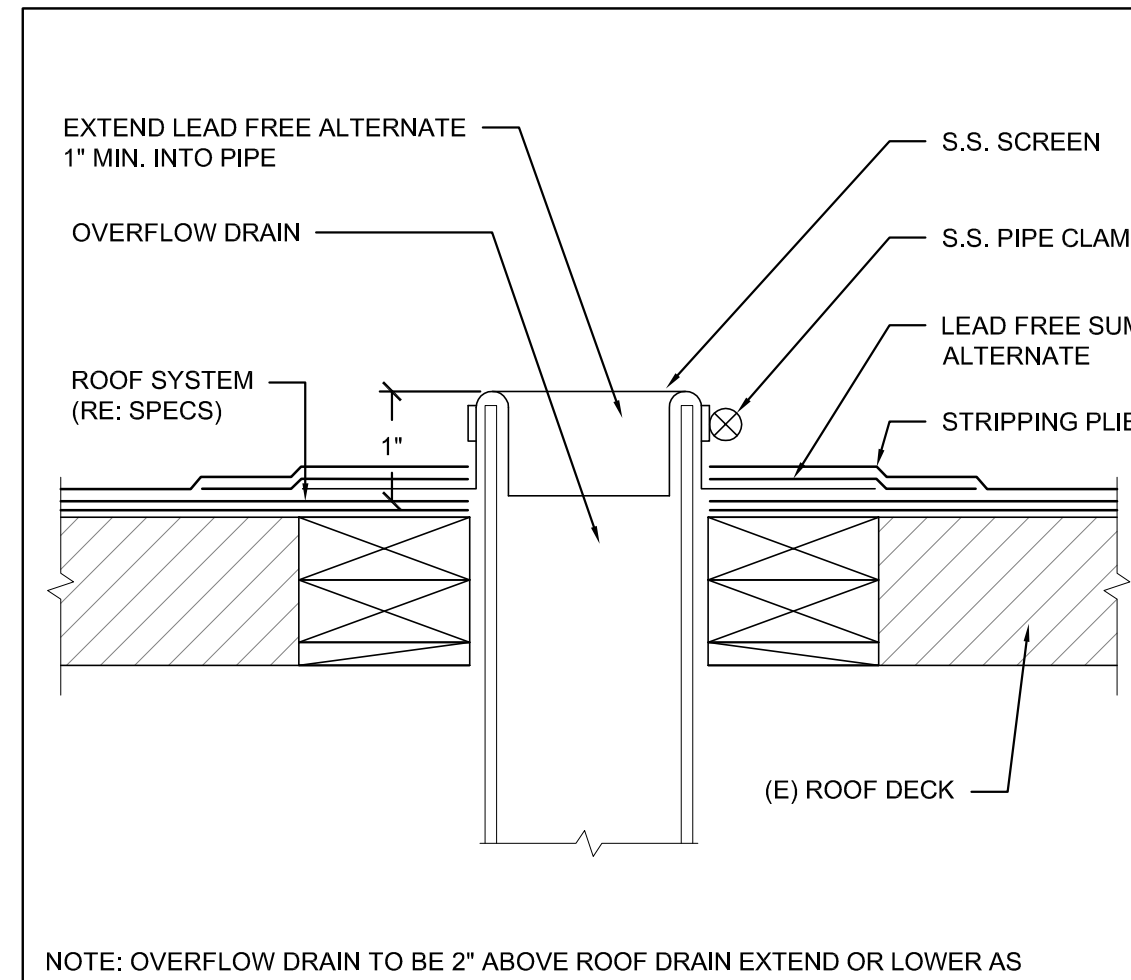
REVISIONS		
#	DESCRIPTION	DATE
1	PVC Termination Details & Ventage Updates	3/2/24

95% CD

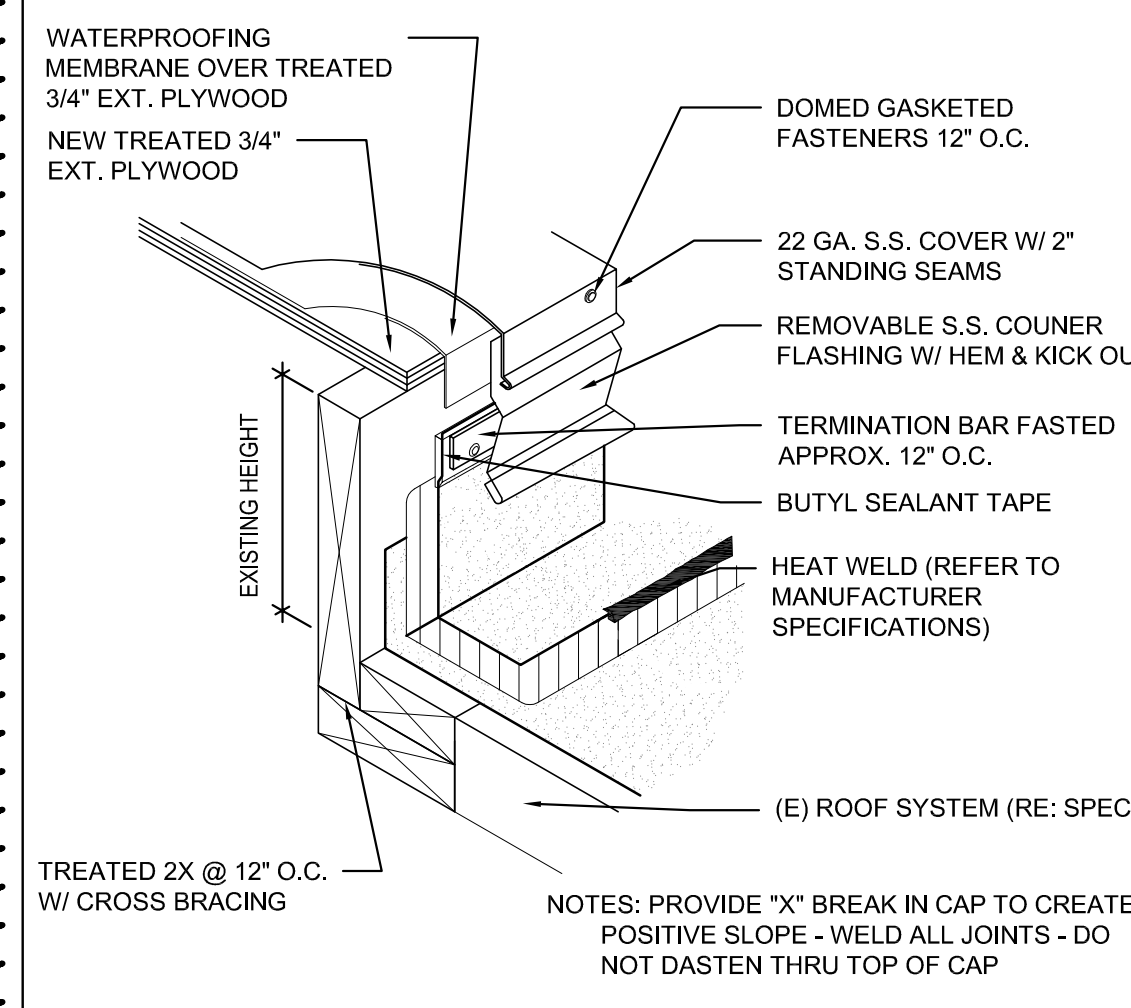
**A1.2**

ROOF PLAN  
CONT.

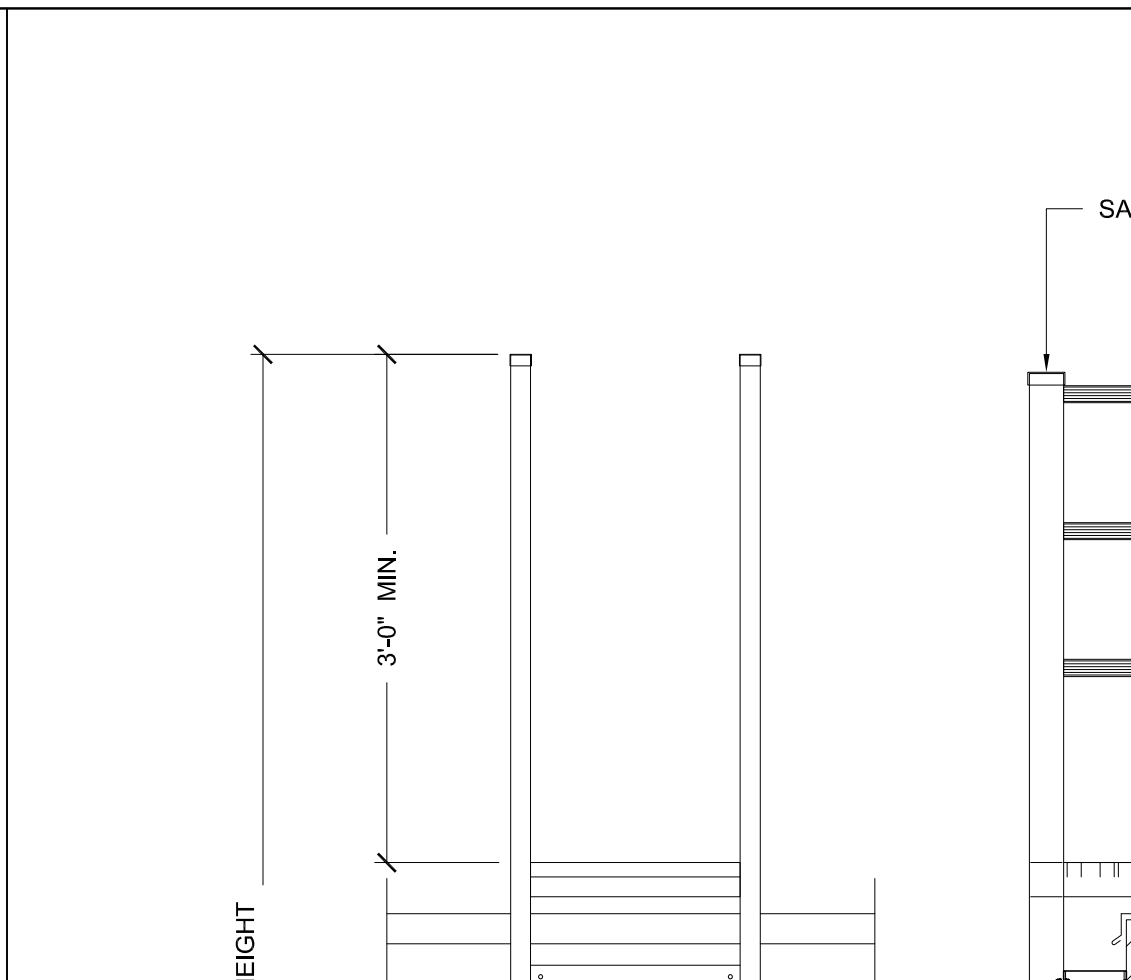




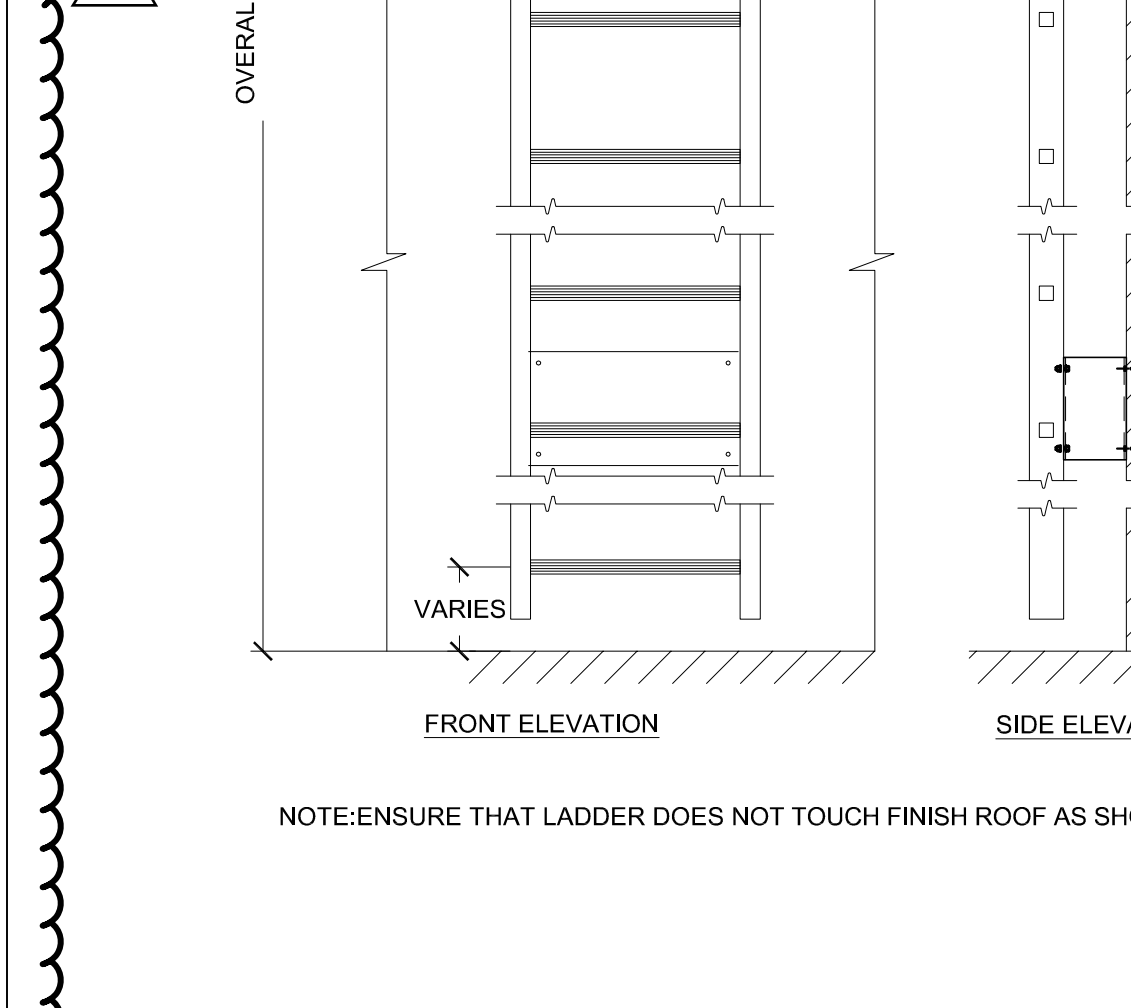
**30 OVERFLOW DRAIN**  
N.T.S.



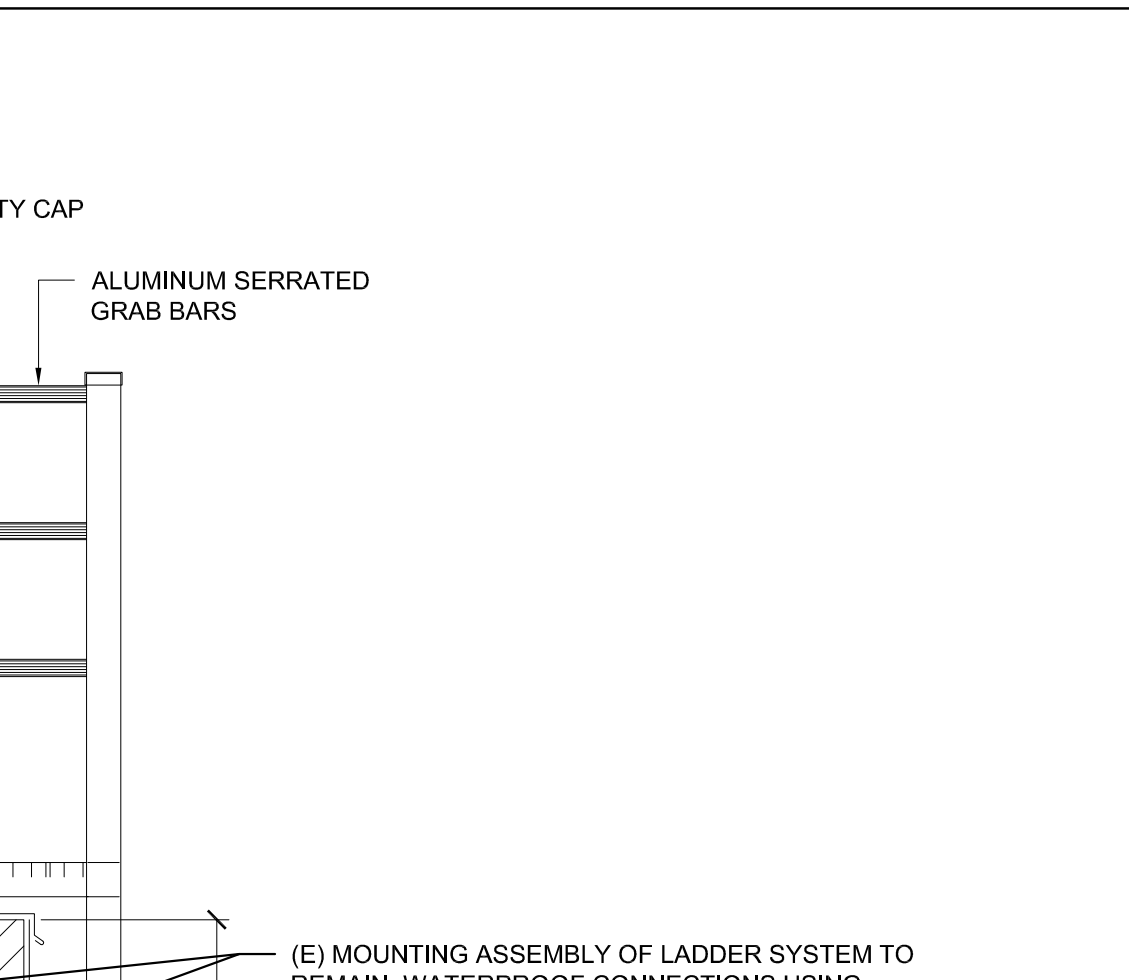
**24 CURBED PLATFORM**  
N.T.S.



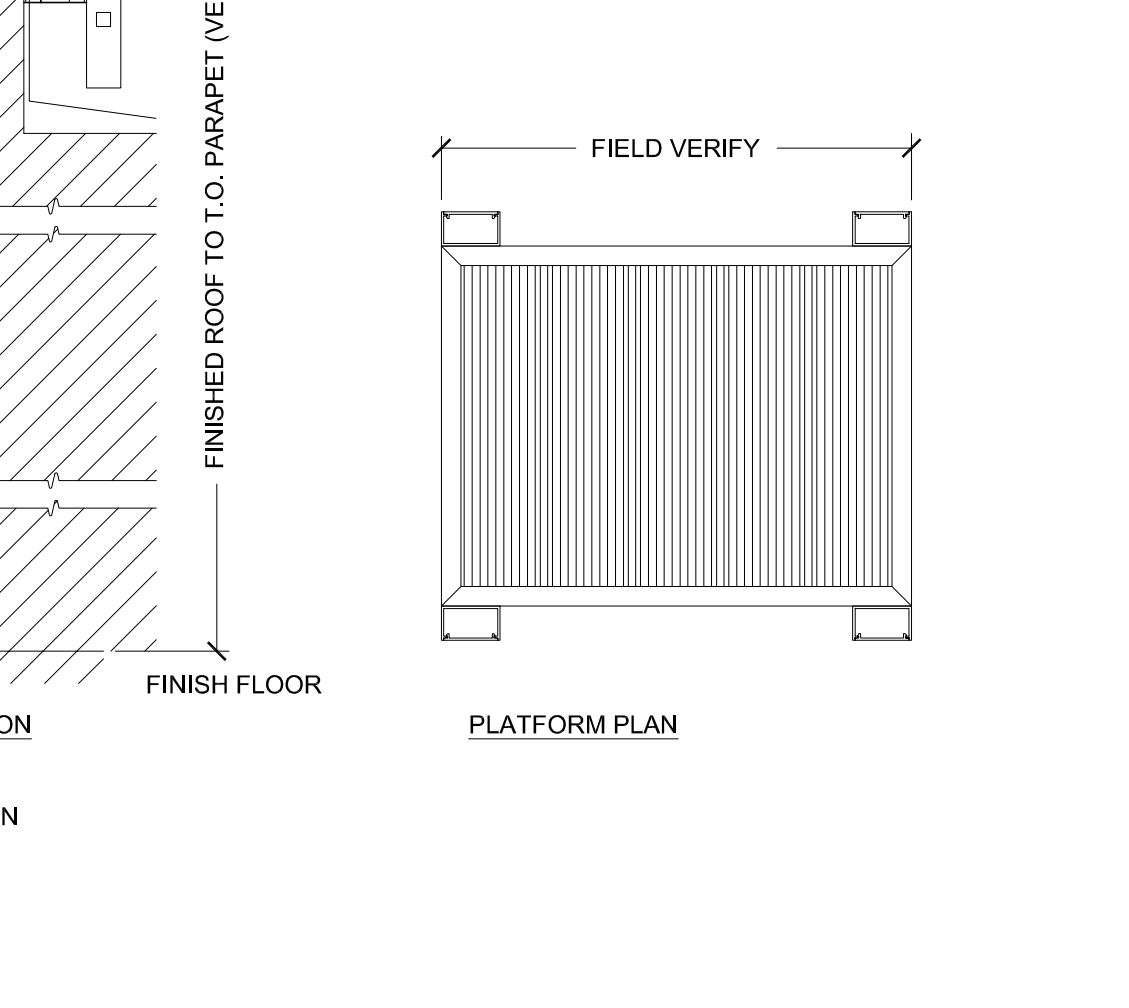
**23 TUBULAR RAIL HIGH PARAPET ACCESS LADDER**  
N.T.S.



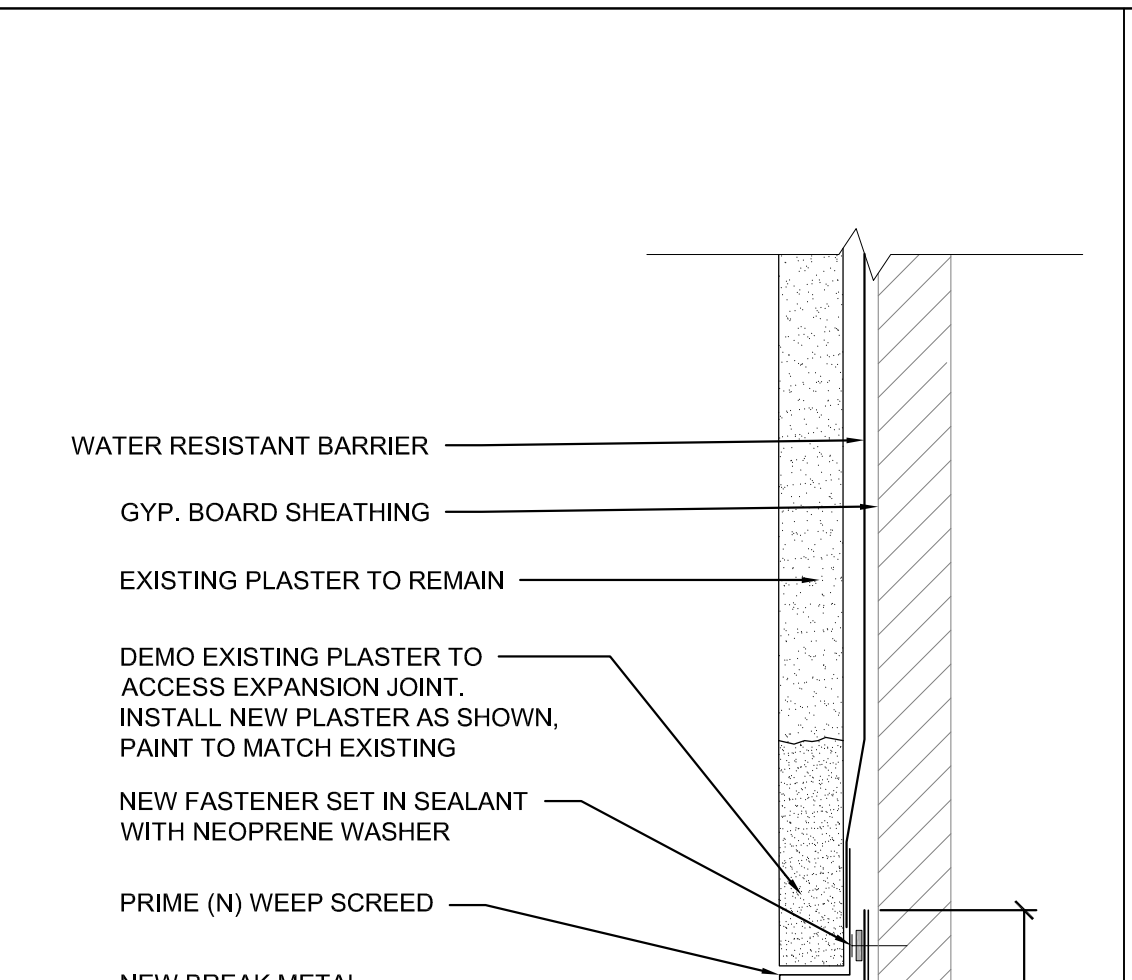
**21 EJ WALL FLASHING**  
N.T.S.



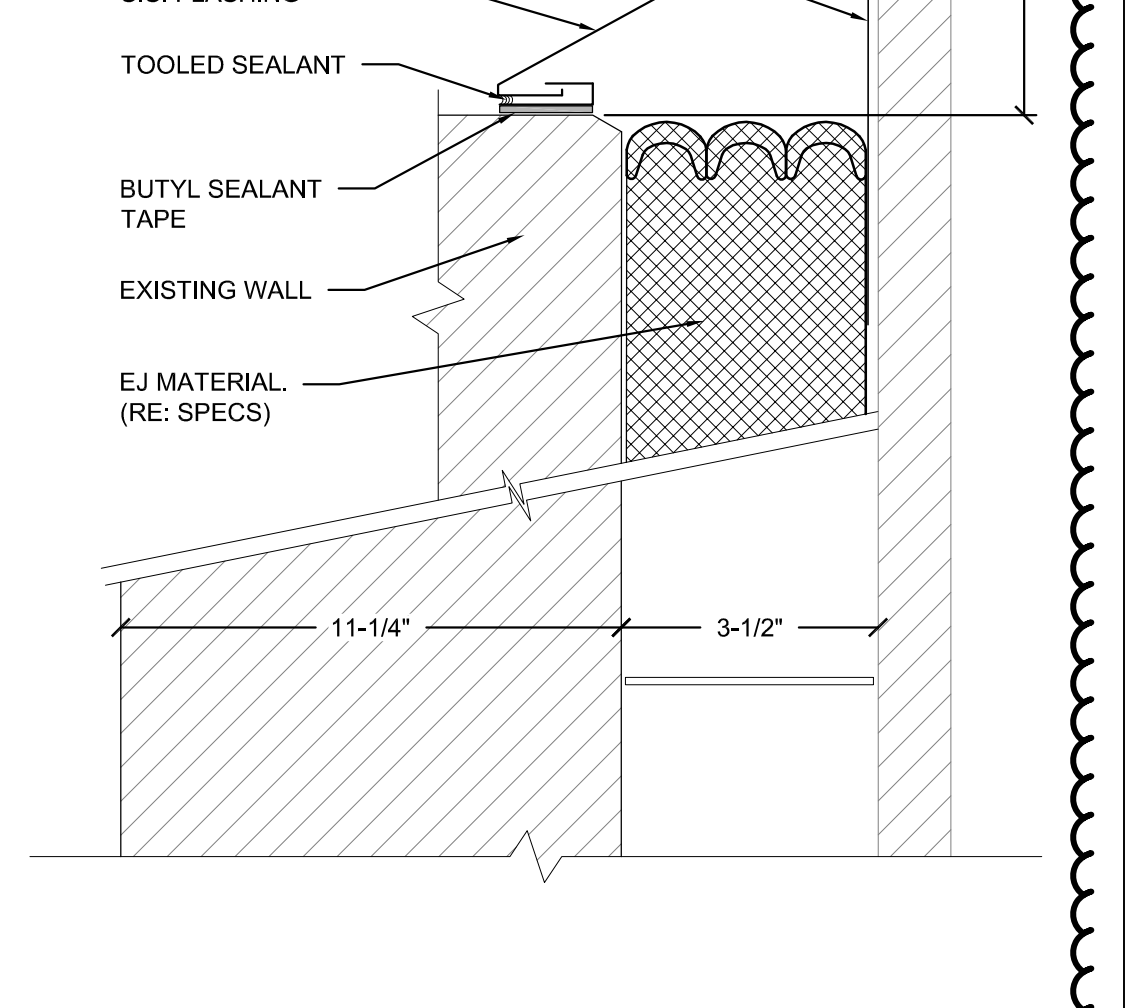
**26 ROOF HATCH**  
N.T.S.



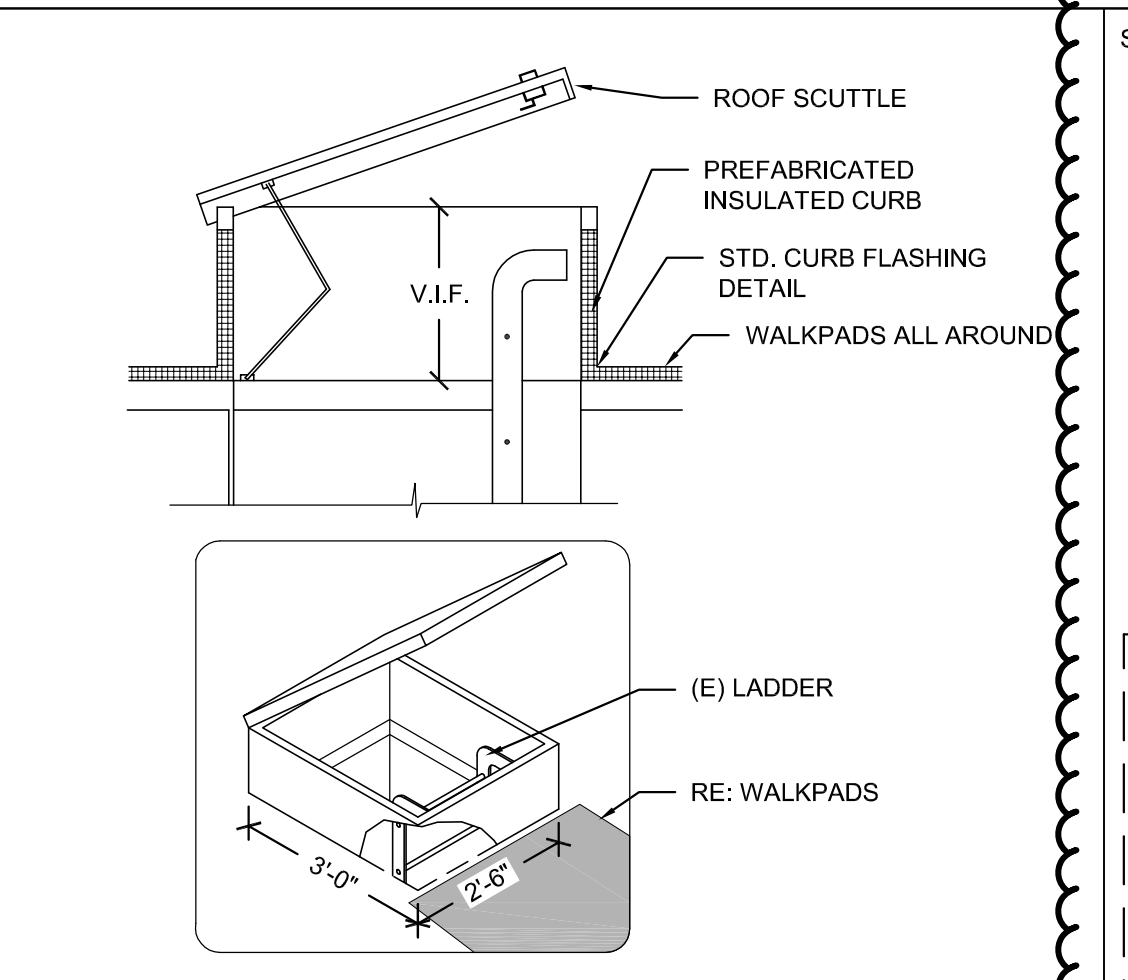
**20 SKYLIGHT CURB**  
N.T.S.



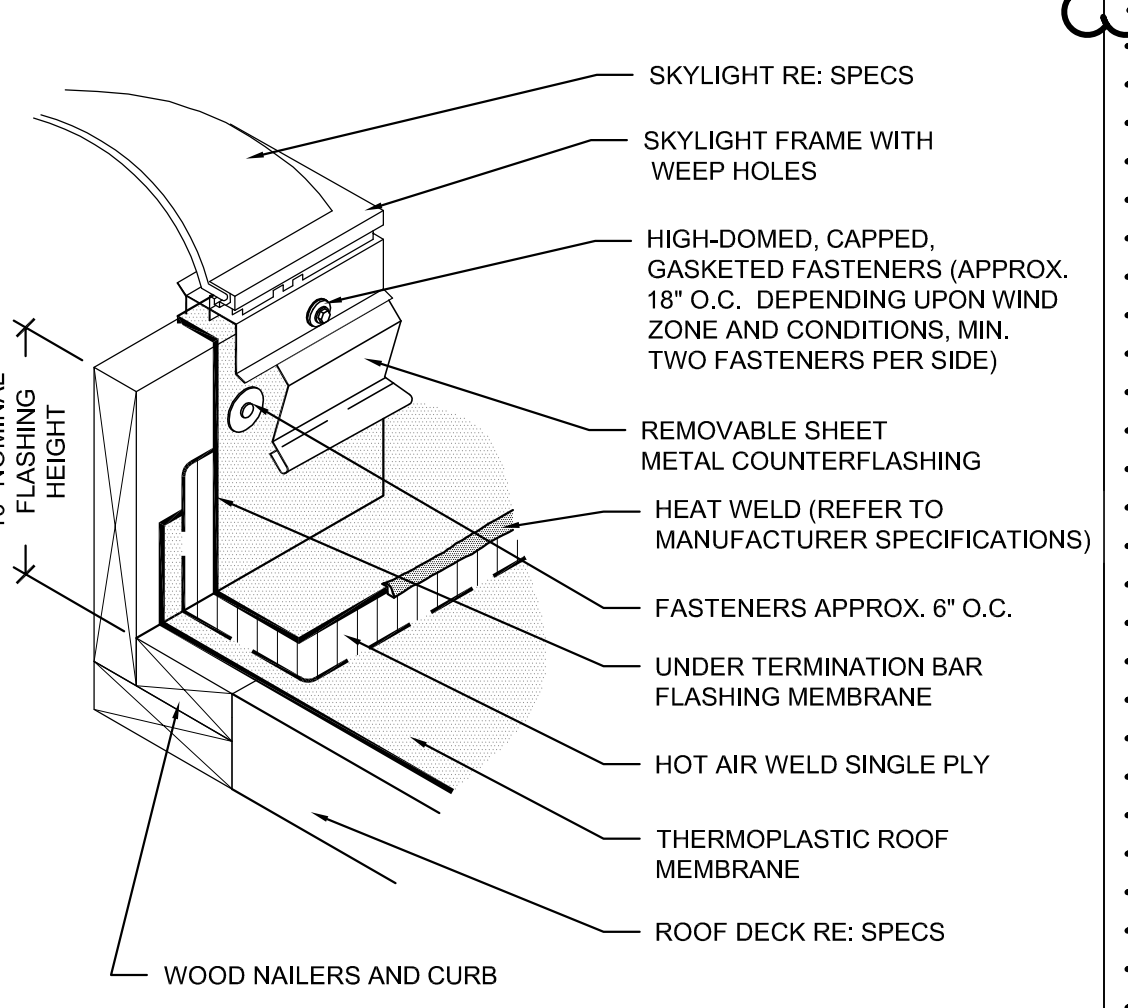
**25 EQUIPMENT CURB**  
N.T.S.



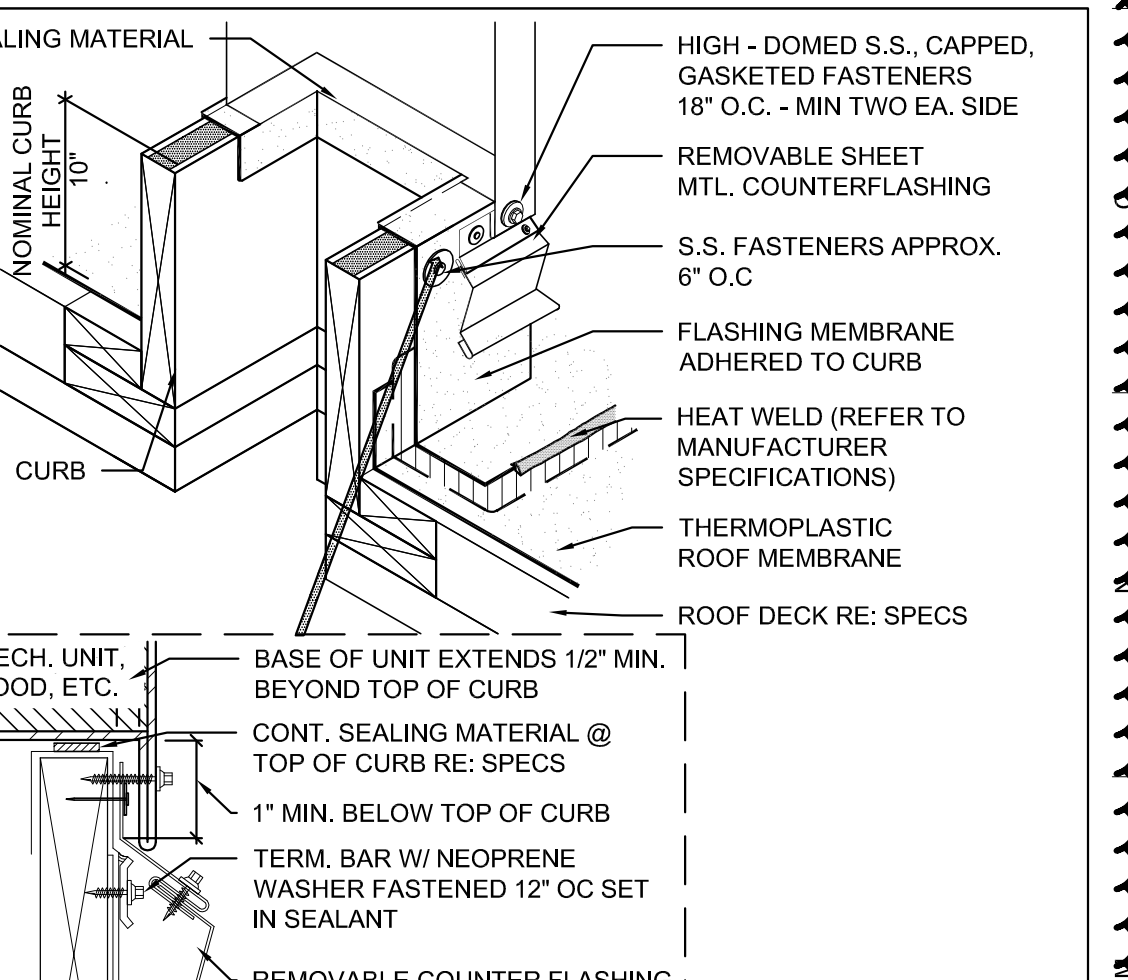
**19 PERIMETER EDGE**  
N.T.S.



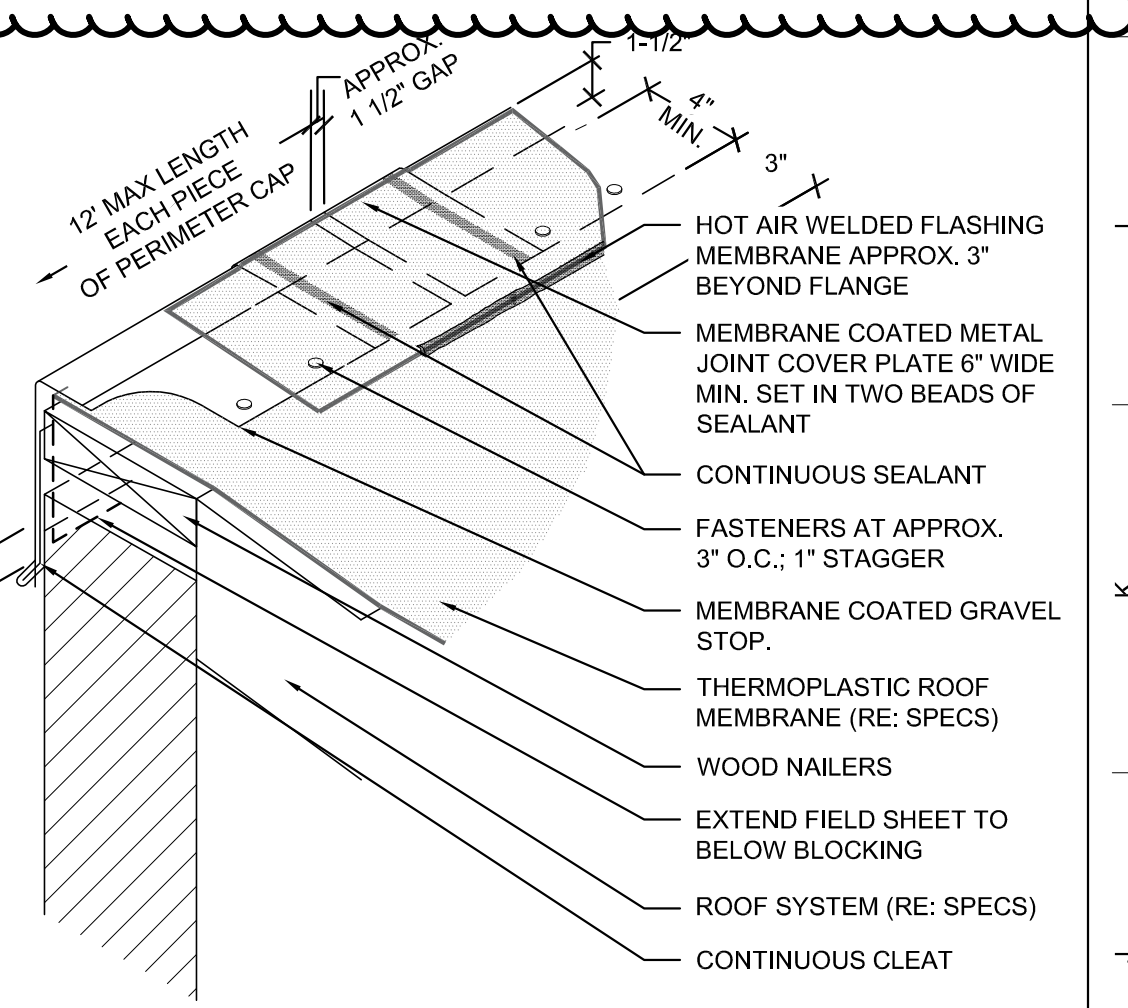
**18 TYPICAL PLUMBING STACK**  
N.T.S.



**17 GUTTER EDGE**  
N.T.S.



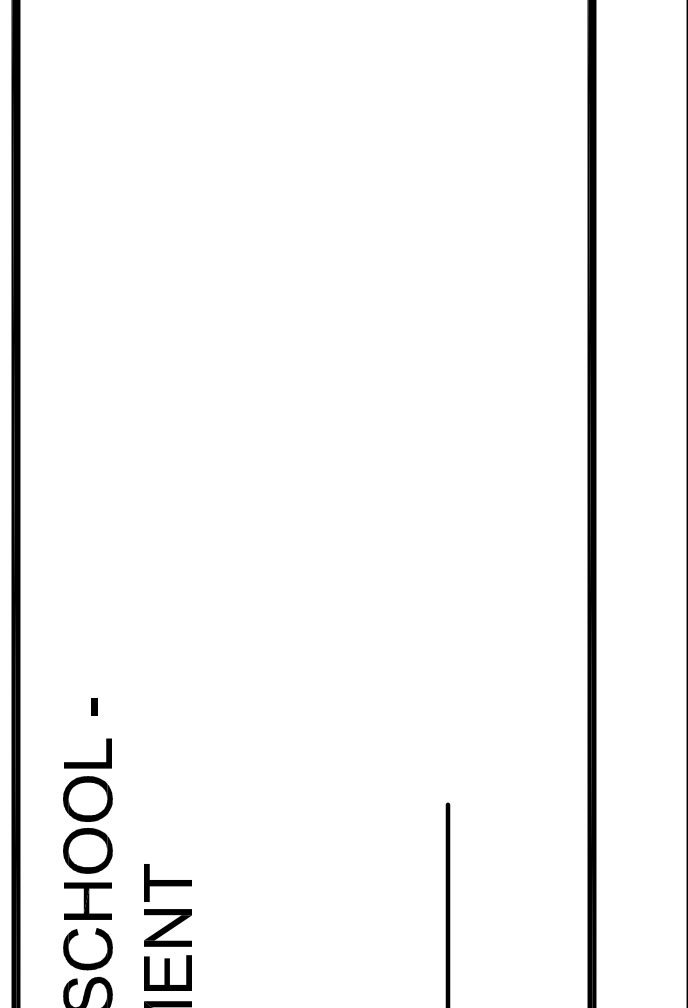
**16 OVERFLOW SCUPPER**  
N.T.S.



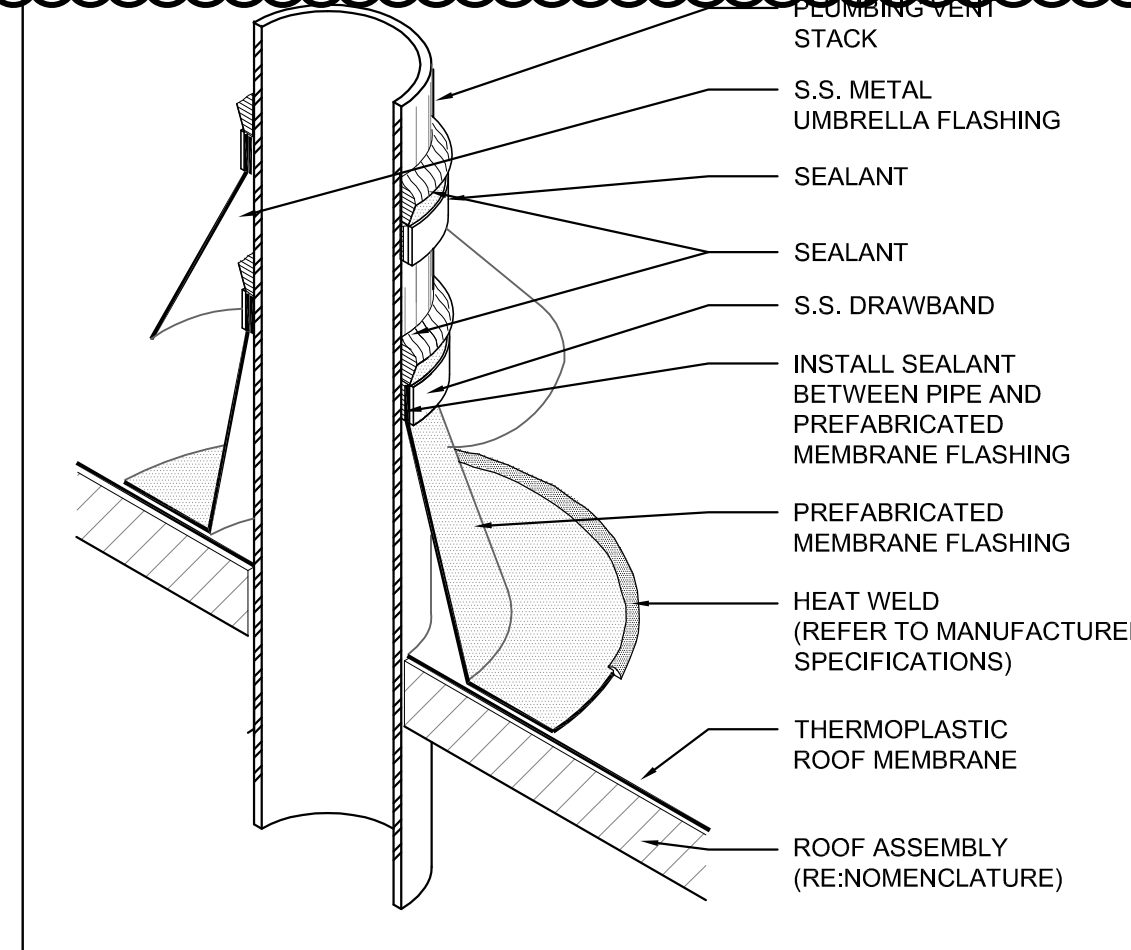
**15 GENERAL**  
N.T.S.



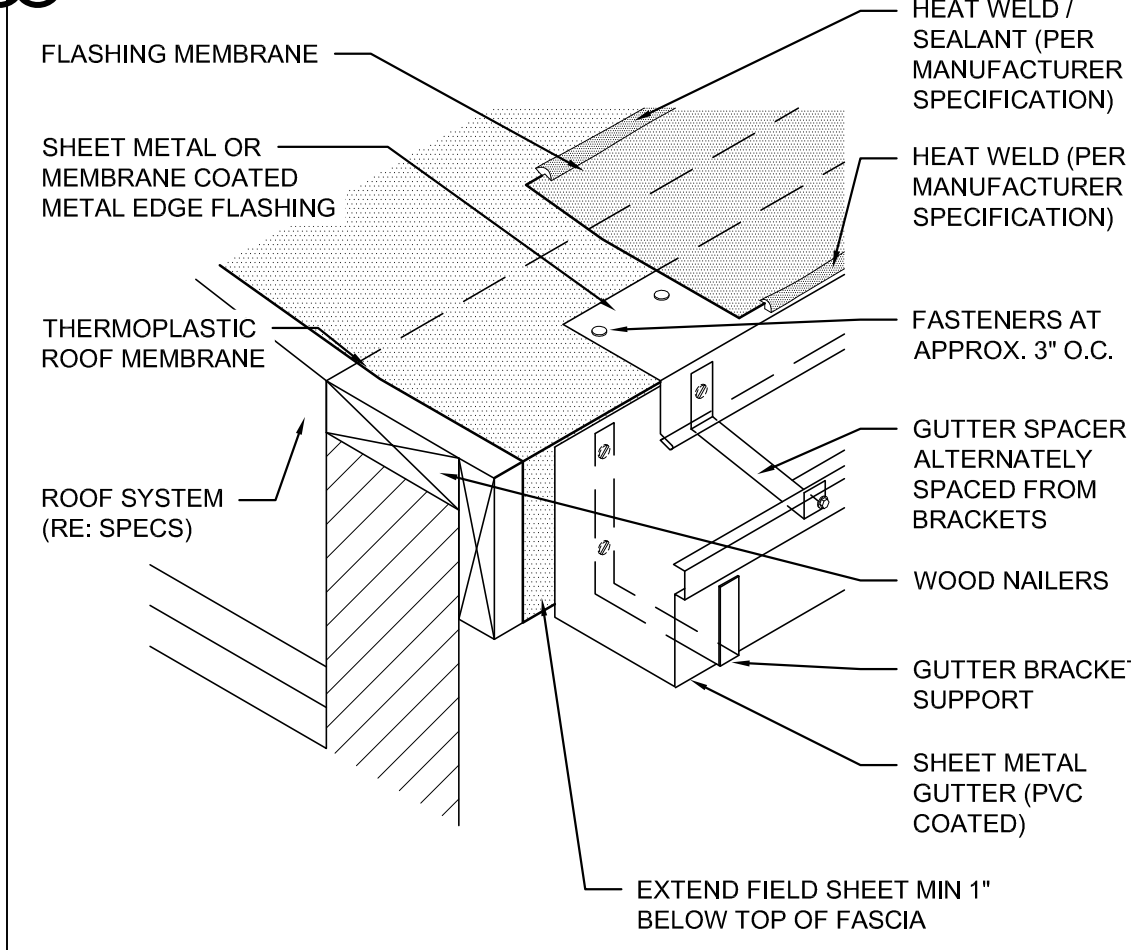
**13 TYPICAL COUNTERFLASHING**  
N.T.S.



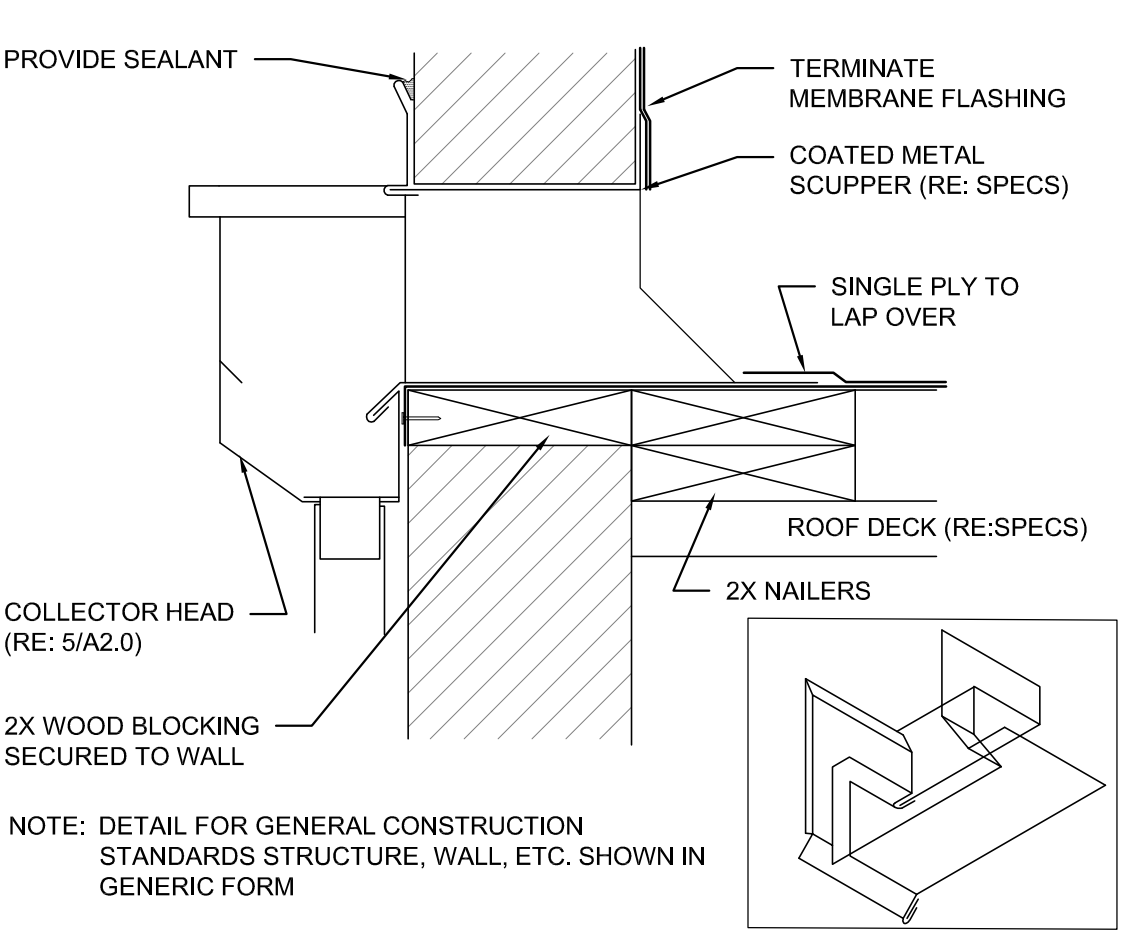
**12 SADDLE FLASHING**  
N.T.S.



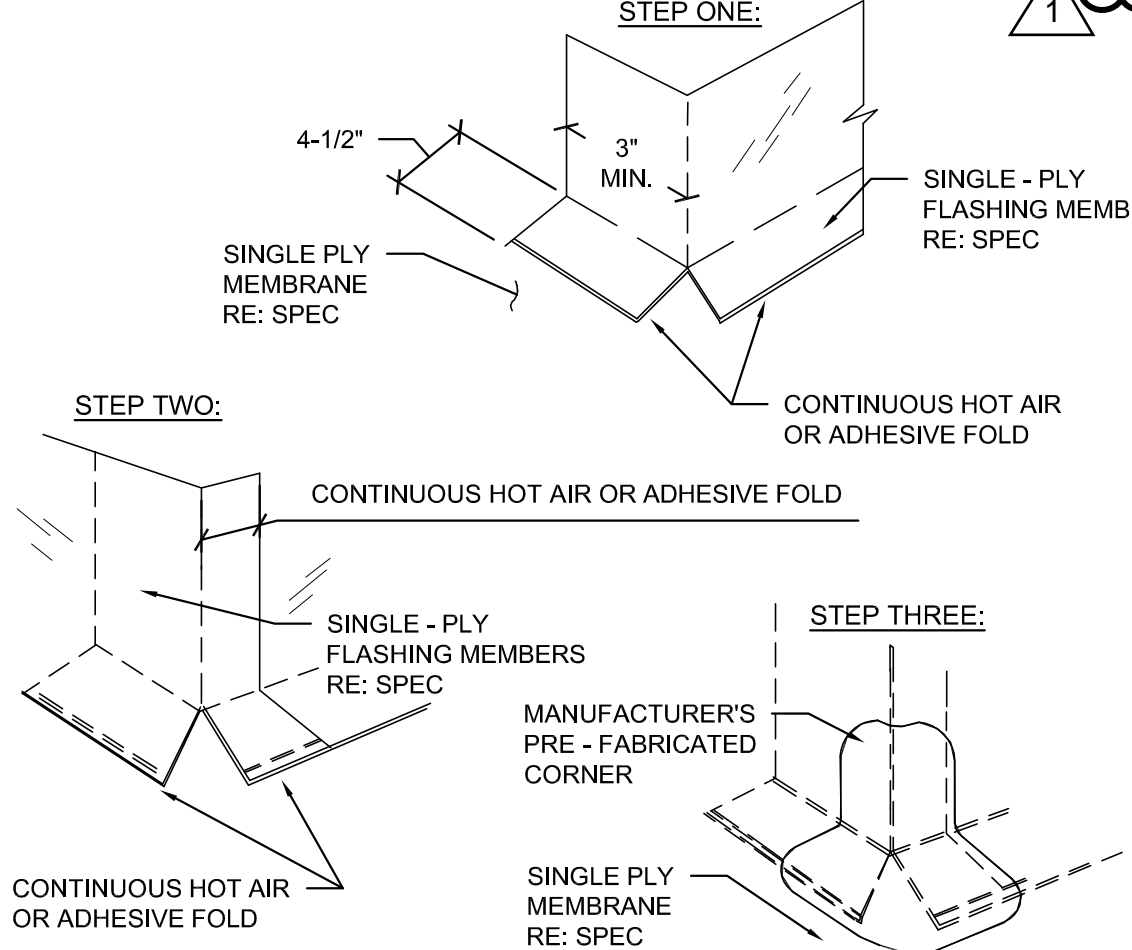
**10 PARAPET BASE AND CAP**  
N.T.S.



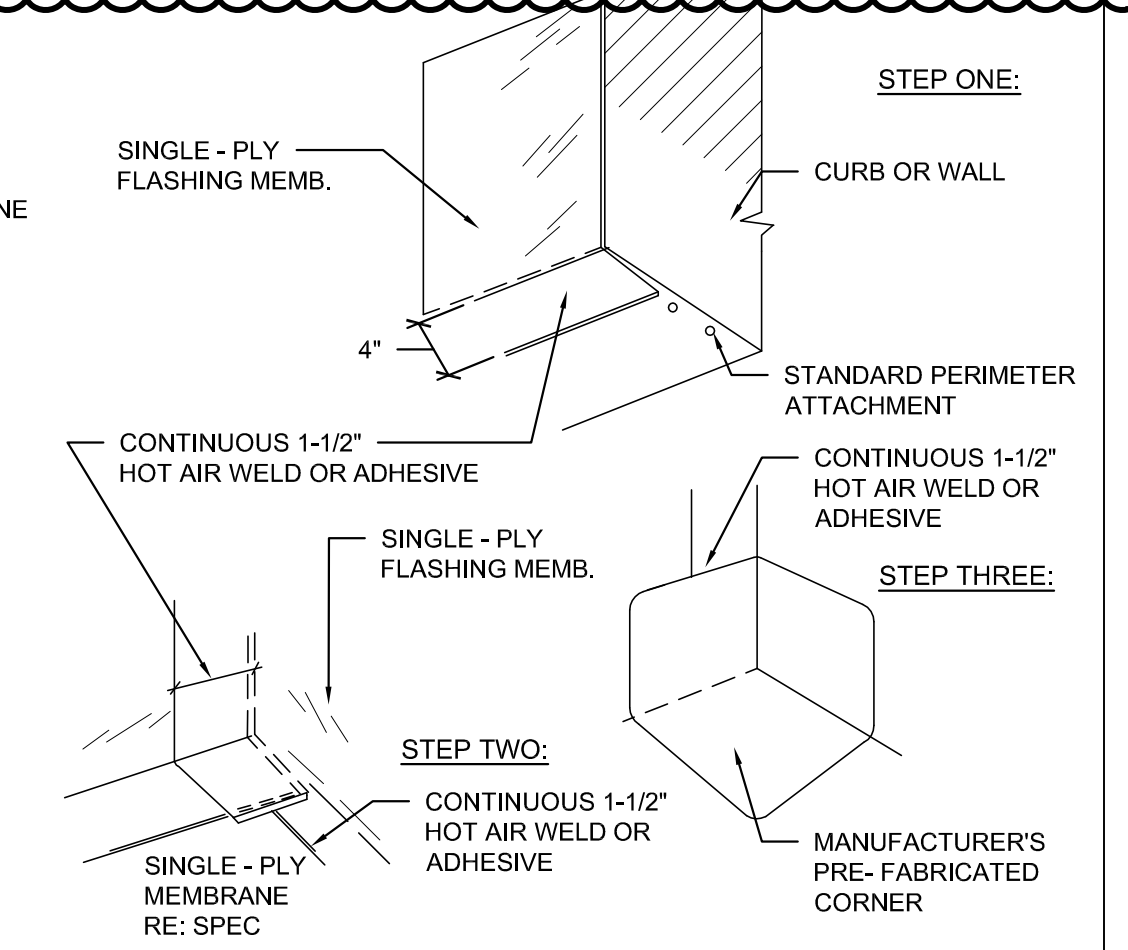
**9 MEMBRANE LAP**  
N.T.S.



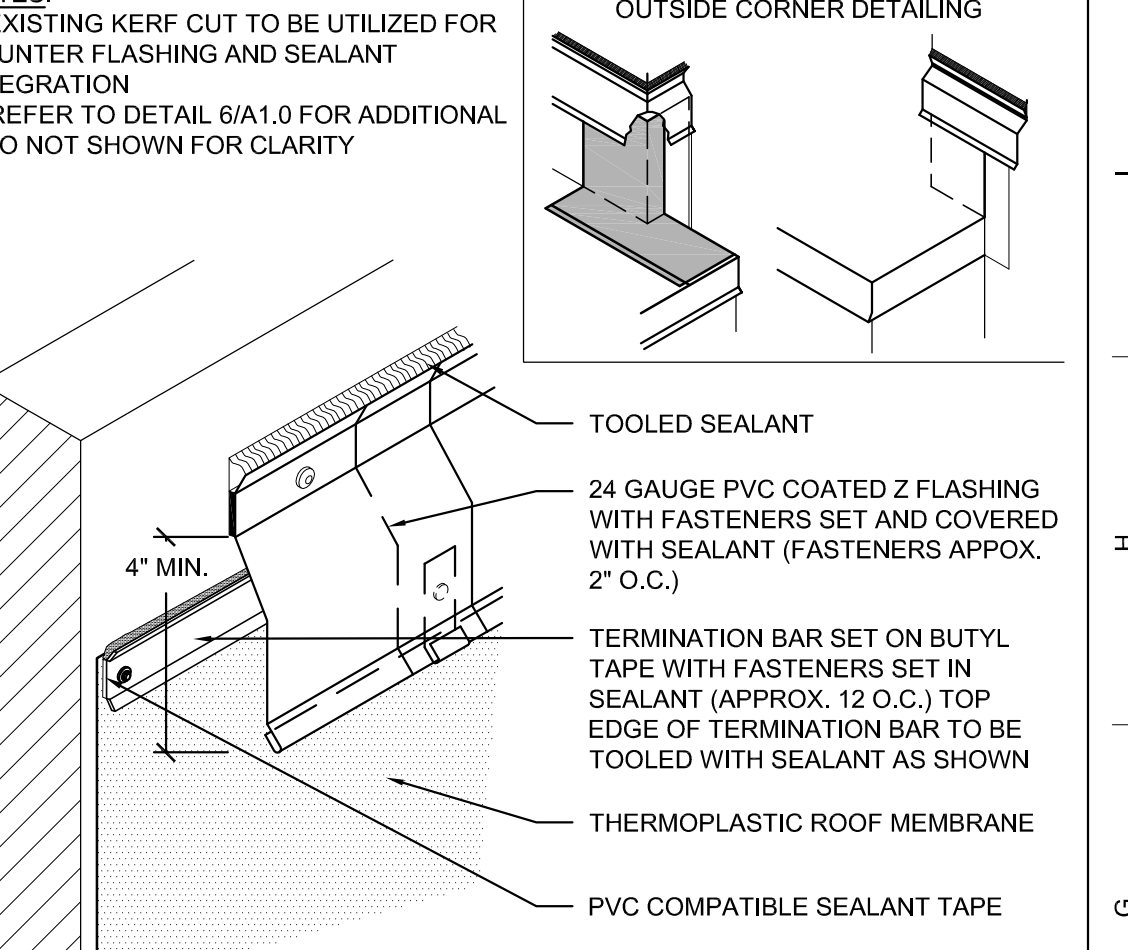
**8 TYPICAL DRAIN TO ROOF TIE IN**  
N.T.S.



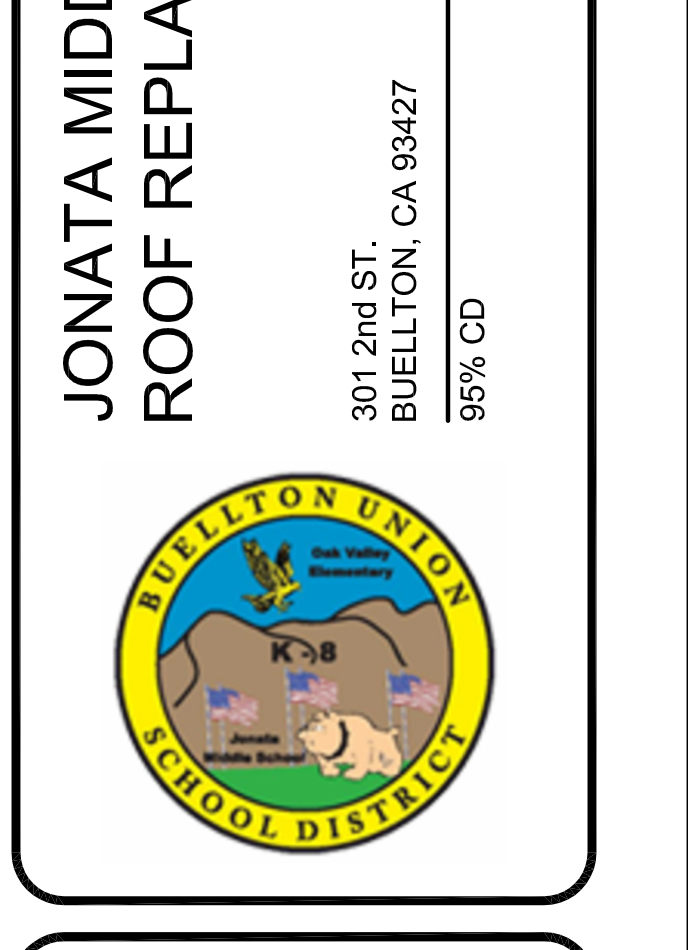
**7 WALK PADS**  
N.T.S.



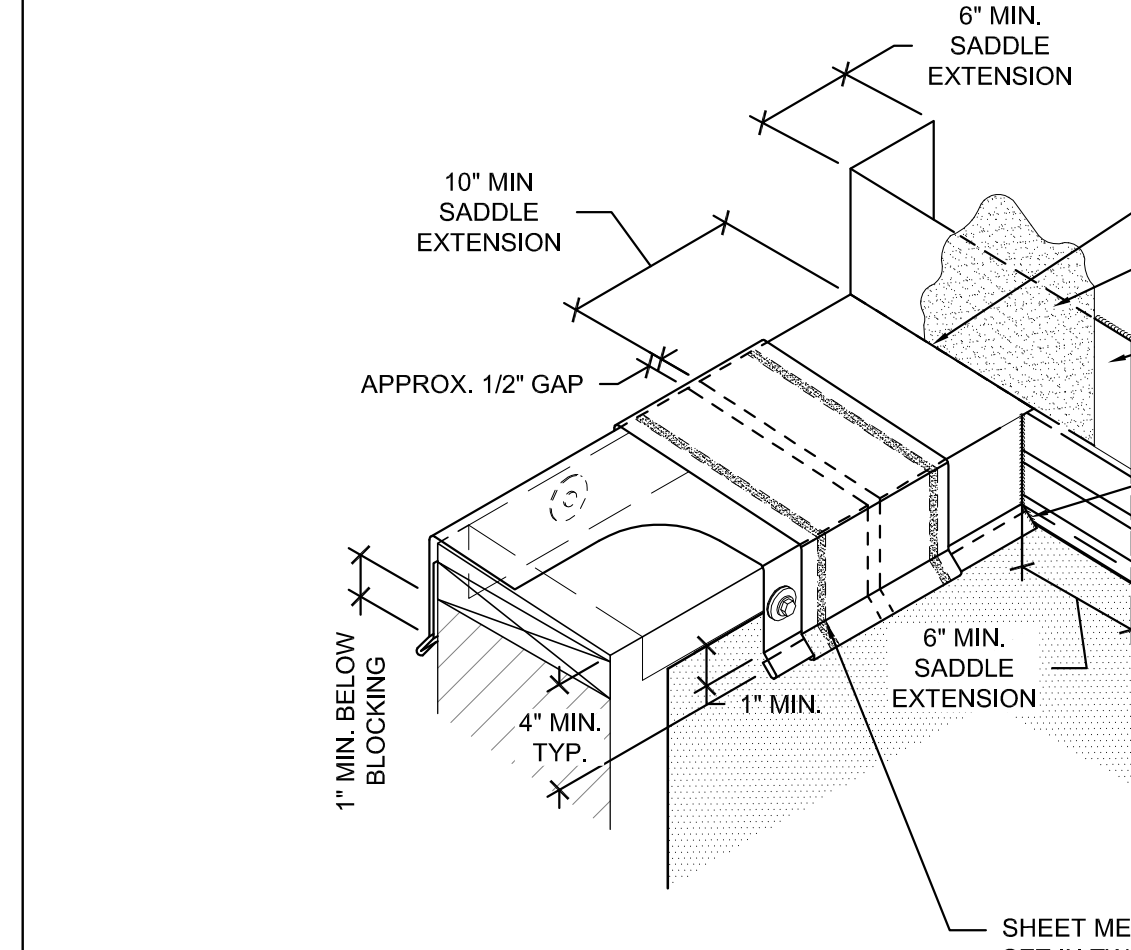
**6 DOWNSPOUT**  
N.T.S.



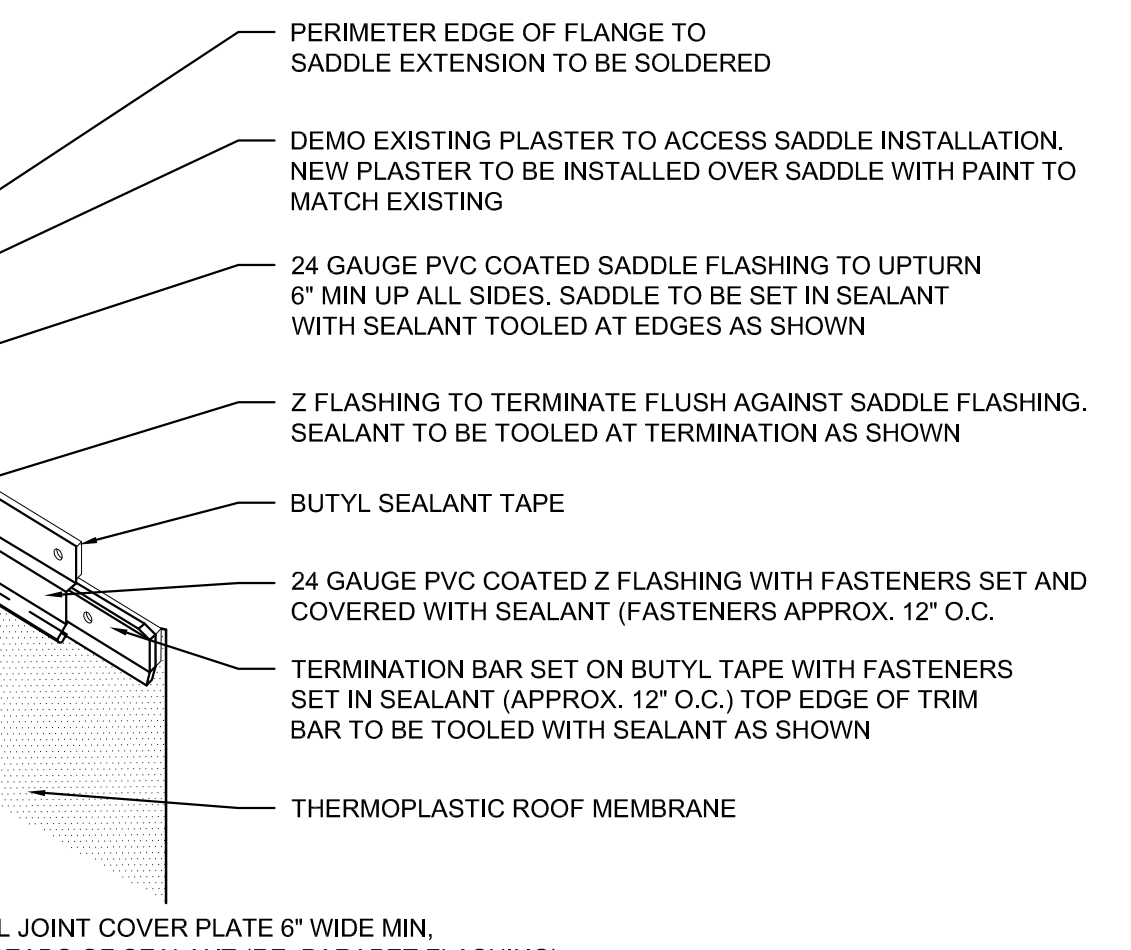
**5 COLLECTOR BOX**  
N.T.S.



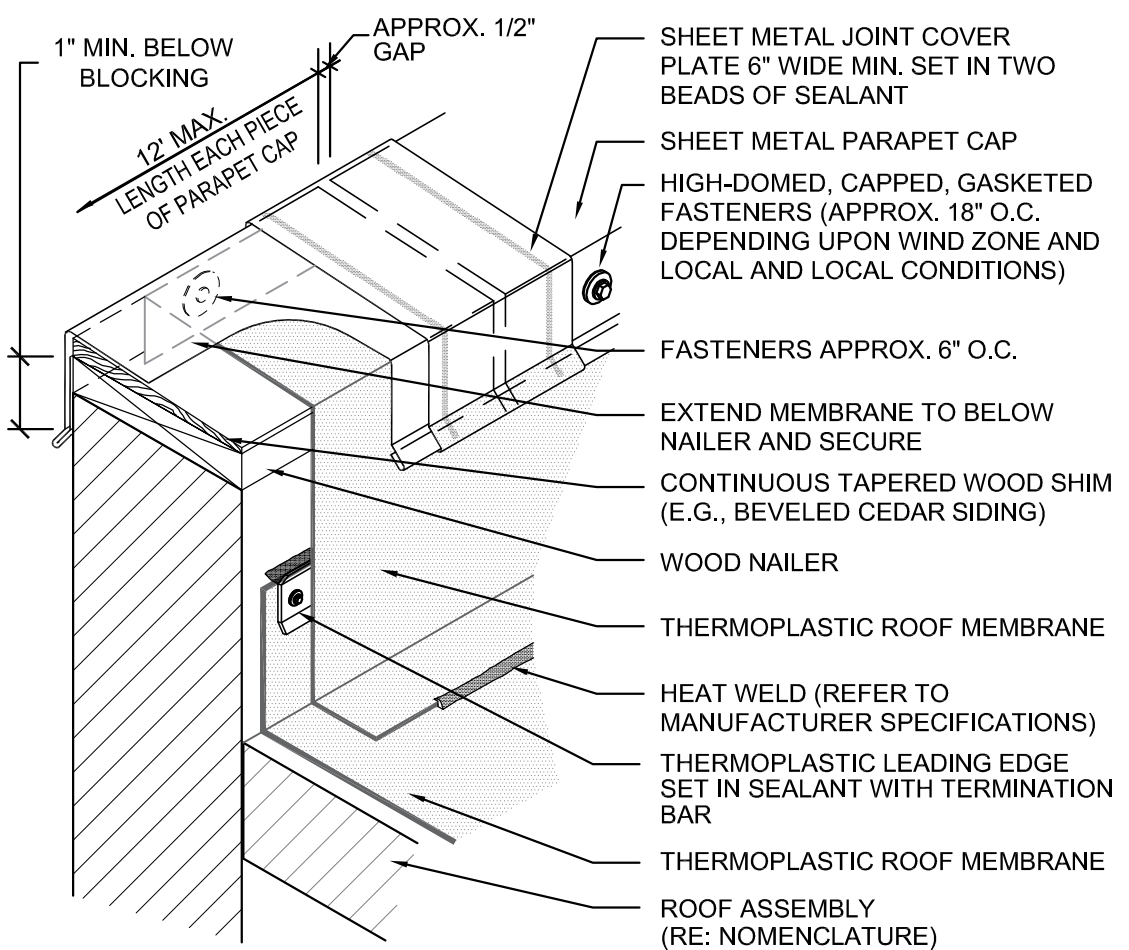
**4 CANOPY TO WALL TRANSITION**  
N.T.S.



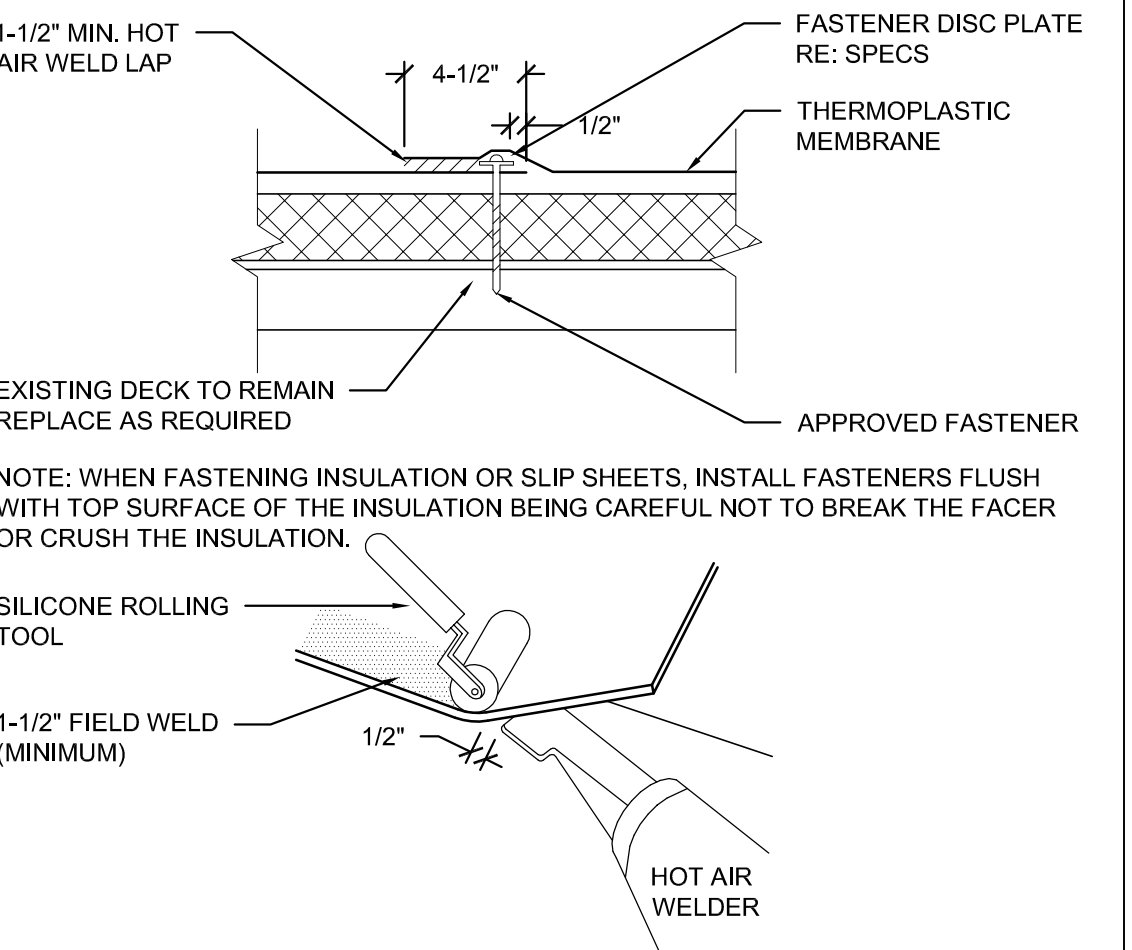
**3 NON-PENETRATING PIPE SUPPORTS**  
N.T.S.



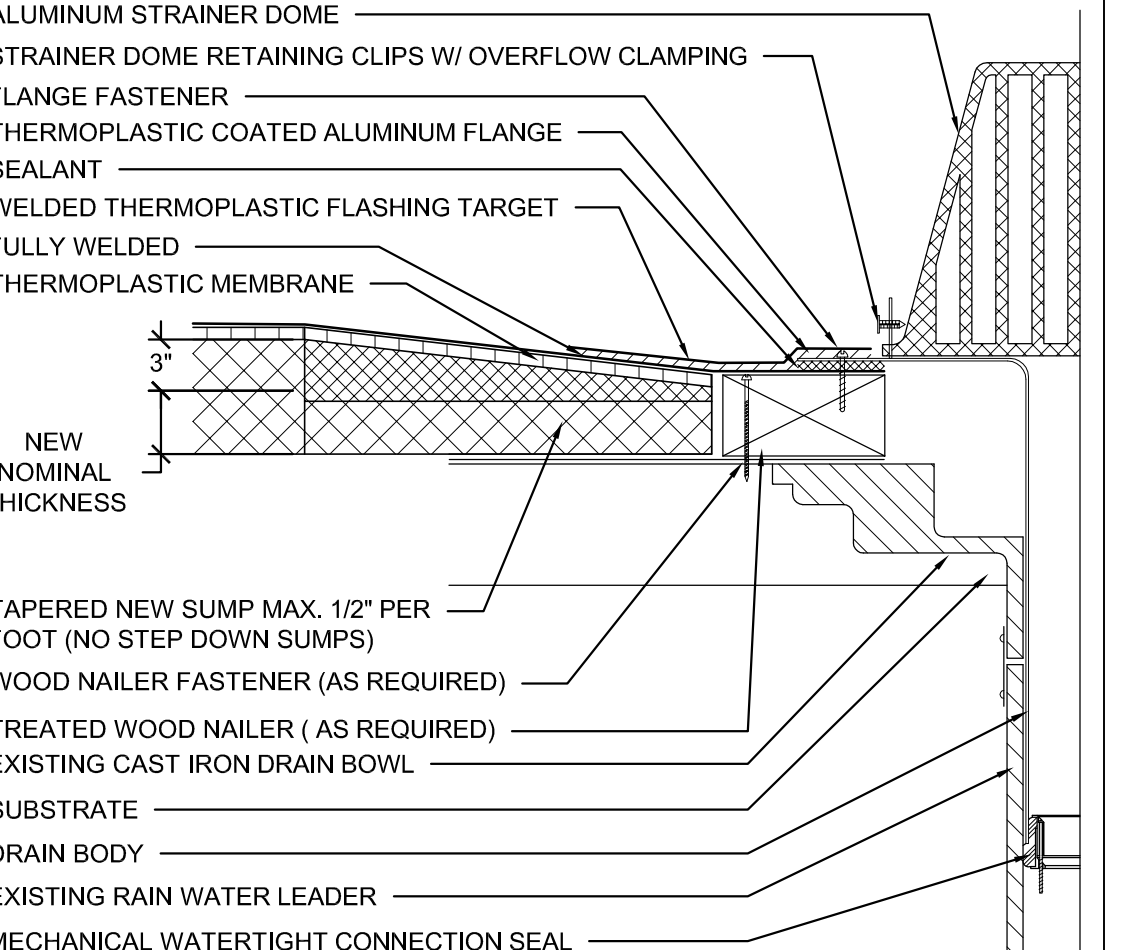
**2 TYPICAL DRAIN DETAILING**  
N.T.S.



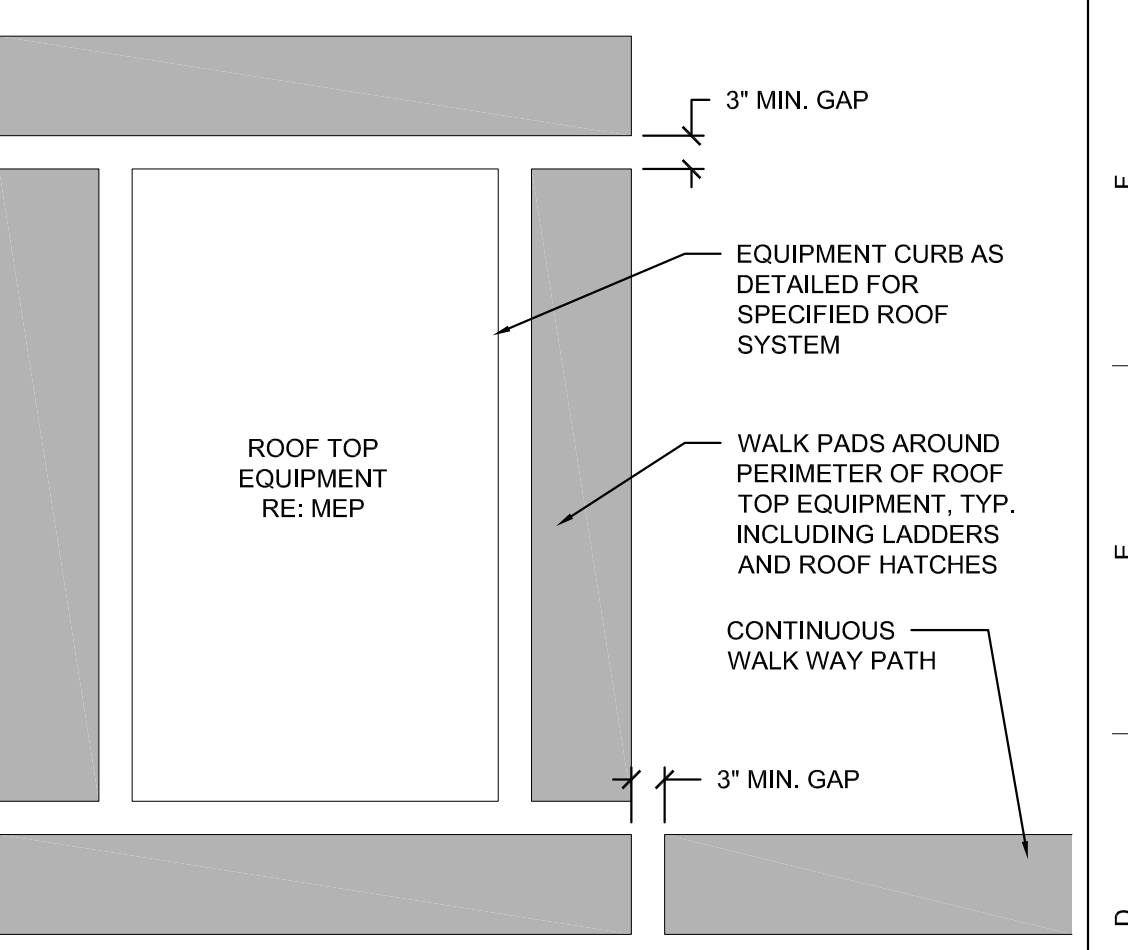
**1 TYPICAL DRAIN DETAILING**  
N.T.S.



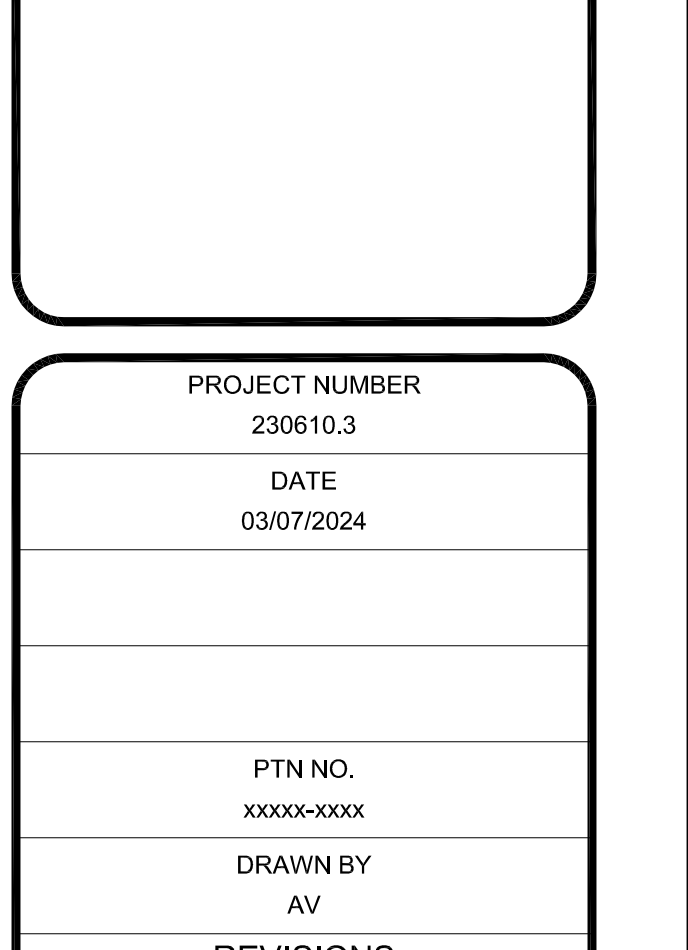
**1 TYPICAL DRAIN DETAILING**  
N.T.S.



**1 TYPICAL DRAIN DETAILING**  
N.T.S.



**1 TYPICAL DRAIN DETAILING**  
N.T.S.



**1 TYPICAL DRAIN DETAILING**  
N.T.S.

**BEAM PROFESSIONALS**  
ARCHITECT PBK Architects, Inc.  
BEAM Professionals  
1110 Iron Point Road  
Suite 200  
Folsom, CA 95630  
916-356-9227  
BEAMProf.com

**JONATA MIDDLE SCHOOL - ROOF REPLACEMENT**  
301 2nd ST.  
BUELLTON, CA 93427  
95% CD



PROFESSIONAL SEAL

PROJECT NUMBER  
230610.3  
DATE  
03/07/2024

PTN NO.  
XXXX-XXXX  
DRAWN BY  
AV  
REVISIONS

#	DESCRIPTION	DATE
1	PVC TERMINATION DETAIL UPDATES	3/20/24

95% CD

**A2.0**  
ROOFING DETAILS



**BEAM Professionals  
Addendum 1B:  
Oak Valley ES Site**

**ADDENDUM NO. 01B**  
**March 27, 2024**

To Drawings dated March 7, 2024, for Volume 2

**Buellton Union School District**  
**BUSD- Oak Valley ES Roof Replacement**

Prepared by: BEAM Professionals  
2600 Tenth Street, Suite 700  
Berkeley, CA 94710

BEAM Project No.: 230610.3

Notice to Proposers

- A. Receipt of this Addendum shall be acknowledged by all parties associated with the referenced project.
- B. This Addendum forms part of the Contract documents for the above referenced project and shall be incorporated integrally therewith.
- C. Contractor shall make necessary adjustments with full knowledge of all modifications, clarifications, and supplemental data included therein. Where provisions of the following supplemental data differ from those of the original Contract Documents, this Addendum shall govern.

**DRAWINGS:**

Item No. 1 Sheet No. G0.0, A1.0, A1.1, A1.2, A2.0 – TITLEBLOCK UPDATE; UPDATE “95% CD” with “100% CD”  
*All previously advertised sheets that stated “95% CD” should have stated “100% CD”.*

**END OF ADDENDUM NO. 1**

cc: Files 4A

# OAK VALLEY SCHOOL ROOF REPLACEMENT

BUELLTON UNIFIED SCHOOL DISTRICT

---

## Board Of Trustees

---

**CHRISTY NORDGREN**  
President

**RYAN SULLIVAN**  
Board Clerk

**ELAINE ALVARADO**  
Board Member

**ALLISON JORDAN**  
Board Member

**JESSIE SKIDMORE**  
Board Member

## Administration

---

**DR. RANDAL HAGGARD**  
Superintendent

**LISA MELBY**  
Principal



BEAM Professionals  
2600 Tenth Street  
Suite 700  
Berkeley, CA 94710  
510-450-1999 P  
BEAMProf.com

OAK VALLEY ES

595 2ND ST  
BUELLTON, CA 93427

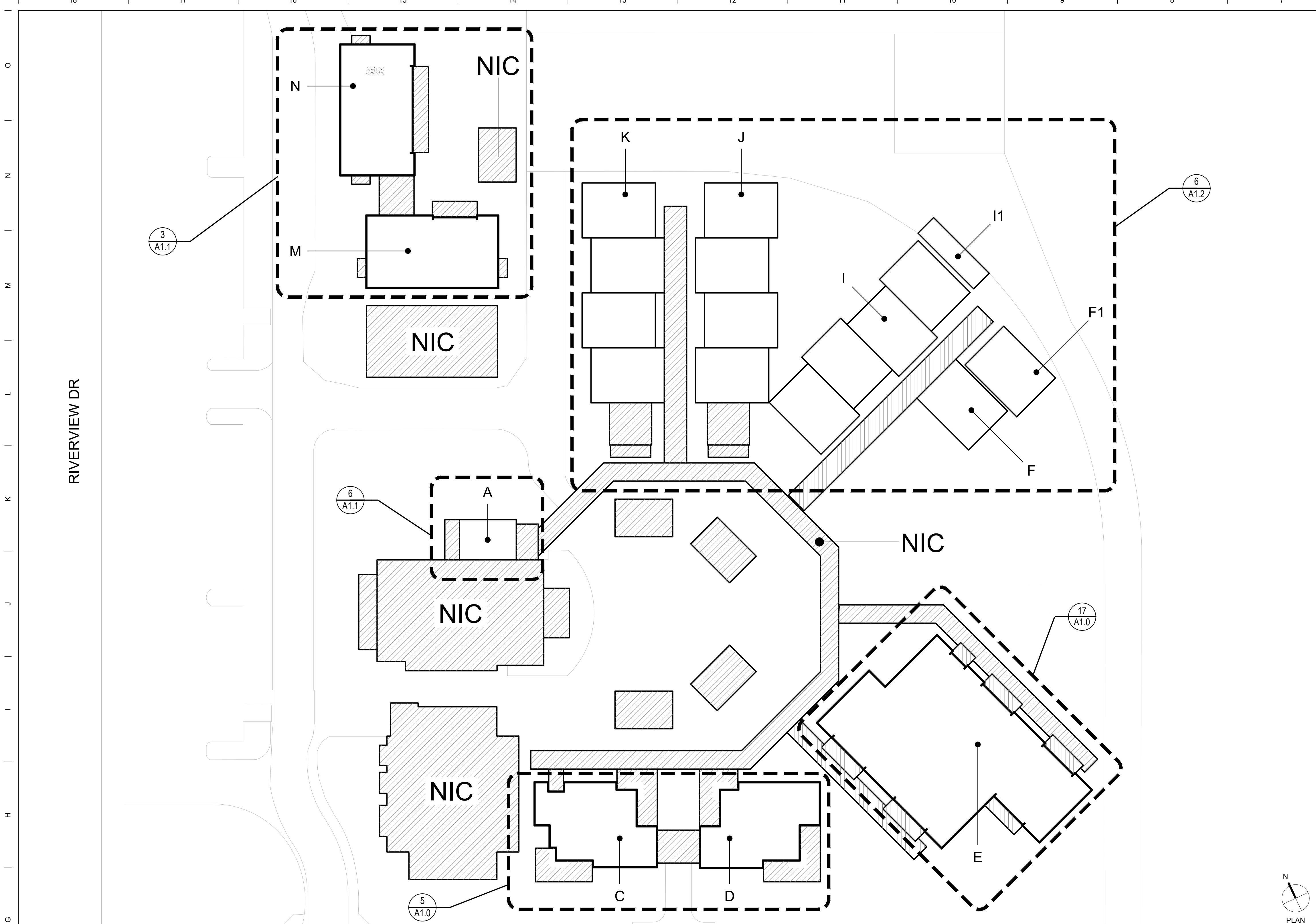
PROJECT: 230610

03/06/2024

95% CD

1

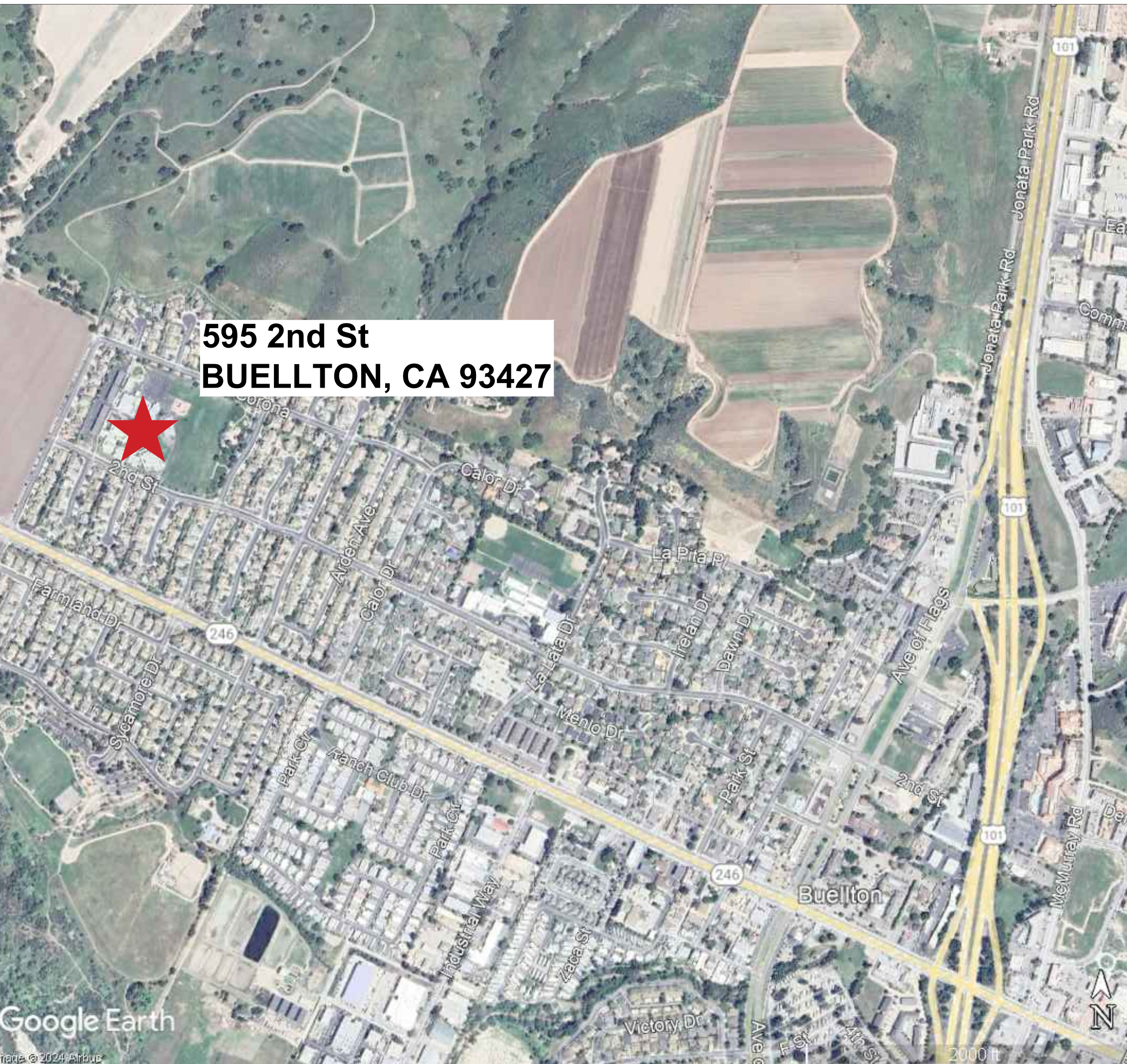




**18 OAK VALLEY SITE MAP**  
1"=30'-0"

A.D. AREA DRAIN	EL. ELEVATION (HEIGHT)	M.O. MASONRY OPENING	REQ'D REQUIRED
ADA AMERICANS WITH DISABILITIES ACT	ELECT. ELECTRICAL (DRAWING)	MAS. MASONRY	RES. RESILIENT
A.F.F. ABOVE FINISH FLOOR EQUIP	EQUIP (E)	MATL. MATERIAL(S)	REV. REVISION(S), REVISED
A.F.G. ABOVE FINISH GRADE	EXP. EXISTING	MECH. MECHANICAL	RF RECREATIONAL RESILIENT FLOORING
A.H.J. AUTHORITY HAVING JURISDICTION	EXP. EXTERIOR	MEM. MEMBRANE	RPG RELOCATABLE PAINTED GYP. BOARD
A/C AIR CONDITIONING	F.A. FULLY ADHERED	MEM. WP. MEMBRANE WATERPROOFING	RSS ROD STOCK AND SEALANT
ACP. ACOUSTICAL PANEL	F.E. FIRE EXTINGUISHER	MEP MECHANICAL, ELECTRICAL AND PLUMBING	S.C. SEALED CONCRETE
ACT. ACOUSTICAL TILE	FB. FACE BRICK	MFR. MANUFACTURE(R)	SCHED SCHEDULE
ADJ. ADJUSTABLE	FD. FLOOR DRAIN	MH. MANHOLE	SCPL SOLID CORE PLASTIC LAMINATE
ALT. ALTERNATE	FIN. FINISH(ED)	MIN. MINIMUM	SECT SECTION
ALUM. ALUMINUM	FIXT. FIXTURE	MISC. MISCELLANEOUS	SHT SHEET
ANGLE	FLR. FLOOR(ING)	MOD. MODULAR	SIM SIMILAR
B.U.R. BUILT-UP ROOF	FLSHG. FLASHING	MTL. METAL	SPC SPECIAL COATING SYSTEM
BD. BOARD	F.V. FIELD VERIFY	N.I.C. NOT IN CONTRACT	SPEC SPECIFICATION(S)
BLD.G. BUILDING	G.B. GRAB BAR	N.R. NOT RATED	SQ. SQUARE
BLK. BLOCK	G.I. GALVANIZED IRON	N.T.S. NOT TO SCALE	S.S. STAINLESS STEEL
BM. BEAM	G.A. GAUGE	NO. NUMBER	STD. STANDARD
C. CHANNEL	GALV. GALVANIZED	O.C. ON CENTER	STL. STEEL
C.J. CONTROL JOINT	GCMU GLAZED CONCRETE MASONRY UNIT	O.C.E.W. ON CENTER EACH WAY	STRUC STRUCTURAL
C.M.U. CONCRETE MASONRY UNIT	GEN. GENERAL	O.D. OUTSIDE DIAMETER	SUSP. SUSPENDED
C.W. COLD WATER	GL. GLASS / GLAZING	O.F.C.I. OWNER FURNISHED, CONTRACTOR INSTALLED	SYS. SYSTEM
CFMF. COLD FORMED METAL FRAMING	GR. GRADE	O.H. OPPOSITE HAND	T.O. TOP OF
CL. CENTERLINE	GTP. GLAZED TILE PAVER	OPNG. OPENING	T.O.B. TOP OF WOOD BLOCKING
CLG. CEILING	GYP. GYPSUM DRYWALL	OPP. OPPOSITE	T.O.M. TOP OF MASONRY
CLR. CLEAR	H.W. HOT WATER	PL. PLASTIC LAMINATE	T.O.S. TOP OF STEEL
COL. COLUMN	HM. HOLLOW METAL FRAME	P. LAM. PRECAST	TEL. TELEPHONE
COMP. COMPRESSIBLE	HORIZ. HORIZONTAL	P.L. PROPERTY LINE	THK THICKNESS
COND. CONCRETE	HT. HEIGHT	P.P. POWER POLE	TYR. TYPICAL
COND. CONDITION	I.D. INSIDE DIAMETER	P.W.B. PREFINISHED WALL BOARD	U.N.O. UNLESS NOTED OTHERWISE
CORR. CORRIDOR	I.P.S. IRON PIPE SIZE	PL. PLATE	V. VENT
C.T. CERAMIC TILE	INSUL. INSULATE(D), (ON)	PLUMB. PLUMBING	VENT. VENTILATION, VENTILATED
CTG. CLEAR TEMPERED GLASS	INT. INTERIOR	PLYWD. PLYWOOD	VERT. VERTICAL
CTSK. COUNTERSINK	JT. JOINT	POL. POLISHED	W.P. WATER PROOFING
D.F. DRINKING FOUNTAIN	L.P. LIGHT POLE	PR. PAIR	W.S. WEATHERSTRIP
D.P. DAMPROOFING	LAV. LAVATORY	PR. PAIR	W.W. WATER WELL
D.S. DOWNSPOUT	LT. LIGHT	PRE-F. PRE-FINISHED	W.W.F. WELDED WIRE FABRIC
DI. DIAMETER	LT.WT. LIGHTWEIGHT	PT. POINT	W. WITH
DIM. DIMENSION		PTD. PAINTED	WC. WATER CLOSET
DTL. DETAIL		R/RAD. RADIUS	WD. WOOD
DWG. DRAWING		R.D. ROOF DRAIN	WDW WINDOW
E.J. EXPANSION JOINT		RE., REF. REFER TO / REFERENCE / SEE	WT. WEIGHT
EQ. EQUAL		RECP. RECEPTACLE	
EA. EACH		REINF. REINFORCE(D), (ING)	

**6 ABBREVIATIONS**  
N.T.S.



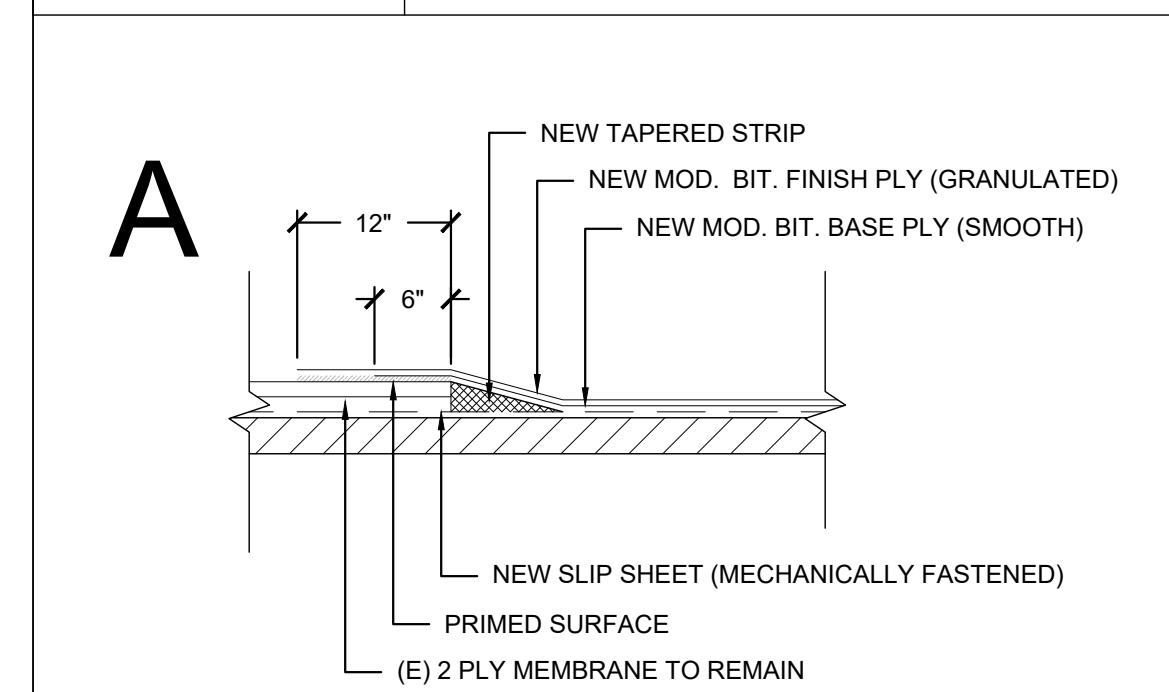
**4 VICINITY MAP**

**BASE SCOPE:**  
SELECTIVE ROOFING MEMBRANE AT BUILDINGS A-MECHANICAL WELL, C, D, E, M, AND N TO BE REPAIRED AS INDICATED ON PLANS. CONTRACTOR TO REMOVE AND PROPERLY DISPOSE OF MEMBRANE IN ITS ENTIRETY DOWN TO THE EXISTING WOOD SUBSTRATE. SITE TO BE PROTECTED AT ALL TIMES AS BUILDING IS TO BE OCCUPIED WHILE CONSTRUCTION IS UNDERWAY. REMOVE ALL ROOFING MATERIAL FROM WALL/CURB LOCATIONS ALONG WITH ASSOCIATED FLASHINGS. REMOVE/REPLACE ALL WOOD DECKING THAT SHOW EVIDENCE OF DETERIORATED ROOF DECK MATERIAL. INFILL TO MATCH EXISTING ELEVATION. CLEAN AND PREP EXISTING SUBSTRATE TO RECEIVE NEW ROOFING SYSTEM.  
INSTALL MODIFIED BITUMEN TWO-PLY SYSTEM OVER MECHANICALLY FASTENED BASE SHEET WHERE INDICATED ON PLANS AND AT UP-SLOPED TRANSITION TO PARAPET WALL PER MANUFACTURER'S RECOMMENDATIONS. POWERWASH ROOFS A, C, D, E, M, AND N AND INSTALL NEW COATING PER MANUFACTURER RECOMMENDATIONS. INSTALL NEW SKYLIGHTS WHERE INDICATED ON PLANS. INSTALL NEW FLASHINGS AT MECHANICAL CURBS AND SKYLIGHTS.

**ALTERNATE #1:**  
CLEANOUT AND REPAIR ALL GUTTERS AND DOWNSPOUTS AT BUILDINGS F, F1, I, I1, J, AND K. CLEAN AND PREPARE SURFACE FOR NEW SEALANT APPLICATION AT STANDING SEAM METAL JOINTS AND FASTENERS. INSTALL NEW SEALANT AT STANDING SEAM METAL JOINTS AND FASTENERS TO ENSURE A WATERTIGHT AND WEATHERPROOF METAL ROOFING SYSTEM.

**26 SCOPE OF WORK**

NOMENCLATURE "A"	
ROOF MEMBRANE	2-PLY MOD BIT
BASE SHEET	MECHANICALLY FASTENED



**20 NEW NOMENCLATURE**

AREA	APPROX. SQ. FT.	EXISTING NOMENCLATURE	NEW NOMENCLATURE	REMARKS
A	680	WD	A	-
C	2,390	WD	A	-
D	2,365	WD	A	-
E	8,490	WD	A	-
F	1,200	WD	-	1
F1	1,200	WD	-	1
I	4,800	WD	-	1
I1	520	WD	-	1
J	4,800	WD	-	1
K	4,800	WD	-	1
M	2,790	WD	A	-
N	2,850	WD	A	-
<b>TOTAL</b>	<b>36885</b>			

NOTE: SQUARE FOOTAGES SHOWN ARE FOR REFERENCE ONLY - FIELD VERIFY! CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND FOR ENGINEERING NEW CONDITIONS WHERE TO ALL LOCAL AND FEDERAL CODES ALONG WITH INDUSTRY STANDARD GUIDELINES AND REMAIN IN A WATERTIGHT CONDITION.  
SEE SPECIFICATION DIVISION 7 FOR OTHER ROOF RELATED COMPONENTS.

**ABBREVIATIONS:**

WD:	WOOD DECK
BUR:	BUILT-UP ROOF
MOD BIT:	MODIFIED BITUMEN

**REMARKS:**

- GUTTER AND DOWNSPOUT REPAIR, SEALANT APPLICATION, AND NEW COATING OVER ROOF. SEE ALTERNATE #1 SCOPE OF WORK.

**8 EXISTING NOMENCLATURE**  
N.T.S.

- PIPE PENETRATION (RE: 1/A2.0)
- ROOF HATCH (RE: /A2.0)
- CURB MOUNTED VENT (RE: 4/A2.0)
- ELECTRICAL LINE (RE: 3/A2.0)
- CURB MOUNTED VENT (RE: 4/A2.0)
- GAS LINE (RE: 3/A2.0)
- SKYLIGHT (RE: 8/A2.0)
- CONDENSATE LINE (RE: 3/A2.0)
- CURB MOUNTED A/C (RE: 4/A2.0)
- WALK PADS (RE: 7/A2.0)
- ROOF DRAIN
- SELECTIVE ROOFING REPAIRS
- MISC CURB (RE: 4/A2.0)
- DOWNSPOUT
- SCUPPER WITH CONDUCTOR HEAD (RE: 9/A2.0)
- SCUPPER (RE: 6/A2.0)
- CROSS OVER LADDER (RE: /A2.0)

**2 LEGEND**

- CONTRACTOR SHALL VISIT SITE TO ASCERTAIN EXACT EXISTING CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUEST FOR ADDITIONAL MONEY SHALL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING THE SITE VISIT BY THE CONTRACTOR. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS AND WARRANTY REQUIREMENTS.
- DIMENSIONS, DETAILS, EQUIPMENT SIZE AND LOCATION SHOWN IN THESE CONSTRUCTION DOCUMENTS ARE FOR CONVEYANCE OF DESIGN INTENT ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF EXISTING CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN AND CONFIRM.
- REFER TO NOMENCLATURE FOR TYPE OF ROOF SYSTEM. ROOF AREAS ARE MARKED WITH DESIGNATED LETTER ON ROOF PLAN.
- NOTE THAT SOME OF THE DETAILS DRAWN ARE GENERIC IN NATURE AND ARE NOT NECESSARILY LOCATED AND KEYS TO THE ROOF PLANS.
- INDICATED ROOF HEIGHTS ARE GENERAL IN NATURE.
- ALL NEW CRICKETS AND TAPERED INSULATION SHALL BE INSTALLED WITH A FINISHED DOUBLE SLOPE. CRICKET THE UP-SLOPE SIDE OF ALL SQUARE CURBS AND PROJECTIONS OVER 20" IN WIDTH.
- REMOVE ALL ABANDONED EQUIPMENT IDENTIFIED ON SITE AND AS SHOWN ON OTHERWISE ON THESE DOCUMENTS.
- REPLACE ROTTED AND / OR OTHERWISE DETERIORATED ROOF DECK MATERIAL WITH LIKE MATERIAL AND THICKNESS.
- REPLACE ROTTED AND / OR OTHERWISE DETERIORATED WOOD NAILER MATERIAL WITH LIKE MATERIAL AND THICKNESS.
- PATCH EXISTING ROOF DECK FOR HOLES LESS THAN 10" WIDE BY ANCHORING 22 GA. STAINLESS STEEL SHEET METAL TO BOTTOM OF EXISTING STEEL ROOF DECK TO MATCH EXISTING THICKNESS. PATCH EXISTING ROOF DECK FOR HOLES GREATER THAN 10" WIDE BY ANCHORING 22 GA. STAINLESS STEEL SHEET METAL TO BOTTOM OF EXISTING GYPSUM ROOF DECK SPANNING FROM JOIST TO JOIST.
- AS APPLICABLE, ALL HVAC AND / OR DX UNITS, ELECTRICAL TRANSFORMERS, ROOF TOP EQUIPMENT, ETC. THAT ARE ON SLEEPERS SHALL BE DISCONNECTED / REMOVED, RAISED, AND PLACED ON NEW CURBED PLATFORMS AS DETAILED AND REINSTALLED / RECONNECTED. ALL CURB MOUNTED HVAC UNITS, EQUIPMENT, ETC. SHALL HAVE A MINIMUM 6" CURB HEIGHT AND ARE TO BE RAISED AS REQUIRED.
- ALL DISCONNECTS AND RECONNECTS SHALL BE PERFORMED BY A LICENSED ELECTRICIAN.
- WORK TO ANY EXISTING UTILITY CONDUIT OR PIPE SHALL BE PERFORMED BY SPECIFIC LICENSED SUBCONTRACTORS SPECIALIZING IN HVAC, PLUMBING AND ELECTRICAL WORK. PERMITS AND INSPECTIONS ARE REQUIRED. REROUTE AND / OR MODIFY UTILITY CONDUIT OR PIPE AS REQUIRED TO BE INSTALLED AS DETAILED.
- UNLESS INDICATED OTHERWISE ON THE CONSTRUCTION DOCUMENTS, REPLACE AND RAISE (AS REQUIRED) ALL EXISTING EXPANSION JOINTS / AREA DIVIDERS / CURB MOUNTED EQUIPMENT / EXISTING ROOF HATCH / SKYLIGHTS A MIN. 10" ABOVE ROOF DECK.
- ALL SOIL STACK FLASHING SHALL BE A MIN. 10" ABOVE FINISHED ROOF SURFACE. COUPLE PVC PIPE ABOVE DECK AND COUPLE CAST IRON PIPE BELOW DECK.
- ALL PIPING / CONDUIT / ETC. SHALL BE A MIN. 10" ABOVE ROOF SURFACE. PROVIDE PORTABLE PIPE HANGERS WITH PROTECTION PADS.
- PROVIDE SHEET METAL HOODED (WITH METAL FACE CLOSURE) CAPS, WOOD WOOD CURB, BOX COVER AT ALL GAS AND WATER PIPE ROOF PENETRATIONS AS DETAILED. PROVIDE POSITIVE SLOPE AWAY FROM FACE COVER.
- PROVIDE WALKWAY PROTECTION PADS AS SPECIFIED AROUND ALL ROOF HATCHES, HVAC ROOFTOP UNITS, DOORS THAT OPEN ON ROOF AND AT TOP AND BOTTOM OF ALL ROOF TOP ACCESS LOCATIONS.
- INSTALL NEW SPLASH PAN AT ALL LOCATIONS WHERE ROOF DRAINAGE DISCHARGES ONTO ROOF AREA. INSTALL NEW SPLASH BLOCKS WHERE ROOF DRAINAGE DISCHARGES ON GROUND.
- ISOLATE ALL HEAT PIPES / FLUES AS DETAILED AND RECOMMENDED AND OUTLINED IN THE NRCA MANUAL FOR HOT STACK FLASHING.
- ALL OUTSIDE AIR INTAKES SHALL BE COVERED TO ELIMINATE ODORS AND FUMES FROM ENTERING INTO THE BUILDING DURING CONSTRUCTION WORK.
- EXAMINE AND CLEAN EXISTING DRAIN LINES OF DEBRIS AND BLOCKAGE, FLUSH WITH WATER TO ENSURE THAT DRAINS FLOW FREELY. REPAIR EXISTING DRAINS AS REQUIRED.
- OWNER WILL VERIFY PROPER OPERATION OF ALL ROOF TOP EQUIPMENT BEFORE AND AFTER THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL INOPERABLE EQUIPMENT PRIOR TO RELEASE OF PROJECT.
- REPLACE RUSTED AND / OR DETERIORATED EXISTING METAL VENT FLASHING AND FLUES.
- PRIOR TO COMMENCEMENT OF WORK, COORDINATE WALK OF ENTIRE ROOF WITH ROOFING MANUFACTURER'S TECHNICAL REPRESENTATIVE TO IDENTIFY AND LOCATE ALL AREAS OF HIGH SLOPE OR OTHER CONDITIONS WHICH MIGHT REQUIRE SPECIAL PROCEDURES FOR SYSTEM ATTACHMENT.
- PAINT ALL EXPOSED GAS PIPE TO REMAIN.
- EXISTING OVERFLOW DRAIN LINE PIPES ARE TO BE REPLACED WITH OVERFLOW ROOF DRAIN ASSEMBLIES PER PLUMBING SPECIFICATIONS.

**13 GENERAL NOTES**

**APPLICABLE CODES AND STANDARDS:**

- 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC)
- 2022 CALIFORNIA BUILDING CODE (CBC)
- 2022 CALIFORNIA ELECTRICAL CODE (CEC)
- 2022 CALIFORNIA MECHANICAL CODE (CMC)
- 2022 CALIFORNIA PLUMBING CODE (CPC)
- 2022 CALIFORNIA ENERGY CODE (CEC)
- 2022 CALIFORNIA FIRE CODE (CFC)
- 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC)
- 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)
- 2022 CALIFORNIA REFERENCED STANDARDS CODE

**DSA REQUIREMENTS:**

DSA REVIEW: EXEMPTED - ROOF REPAIR SCOPE - DSA IR A-22

**APPLICABLE LOADS (CBC 1603A.1 & ASCE 7-16)**

BUILDING OCCUPANCY CATEGORY: E (EDUCATION)	20 PSF
NON-OCCUPABLE ROOF LIVE LOAD:	3 PSF < 5 PSF
SUPERIMPOSED DEAD LOAD (ASCE 7-16):	
1/2" DENS DECK	2.1 PSF
1/2" RIGID INSULATION	0.2 PSF
2-PLY MEMBRANE	1.4 PSF
<b>TOTAL</b>	<b>3.7 PSF</b>

RAIN 100-YR:	2 IN/HR
SNOW:	P <sub>s</sub> = 0
ICE:	0 IN
WIND:	EXPOSURE CATEGORY B (CBC 2022)
	V <sub>1-10</sub> = 102 MPH (CBC Table 1609.3.1 & 1609.3.2)
	V <sub>30</sub> = 85 MPH

**7 CODES AND STANDARDS**

**GENERAL SHEETS**  
G0.0 GENERAL INFORMATION

#	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	3/20/24

**BUILDING ENVELOPE**

A1.0	ROOF PLAN
A1.1	ROOF PLAN CONT.
A1.2	ROOF PLAN CONT.
A2.0	ROOFING DETAILS

**1 INDEX**



ARCHITECT PBK Architects, Inc.  
BEAM Professionals  
1110 Iron Point Road  
Suite 200  
Folsom, CA 95630  
916-355-9222  
BEAMProf.com

OAK VALLEY ELEMENTARY SCHOOL - ROOF REPLACEMENT  
595 2nd ST. BUELLTON, CA 93427  
95% CD



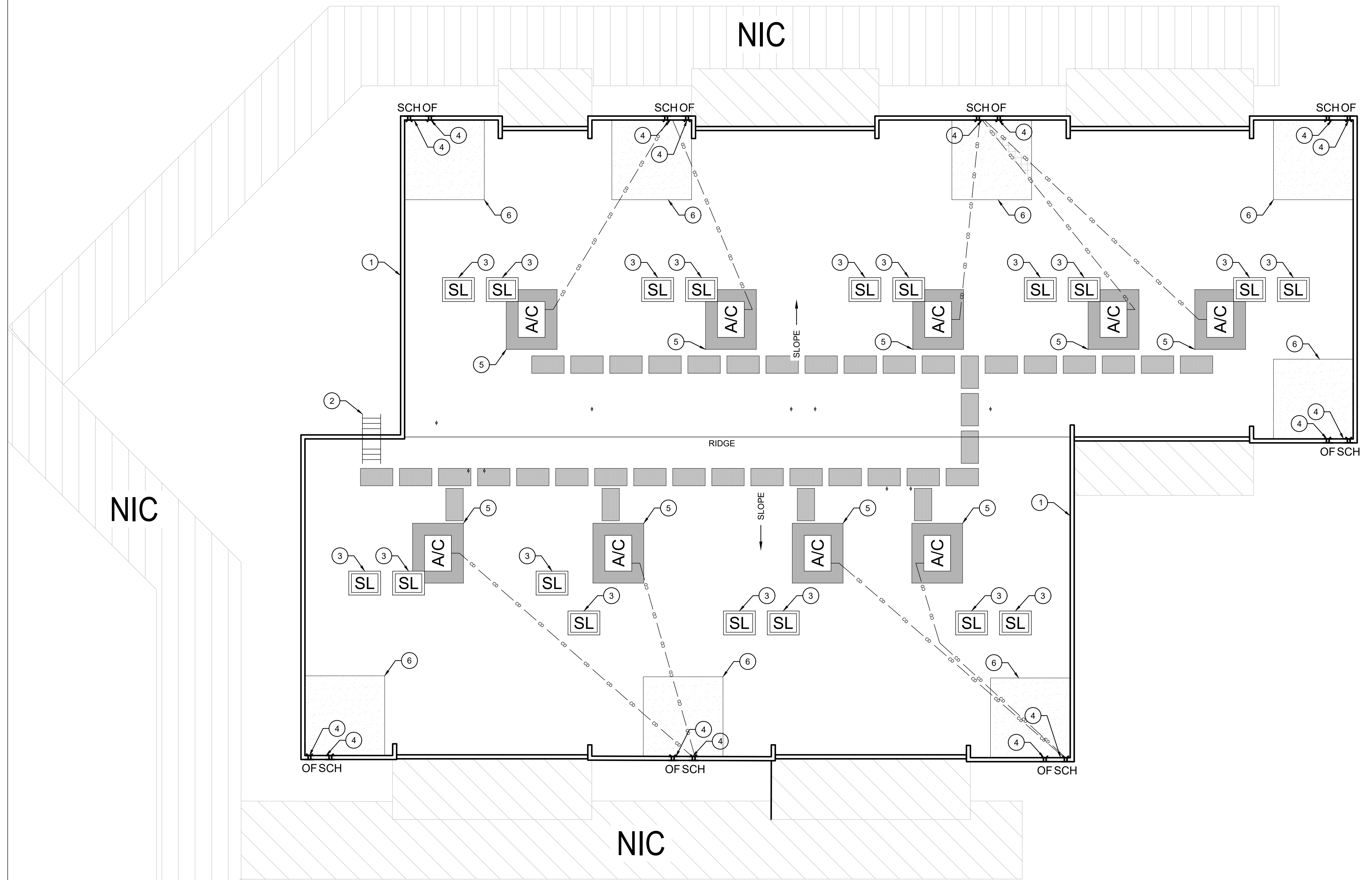
PROJECT NUMBER	230610.3
DATE	03/07/2024

95% CD

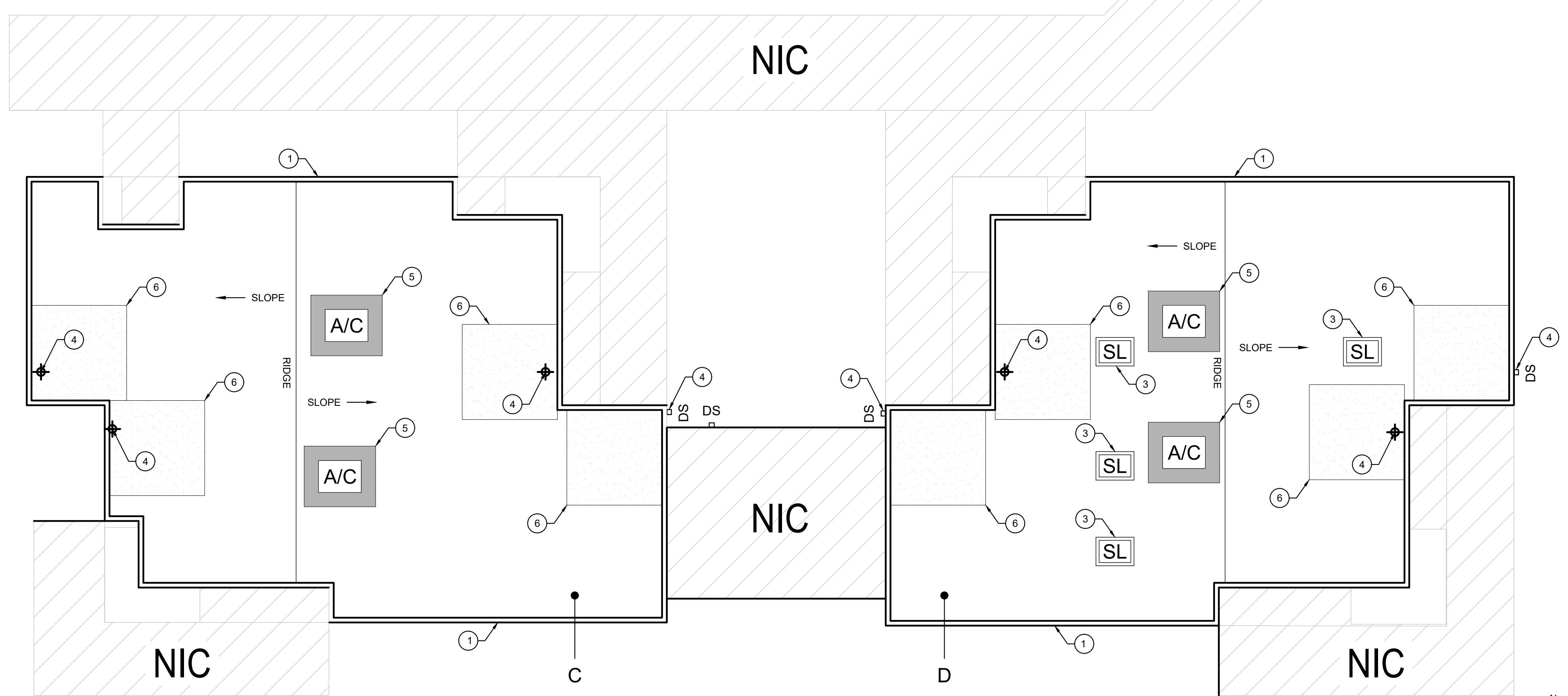
**G0.0**

GENERAL INFORMATION





**17** ROOF PLAN - AREA "E"  
1/8"=1'-0"



**5** ROOF PLAN - AREAS: "C" & "D"  
1/8"=1'-0"

- 1 PERIMETER COPING METAL TO BE PROTECTED AND REMAIN IN PLACE DURING INSTALLATION OF NEW ROOF COATING. REFERENCE SPECIFICATION SECTION 07 62 00.
- 2 LADDER AND/OR ROOF HATCH TO REMAIN.
- 3 SKYLIGHTS TO BE REPLACED ALONG WITH ASSOCIATED METAL FLASHINGS.
- 4 THROUGH-WALL SCUPPERS, SCUPPER OVERFLOWS, ROOF DRAINS, ROOF OVERFLOW DRAINS ARE TO BE REPLACED ALONG WITH ASSOCIATED METAL FLASHINGS. EXISTING DOWNSPOUTS AND COLLECTOR HEADS ARE TO BE PROTECTED AND REMAIN.
- 5 ACCESSORY/UNIT CURB METAL TO BE PROTECTED AND/OR RAISED TO INSTALL NEW ROOF COATING AS NECESSARY. WHERE INDICATED ON PLANS, INSTALL NEW WALKPADS AROUND UNITS PER SPECIFICATION SECTION 07 52 00 AND 07 56 00.
- 6 SELECTIVE ROOF REPAIR PER SCOPE OF WORK. APPROXIMATELY 100 SQUARE FOOT SECTIONS.
- 7 ROOF AREA TO RECEIVE SEALANT MAINTENANCE, GUTTER CLEAN-OUT, DOWNSPOUT REPAIR, AND NEW ROOF COATING PER SPECIFICATION SECTION 07 56 00.

**2** KEYNOTES

- PIPE PENETRATION (RE: 1/A2.0)
- CURB MOUNTED VENT (RE: 4/A2.0)
- CURB MOUNTED VENT (RE: 4/A2.0)
- SKYLIGHT (RE: 8/A2.0)
- A/C CURB MOUNTED A/C (RE: 4/A2.0)
- ROOF DRAIN
- MISC CURB (RE: 4/A2.0)
- DOWNSPOUT
- SCUPPER WITH CONDUCTOR HEAD (RE: 9/A2.0)
- SCUPPER (RE: 6/A2.0)
- CROSS OVER LADDER (RE: /A2.0)
- ROOF HATCH (RE: /A2.0)
- ELECTRICAL LINE (RE: 3/A2.0)
- GAS LINE (RE: 3/A2.0)
- CONDENSATE LINE (RE: 3/A2.0)
- WALK PADS (RE: 7/A2.0)
- SELECTIVE ROOFING REPAIRS

**1** LEGEND



ARCHITECT PBK Architects, Inc.  
BEAM Professionals  
1110 Iron Point Road  
Suite 200  
Folsom, CA 95630  
916-355-8922  
BEAMProf.com

OAK VALLEY ELEMENTARY  
SCHOOL - ROOF REPLACEMENT

595 2nd ST.  
BUELLTON, CA 93427  
95% CD



PROJECT NUMBER  
230610.3  
DATE  
03/07/2024

DRAWN BY  
AV

REVISIONS		
#	DESCRIPTION	DATE
1	Update 10/20/24	3/27/24

95% CD  
**A1.0**

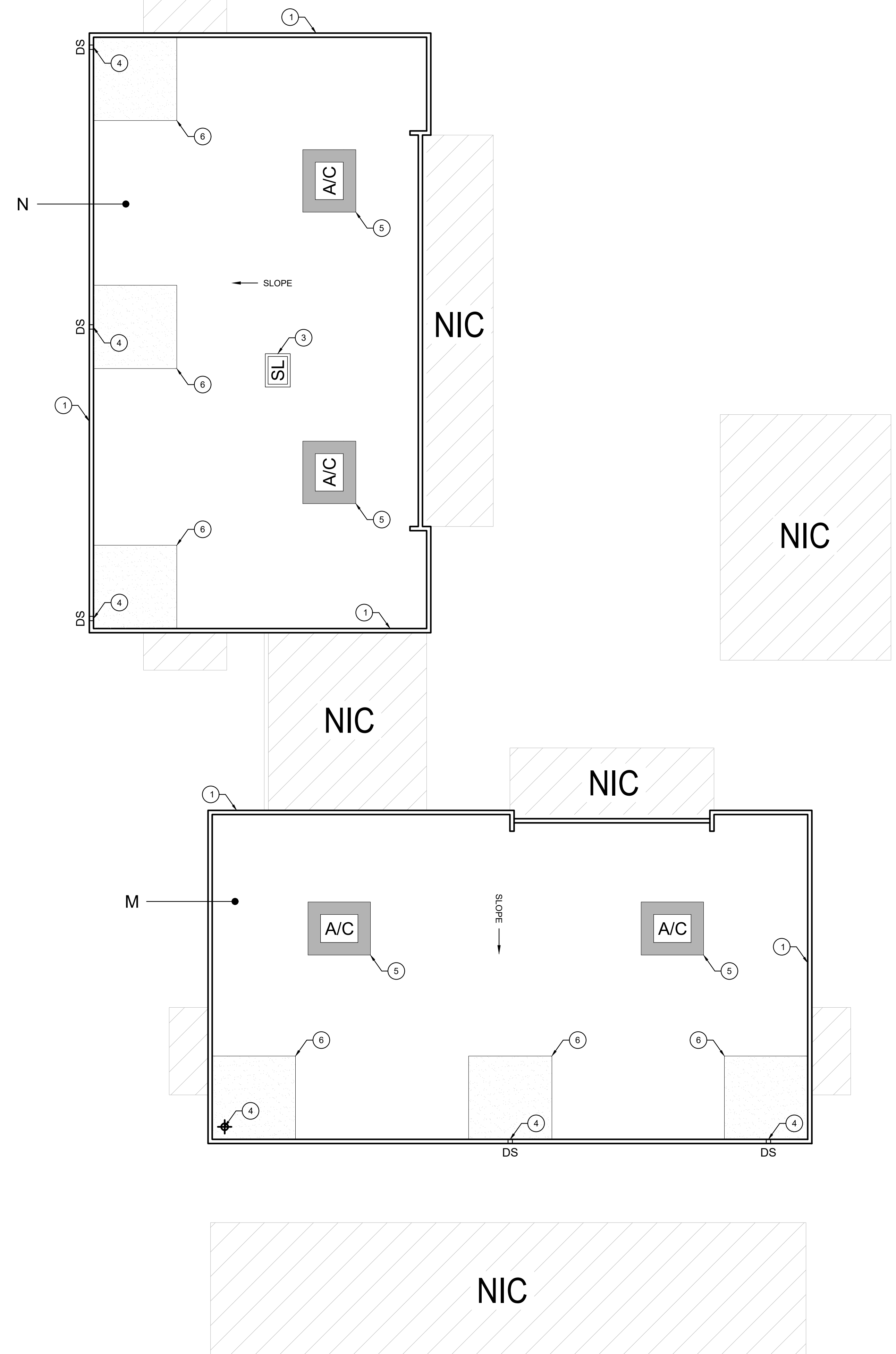
ROOF PLAN

- ① PERIMETER COPING METAL TO BE PROTECTED AND REMAIN IN PLACE DURING INSTALLATION OF NEW ROOF COATING. REFERENCE SPECIFICATION SECTION 07 62 00.
- ② LADDER AND/OR ROOF HATCH TO REMAIN.
- ③ SKYLIGHTS TO BE REPLACED ALONG WITH ASSOCIATED METAL FLASHINGS.
- ④ THROUGH-WALL SCUPPERS, SCUPPER OVERFLOWS, ROOF DRAINS, ROOF OVERFLOW DRAINS ARE TO BE REPLACED ALONG WITH ASSOCIATED METAL FLASHINGS. EXISTING DOWNSPOUTS AND COLLECTOR HEADS ARE TO BE PROTECTED AND REMAIN.
- ⑤ ACCESSORY UNIT CURB METAL TO BE PROTECTED AND/OR RAISED TO INSTALL NEW ROOF COATING AS NECESSARY. WHERE INDICATED ON PLANS, INSTALL NEW WALKPADS AROUND UNITS PER SPECIFICATION SECTION 07 52 00 AND 07 56 00.
- ⑥ SELECTIVE ROOF REPAIR PER SCOPE OF WORK, APPROXIMATELY 100 SQUARE FOOT SECTIONS.
- ⑦ ROOF AREA TO RECEIVE SEALANT MAINTENANCE, GUTTER CLEAN-OUT, DOWNSPOUT REPAIR, AND NEW ROOF COATING PER SPECIFICATION SECTION 07 56 00.

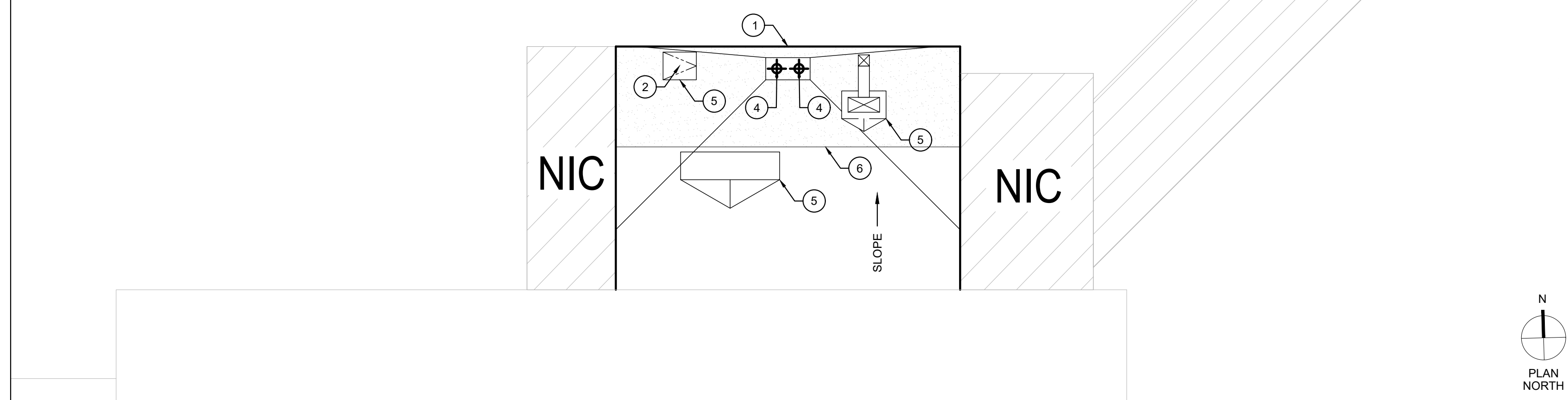
- PIPE PENETRATION (RE: 1/A2.0)
- CURB MOUNTED VENT (RE: 4/A2.0)
- CURB MOUNTED VENT (RE: 4/A2.0)
- SKYLIGHT (RE: 8/A2.0)
- CURB MOUNTED A/C (RE: 4/A2.0)
- ROOF DRAIN
- MISC CURB (RE: 4/A2.0)
- DOWNSPOUT
- SCUPPER WITH CONDUCTOR HEAD (RE: 9/A2.0)
- SCUPPER (RE: 6/A2.0)
- CROSS OVER LADDER (RE: /A2.0)
- ROOF HATCH (RE: /A2.0)
- ELECTRICAL LINE (RE: 3/A2.0)
- GAS LINE (RE: 3/A2.0)
- CONDENSATE LINE (RE: 3/A2.0)
- WALK PADS (RE: 7/A2.0)
- SELECTIVE ROOFING REPAIRS

**2** KEYNOTES

**1** LEGEND



**3** ROOF PLAN - AREAS: "M" & "N"  
1/8"=1'-0"



**6** ROOF PLAN - AREAS: "A"  
1/8"=1'-0"



ARCHITECT PBK Architects, Inc.  
 BEAM Professionals  
 1110 Iron Point Road  
 Suite 200  
 Folsom, CA 95630  
 916-356-9922  
 BEAMProf.com

OAK VALLEY ELEMENTARY SCHOOL - ROOF REPLACEMENT

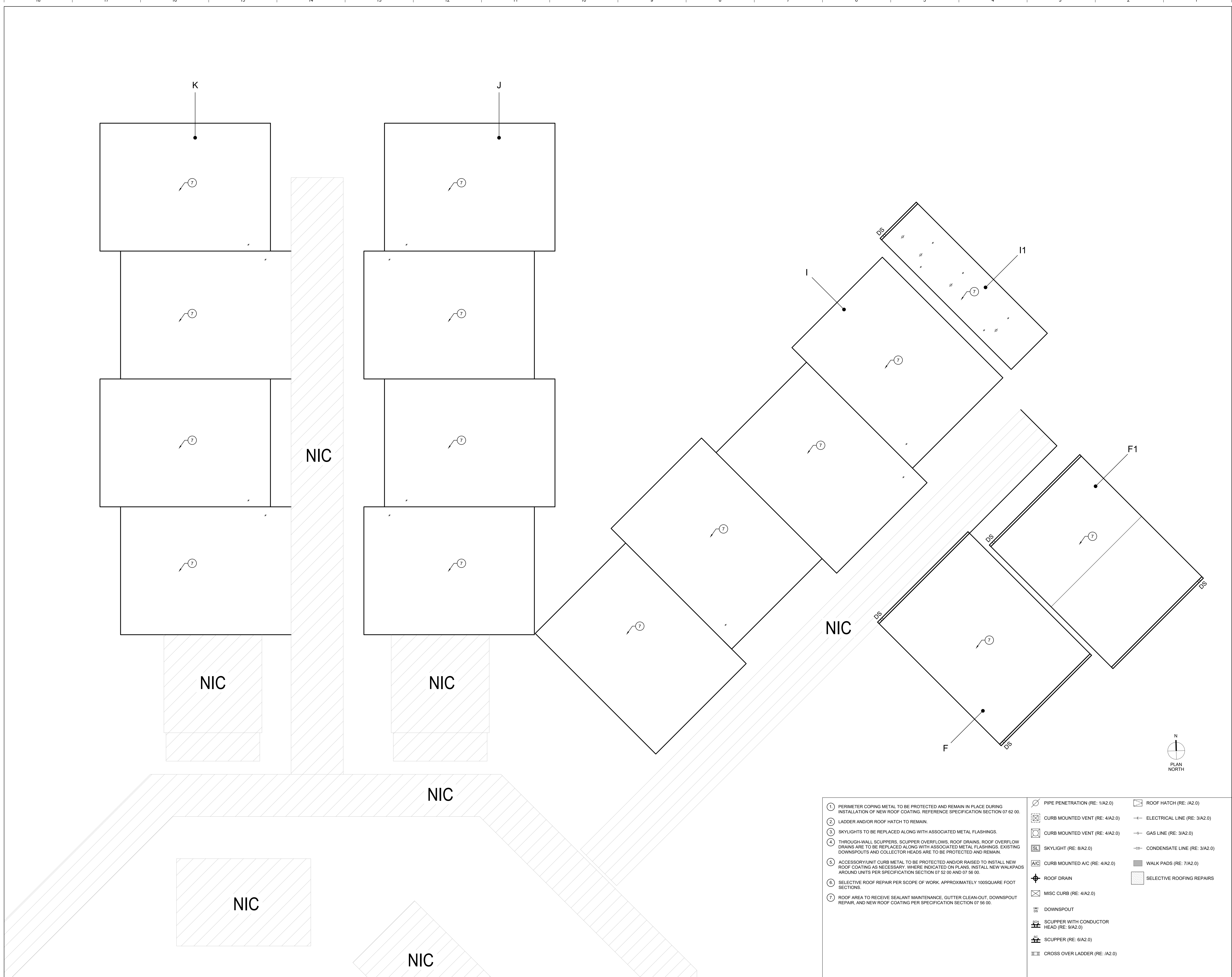


PROJECT NUMBER	230610.3
DATE	03/07/2024
DRAWN BY	AV

#	DESCRIPTION	DATE
1	Update Lockdown	3/7/24

95% CD  
**A1.1**  
 ROOF PLAN CONT.





**6** ROOF PLAN - AREAS: "F", "F1", "I", "I1", "J" & "K"  
1/8"=1'-0"

**2** KEYNOTES

- ① PERIMETER COPING METAL TO BE PROTECTED AND REMAIN IN PLACE DURING INSTALLATION OF NEW ROOF COATING. REFERENCE SPECIFICATION SECTION 07 62 00.
- ② LADDER AND/OR ROOF HATCH TO REMAIN.
- ③ SKYLIGHTS TO BE REPLACED ALONG WITH ASSOCIATED METAL FLASHINGS.
- ④ THROUGH-WALL SCUPPERS, SCUPPER OVERFLOWS, ROOF DRAINS, ROOF OVERFLOW DRAINS ARE TO BE REPLACED ALONG WITH ASSOCIATED METAL FLASHINGS. EXISTING DOWNSPOUTS AND COLLECTOR HEADS ARE TO BE PROTECTED AND REMAIN.
- ⑤ ACCESSORY UNIT CURB METAL TO BE PROTECTED AND/OR RAISED TO INSTALL NEW ROOF COATING AS NECESSARY. WHERE INDICATED ON PLANS, INSTALL NEW WALKPADS AROUND UNITS PER SPECIFICATION SECTION 07 50 00 AND 07 56 00.
- ⑥ SELECTIVE ROOF REPAIR PER SCOPE OF WORK. APPROXIMATELY 100 SQUARE FOOT SECTIONS.
- ⑦ ROOF AREA TO RECEIVE SEALANT MAINTENANCE, CUTTER CLEAN-OUT, DOWNSPOUT REPAIR, AND NEW ROOF COATING PER SPECIFICATION SECTION 07 56 00.

- ☒ PIPE PENETRATION (RE: 1/A2.0)
- ☒ ROOF HATCH (RE: /A2.0)
- ☒ CURB MOUNTED VENT (RE: 4/A2.0)
- ⚡ ELECTRICAL LINE (RE: 3/A2.0)
- ☒ CURB MOUNTED VENT (RE: 4/A2.0)
- ⚡ GAS LINE (RE: 3/A2.0)
- ☒ SKYLIGHT (RE: 8/A2.0)
- ⚡ CONDENSATE LINE (RE: 3/A2.0)
- ☒ CURB MOUNTED A/C (RE: 4/A2.0)
- WALK PADS (RE: 7/A2.0)
- ☒ ROOF DRAIN
- SELECTIVE ROOFING REPAIRS
- ☒ MISC CURB (RE: 4/A2.0)
- ☒ DOWNSPOUT
- ☒ SCUPPER WITH CONDUCTOR HEAD (RE: 9/A2.0)
- ☒ SCUPPER (RE: 6/A2.0)
- ☒ CROSS OVER LADDER (RE: /A2.0)

**1** LEGEND



ARCHITECT PBK Architects, Inc.  
BEAM Professionals  
1110 Iron Point Road  
Suite 200  
Folsom, CA 95630  
916-355-8922  
BEAMProf.com

OAK VALLEY ELEMENTARY SCHOOL - ROOF REPLACEMENT

595 2nd ST.  
BUELLTON, CA 93427  
95% CD



PROFESSIONAL SEAL



PROJECT NUMBER

230610.3

DATE

03/07/2024

DRAWN BY

AV

REVISIONS

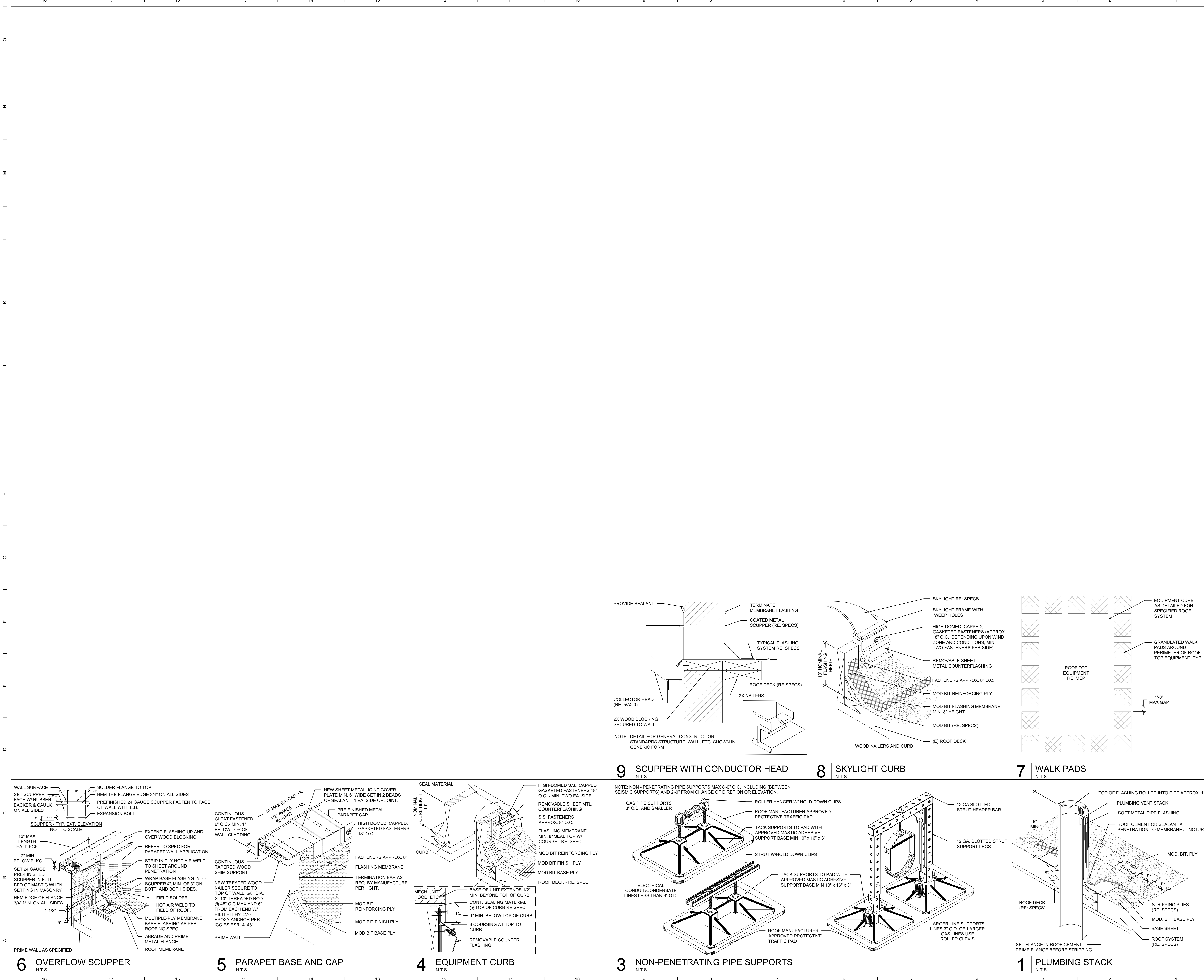
#	DESCRIPTION	DATE
1	Update Schedule	3/20/24

95% CD

A1.2

ROOF PLAN CONT.





ARCHITECT PBK Architects, Inc.  
 BEAM Professionals  
 1110 Iron Point Road  
 Suite 200  
 Folsom, CA 95630  
 916-355-8922  
 BEAMProf.com

OAK VALLEY ELEMENTARY  
 SCHOOL - ROOF REPLACEMENT

595 2nd ST.  
 BUELLTON, CA 93427  
 95% CD



PROJECT NUMBER	230610.3
DATE	03/07/2024
DRAWN BY	AV

REVISIONS	
#	DESCRIPTION
1	Update 10/2024
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	

95% CD

**A2.0**

ROOFING DETAILS