

San Ramon Valley Unified School District

REQUEST FOR BID

RFB # 677 For Reroofing – Education Center, Main

Bids must be received no later than:

Monday, May 23, 2016 @ 11:00 AM (Pacific Time)
And NO MINUTES, NO SECONDS

Deliver response to the office of:
Jasmine R. Gacusan, CPPO
Director of Purchasing
3280 Crow Canyon Road
San Ramon, CA 94583

www.SRVUSD.NET

TABLE OF CONTENTS

| NOTICE FOR BIDDERS | Page 3 |
|--|---------------|
| INTRODUCTION | Pages 5 - 7 |
| INSTRUCTIONS & CONDITIONS | Pages 8 - 18 |
| SPECIAL PROVISION | Pages 19 - 22 |
| BID FORM AND PRICING SCHEDULE | Pages 23 - 24 |
| SCHEDULE and FORMS (must be returned along with the Bid Form): | |

- A Reference
- B Fingerprint
- C Survey
- C.1 Quality Assurance
- D Acknowledgment of Addenda
- E Non-Collusion
- F Worker's Compensation Certificate
- G- Designation of Subcontractors
- H Bid Bond
- H.1 Payment Bond (Labor & Material)
- H.2 Performance Bond

Additional Exhibits:

District Boundary Map

Provision for Purchase of Work and Services

SCOPE OF WORK

- 01 0100 SUMMARY OF WORK
- 01 7100 FINAL CLEANING
- 01 7400 WARRANTIES-GUARANTEES
- 02 4119.13 SELECTIVE DEMOLITION
- 07 3113 ASPHALT SHINGLES
- 07 5419 THERMOPLASTIC MEMBRANCE
- SRVUSD ED CENTER ROOF PLAN
- CONTRACTOR WORKSHEET
- DETAILED DRAWINGS
 - Typical Section (1)
 - o Asphalt Shingles, Section View (2)
 - Shingle Underlayment (3)
 - Asphalt Shingles, Cross Section View (4)
 - o Penetration Flashing (5)

NOTE: The Table of Contents is to be made a part of the above referenced bid.

NOTICE TO BIDDERS

RFB # 677

Notice is hereby given that the San Ramon Valley Unified School District (hereinafter referred to as "District") in the town of Danville, County of Contra Costa, State of California desires to solicit qualified bids for:

REROOFING – Education Center, Main FOR MAINTENANCE AND GROUNDS DEPARTMENT

Each bid must be sealed, marked with the RFB # 677 and titled "REROOFING – EDUCATION CENTER, MAIN FOR MAINTENANCE AND GROUNDS DEPARTMENT" and returned no later than:

11:00 am (Pacific Time) and NO MINUTES, NO SECONDS on Monday, May 23, 2016

to the office of Purchasing Director of the San Ramon Valley Unified School District, 3280 Crow Canyon Road, San Ramon, CA 94583. Bids will be publicly opened at that time. The District will not receive bids after the time set for opening thereof. It shall be the full responsibility of all bidders to ensure that bids are delivered to the above office by the time and date stated. It is the sole responsibility of the bidder to assure that the bid is received by the Purchasing Director prior to the bid opening deadline date and time. The District will not be responsible for late deliveries by U.S. mail or any other means. Late bids, unsealed bids, unlabeled bids, incomplete bids, or bids otherwise not in compliance with the General Conditions of this Request for Bid, will be rejected. By submitting a response, bidder acknowledges and accepts the General Conditions and all terms contained in this RFB. Faxed bids will not be accepted. All bids shall be on the form provided for by the District.

PRE-BID CONFERENCE: A bidder's conference will be held on Tuesday, May 10, 2016 @ 10:00 am at Education Center, 699 Old Orchard Drive, Danville CA 94526 for the purpose of acquainting all prospective bidders with the bid documents and the scope of the entire project. Vendors are highly encouraged to attend this conference to address any questions or clarifications. The site visit will be an opportunity for prospective Bidders to investigate condition at the site. Bidders shall address any questions in writing by the said email address and deadline below.

CLARIFICATION DEADLINE

All questions regarding bid preparation, documents, discrepancies, omissions, the selection process, specifications and interpretations of the terms and conditions of the Request for Bid (RFB) must be submitted in writing via email to Purchasing@srvusd.net with subject title: BID CLARIFICATION, no later than May 12, 2016 @ 11:00 am (Pacific Time). The District will respond to all submitted questions in a timely manner to all the bidders by email only. It is the responsibility of the bidder to provide the District with a valid email address to receive the questions and responses.

BID DOCUMENTS may be examined and downloaded online at: http://www.srvusd.net/cms/page_view?d=x&piid=&vpid=1410255936944 BONDS: All bids must be accompanied by certified check, cashier's check or bidder's bond, for an amount not less than ten (10%) of the amount of the base bid, made payable to the San Ramon Valley Unified School District. Said check or bond shall be given as a guarantee that the bidder will enter into Contract if awarded the Work, and in case of refusal or failure to enter into said Contract, the check or bond, as the case may be, shall be payable to the District and retained as liquidated damages. Successful bidder, simultaneously with the execution of the agreement, shall furnish a payment bond in the amount of 100% of the contract price and a faithful performance bond in the amount of 100% of the contract price. Bonds secured from a surety company issued by corporation duly and legally licensed to transact business in the State of California and approved by the District.

Date: May 10, 2016

Jasmine R. Gacusan, CPPO
Director of Purchasing,
Duplicating and Warehouse

Published dates: May 3 & 10, 2016

INTRODUCTION

ABOUT THE DISTRICT

The San Ramon Valley Unified School District encompasses the communities of Alamo, Blackhawk, Danville, Diablo, and San Ramon (including the new Dougherty Valley communities) as well as a small portion of the cities of Walnut Creek and Pleasanton. The district is comprised of 36 schools serving more than 30,000 students in Kindergarten through Grade 12.

Facts and Figures

36 Schools (communities: Alamo, Blackhawk, Danville, Diablo, San Ramon)

22 elementary schools

8 middle schools

4 comprehensive high schools

1 continuation high school

1 independent study school

SRVUSD Statistics

Number of Students 33,814

Number of Employees 4,136

Number of Teachers 1,414

Number of Administrators 80

Number of Pupil Services Personnel 87

Number of Classified Staff 1,155

Meals served per day: between 6,300 – 8,100

District Wide Learning Standards

District-wide learning standards are in place in the following areas:

- Language Arts
- Mathematics
- Foreign Language
- History/Social Studies
- Science
- Technology
- Health

Budget/Funding

| Year | Description | Budget |
|---------|---------------------------|---------------|
| 2014-15 | Operating Budget Revenues | \$265,332,894 |
| 2014-15 | Expenditures | \$260,920,237 |
| | | |
| 2015-16 | Operating Budget Revenue | \$313,106,212 |
| 2015-16 | Expenditures | \$281,405,413 |

CALENDAR OF EVENTS

| Event | Date | | |
|----------------------------------|-------------------------|--|--|
| Legal Advertisement | May 3 and 10, 2016 | Daily Journal – San Ramon Valley Times | |
| Bidder's Conference | May 10, 2016 @ 10:00 am | Job Site – Ed Services, 699 Old Orchard Dr., Danville, CA 94526 | |
| Questions/Clarification Deadline | May 12, 2016 @ 11:00 am | Purchasing@srvusd.net | |
| Bid Opening Date | May 23, 2016 @ 11:00 am | Purchasing Conference Room – Service Center 3280 Crow Canyon Rd, San Ramon, CA 94583 | |
| Board Approval | June 14, 2016 | District Office | |

DEFINITIONS

ASB - Apparent Successful Bidder

CONTRACT – The resulting contract issued by the SRVUSD Purchasing Department, which is also at times Referred to herein as the "Agreement", or as the "Master Purchase Agreement".

PROPOSAL - The term "Bid" "proposal", and Quote, are used interchangeably herein and refer to the bid submitted in response to this Request For Bid (RFB).

PURCHASE ORDER (PO) - The documents to be furnished to the successful contractor(s) by SRVUSD Purchasing Department, specifically describes the work to be done and references back to the Master Purchase Agreement.

SAN RAMON VALLEY UNIFIED SCHOOL DISTRICT - The terms, "Owner", "District", "SRVUSD", "Purchasing Director", "Buyer", "Department", are used interchangeably herein and refer to the same entity: San Ramon Valley Unified School District

REQUESTOR – The terms "Requestor", "requesting department", "department", "end user", "school site" or "originator", are interchangeably herein and refer to the same entity, the receiver of goods and services.

RFB, RFP or RFQ are used interchangeably and mean solicitation for pricing, proposal, quote, bid.

SELLER--- The term "Seller", "Supplier", "Contractor", "Bidder", "Respondent", "Provider", "Offeror" and "Vendor", are used interchangeably herein and refer to the same entity, the provider of goods and services to the District.

WORK - "Work" shall include all obligations, duties, requirements, and responsibilities required for the successful completion of the Contract by the Seller, including the furnishing of all supervision, labor, materials, equipment and other supplies, incidental with the execution of the Contract and in accordance with the terms and conditions set forth in the Contract.

JOB SITE LOCATIONS

The work will be performed in San Ramon Valley Unified School District property in District owned or operated buildings. See attached district boundary map.

INSTRUCTIONS and CONDITIONS

BIDDERS RESPONSIBILITIES

Each bidder is responsible for reading this entire document carefully and becoming familiar with all the instructions, terms and conditions, plans, specifications and drawings before submitting a bid. Bidders shall fully inform themselves of all conditions, in, at, and about the site, the building or buildings, if any, and any work that may have been done thereon.

Submittal of a bid shall be incontrovertible evidence that the bidder understands the bid requirements and has determined that the plans, instructions, specifications and/or drawings fall within an acceptable standard and are sufficient for bidding and delivering the required items; and that the bidder is capable of delivering items/equipment which comply with the plans, specifications and drawings within the required time frame.

Alternate or incomplete bids will NOT be accepted.

The Governing Board reserves the right to correct errors or omissions in specifications wherever necessary for the proper fulfillment of the intentions of the bid.

No bid response shall receive consideration by the San Ramon Valley Unified School District unless made in accordance with the instructions of RFB # 677.

INTENT

To provide all labor, materials, tools, equipment, permitting, fees, licenses, and supervision necessary to complete the: REROOFING @ Education Center, Main Building, for the San Ramon Valley Unified School District (SRVUSD), in accordance with the specifications, terms and conditions contained herein. Contractor shall make every effort to minimize and coordinate downtime with the District. This includes site and protection and buildings. No interruption of the District operation shall be allowed. Any need to turn off utilities to surrounding buildings must be approved by the Owner in advance. Contractor shall coordinate all phases of the construction schedule with the Owner. The contractor shall submit a preliminary Scheduling and Work Sequence Schedule for review and approval.

PREPARATION OF BIDS

All bids must be prepared and submitted using only the bid schedule/pricing sheet, questionnaire or other forms included in the bid packages. Bids prepared on any other form will be rejected. Bids must be submitted in ink or typewritten; signature on bids must be in ink to be considered acceptable. Prices should be stated in units specified hereon. Numbers shall be stated in figures and words where so indicated, and signatures of all individuals must be in longhand. The completed form should be without interlineations, alterations or erasures.

SUBMITTAL OF BIDS

Bid response may only be submitted to the office of the Director of Purchasing, in a sealed envelope, clearly marked with the Bid Number, Bid Name, Vendor Name and Date and Time bid is due. Bidders shall submit two (2) original signed set. See section 01 7400 bullet 1.02 FORM SUBMITTALS. Each bid received in response to this RFB shall remain the property of the District. Bidders are responsible for ensuring that their bids are received by the San Ramon Valley Unified School District Purchasing Department on or before the bid due date. No faxed, verbal or electronically transferred bids will be accepted. Postmarks indicating the date of mailing shall not be considered as evidence of receipt of bid. Any bids received after the schedule closing time for receipt of bids will be returned to the bidder unopened.

BONDS

Bids must be accompanied by a certified check, cashier's check, or bidder's bond, for an amount not less than ten percent (10%) of the amount of the base bid, made payable to the order of the Owner. If a bidder's bond accompanies the bid, said bond shall be secured by an Admitted Surety (an insurance organization authorized by the Insurance Commissioner to transact business of insurance in the State of California during this calendar year). The surety insurer must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bond, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurer selected by Contractor and to require Contractor to obtain a bond from a surety insurer satisfactory to the Owner. Said check or bond shall be given as a guarantee that the bidder will enter into the Contract if awarded the Work, and in case of refusal or failure to enter into said Contract, the check or bond, as the case may be, shall be payable to the Owner and retained as liquidated damages.

The successful bidder, simultaneously with the execution of the agreement, shall furnish a payment bond in the amount of 100% of the contract price and a faithful performance bond in the amount of 100% of the contract price. Bonds secured from a surety company issued by corporation duly and legally licensed to transact business in the State of California and approved by the District.

DEADLINE FOR RECEIPT OF BID

Bid proposals must be filed at the office of the Purchasing Director located at 3280 Crow Canyon Road, San Ramon, CA 94583 no later than Monday, May 23, 2016 at 11:00 am (Pacific Time) and no minutes, no seconds. It is their sole responsibility to see that their bid is RECEIVED by the Purchasing Department on-time.

BIDDER'S CONFERENCE

A mandatory **bidder's conference** will be held on **Tuesday, May 10, 2016** @ **10:00** am at Education Services, 699 Old Orchard Drive, Danville, CA 94526 for the purpose of acquainting all prospective bidders with the bid documents and the scope of the entire project. Vendors are highly encouraged attend bidders conference to address any questions or clarifications. The site visit will be an opportunity for prospective Bidders to investigate condition at the site. Bidders shall address any questions in writing by the said email address and deadline below.

CLARIFICATION DEADLINE

Questions regarding documents, discrepancies, omissions, or doubts as to meaning must be submitted in writing via email to PURCHASING@SRVUSD.NET with subject title: BID CLARIFICATION, no later than **Thursday**, **May 12, 2016 at 11:00 am**.

CONTACT

Any questions regarding administrative bidding procedures should be directed to the Director of Purchasing, Jasmine Gacusan, CPPO, at (925) 824-1834; jgacusan@srvusd.net

Any questions regarding the scope or nature of the services should be directed Craig Cesco, Director of Maintenance and Grounds at (925) 824-1818; ccesco@srvusd.net

MODIFICATIONS

Changes in or additions to the Bid Form, recapitulations of the work bid upon alternative proposals, or any other modifications of the Bid Form which is not specifically called for in the contract documents may result in the rejection of the bid as not being responsive to the Bid. No oral or telephonic modification of any bid submitted will be considered.

WITHDRAWAL OF BID PROPOSALS

Bid proposal may be withdrawn by the bidder prior to the time fixed for the opening of bids, but may not be withdrawn for a period of ninety (90) days after the opening of bids. A successful bidder shall not be relieved of the bid submitted without the District's consent or bidder's recourse to Public Contract Code sections 5101 et. seq.

BASIS OF AWARD

San Ramon Valley Unified School District intends to award to the lowest responsive, responsible bidder. Bids will be evaluated on basis of price, compliance to the specifications, statement of qualifications and references provided by the Bidder. The District reserves the right to consider quality, warranty, compatibility with existing equipment or set-up, and any other information considered to be in the best interests of San Ramon Valley Unified School District. Bidder may be required to demonstrate in their Bid response that they have the available resources necessary to successfully provide SRVUSD's requirements.

The Owner reserves the right to add or deduct any of the additive or deductive items after the lowest responsible and responsive bidder is determined.

AWARD OF CONTRACT

A written purchase order and mutually signed contract will be furnished to the successful bidder within time for acceptance specified, result in a binding contract without further action by either party. The Purchase Order and contract shall be interpreted, construed and given effect in all respects according to the laws of the State of California. If two identical low bids are received from responsive responsible bidders, the District will determine which bid will be accepted pursuant to

DISTRICT'S RIGHTS AND OPTIONS

San Ramon Valley Unified School District reserves the following options:

- The right to reject any and all bid proposals, to contract work with whomever and in whatever manner the District decides, to abandon the work entirely, or postpone selection for its own convenience, without indicating any reasons or to negotiate with any, all, or none of the respondents to the RFB. This RFB does not obligate the San Ramon Valley Unified School District to negotiate or award a contract.
- 2. The right to waive any informality or non-substantive irregularity as the interest of the District may require.
- 3. The right to award in whole or in part.
- 4. The right to issue subsequent request for bids.
- 5. The right to approve or disapprove the use of particular subcontractors and/or suppliers.
- 6. The right to waive any informality or irregularity in the bidding process and any bids.
- 7. The right to accept Supplier's signed offer and issue a purchase order directly to the supplier based on this bid document.
- 8. The right to add additional sites during the life of the contract with all terms and condition remaining the same as prescribed in this bid solicitation.
- 9. The District reserves the right to accept and award the contract within ninety (90) days of the submission deadline date. Any offer not otherwise extended or accepted within this time period may be rejected.

Award of this bid does not imply exclusive agreement with the San Ramon Valley Unified School District.

ADDENDA OR BULLETINS

Any addenda or bulletins issued during the time of bidding shall form a part of the drawing and specifications issued to bidders for the preparation of their proposals and shall constitute a part of the contract documents. Initials of bidders on the bid form shall reflect receipt of all addenda prior to submittal of the bid. If an addendum or addenda have been issued by the District and not noted as being received by the bidder, the Proposal may be rejected.

BID PROTEST

Should any bidder question or protest the award of contract to the apparent low bidder, such question or protest must be furnished in writing to the Director of Purchasing no later than three working (3) days following the date of bid opening. Such submittal must fully explain the basis of objection supported by all relevant information, facts and details. Letter must be signed by an authorized representative stating specific reason(s) for the protest including all relevant facts (law, rule, regulation, and criteria).

GOVERNING BOARD

This bid will result in award of a formal contract. The award of the contract will be by action of the

Governing Board and to the lowest responsible bidder from among those bidders responsive to the call for bids unless otherwise specified.

EXECUTION OF CONTRACT

The Agreement between Owner and Contractor shall be signed by the successful bidder in as many originals as the Owner deems necessary and returned, together with the required Contract bonds, insurance certificates, additional insured endorsement, declarations page, and a Public Contract Code section 3006(a) Roof Project Certification, if required, within ten (10) days after the mailing, faxing, emailing or delivering of the Notice of Award of Contract. If the ten (10) day period would expire after the date for commencement of the Work, Contractor must submit the documents before the date of commencement of the Work. If the successful bidder does not comply with this paragraph, Owner may revoke and/or cancel the award to the successful bidder and award the Contract to the next lowest bidder, or release all bidders and call for new bids or may otherwise proceed as allowed by law. Successful Bidder's bid bond will be forfeited for failure to enter into contract within the given deadline. A Roof Project Certification is not required if (1) the Owner has ADA (average daily attendance) of 2,500 or less, or (2) the Project involves repair of 25% or less of the roof, or costs \$21,000 or less.

PUBLIC RECORDS

All responses to the BID will become the property of the District. Once a final award is made, all bid responses, except financial and proprietary information, become a matter of public record and shall be regarded by the District as public records. The District shall not in any way be liable or responsible for the disclosure of any such records or portions thereof if the disclosure is made pursuant to a request under the Public Records Act.

If a Bidder believes that portions of a proposal constitute trade secrets or confidential or financial data, then the Bidder must so specify by, at a minimum, stamping in bold red letters, the term "CONFIDENTIAL" on that part of the proposal which the Bidder believes to be protected from disclosure. The Bidder must submit in writing specific detailed reasons, including any relevant legal authority, stating why the Bidder believes the material to be confidential or a trade secret. Vague and general claims as to confidentiality will not be accepted. The District will be the sole judge as to whether a claim is general and/or vague in nature. All offers and parts of offers that are not marked as confidential may be automatically considered public information after the contract is awarded. The Bidder is hereby notified that the District may consider all or parts of the offer public information under applicable law even though marked confidential.

TAXES

Taxes shall be included in the proposed prices if it involves labor and materials. The District is subject only to State of California, Contra Costa County sales tax, which will be collected by the vendor. Federal excise taxes are not applicable to schools districts, and shall not be paid by the District.

ERRORS AND CORRECTIONS

No erasures or white-out will be permitted. Mistakes may be crossed out and corrections made adjacent but must be initialed in ink by the person signing the bid. Verify your bids before

submission as they may not be withdrawn or corrected after being opened or withdrawn after the specified time period has elapsed.

COST OF BID PREPARATION

Cost of preparation of the response to this Invitation to Bid is solely the responsibility of the vendor. San Ramon Valley Unified School District accepts or implies no liability in the cost of the bid preparation.

WARRANTY/QUALITY

Manufacturer's warranty must be included as part of any bid. The supplier, manufacturer, or their assigned agent shall guarantee the product or service performed against all defects or failures of materials and workmanship for a period recommended by the manufacturer from the actual delivery date. Where applicable, all merchandise must be warranted to be in compliance with California energy, conservation, environmental, educational, and products liability standards.

DELIVERY

Time is of the essence. Delivery shall be no later than 60 days from date of award of bid. If unable to meet this deadline, please indicate on bid price page. The District reserves the right to postpone delivery up to 30 calendar days at no additional cost.

FOB DESTINATION PRICING

Bidders must quote prices F.O.B. destination, to the delivery location. Pricing or discounts should be stated in the units specified herein and bidders should quote each manufacturer separately. The District is not obligated to pay shipping and handling charges, fuel surcharges, drayage or labor charges not indicated herein.

FAILURE TO BID

If a bidder does not bid on any line item, the bidder is required to write "no bid" in the space provided. If a bidder is no bidding the entire project, the bidder is required to write "no bid" across the face of the bid form, place the company name, sign and date the form and return the form to the purchasing department. Failure to notify the District of a no bid may result in the vendor being removed from the District's bidders list.

EVIDENCE OF RESPONSIBILITY

Upon the request of the District, a bidder whose bid is under consideration for the award of the contract shall submit promptly to the District satisfactory evidence showing the bidders financial resources, his experience in the field and his organization, background check certification, proof of registration with the Department of Industrial Relations or other factors and submittals contributing to the successful execution and completion of the contract.

NON-COLLUSION AFFIDAVIT

A non-collusion affidavit must be executed and submitted with this bid. The certificate is included as part of this bid package.

RIGHTS AND REMEDIES IN THE EVENT OF DEFAULT

If the bidder defaults, the District may procure the articles or services from other sources and may recover the loss occasioned thereby from any unpaid balance due the bidder or by proceeding against a bidder's bonds, if any, or by suit against the bidder. The prices paid by the District shall be considered the prevailing market prices at the time such purchase is made.

GOVERNING LAW AND VENUE

In the event of litigation, the bid documents, specifications and related matters shall be governed by and construed in accordance with the law of the State of California. Venue shall be with the appropriate state or federal court located in Contra Costa County.

TRANSFER OF INTEREST

No interest in the contract shall be transferred to any other party without permission of the District.

INDEMNIFICATION

The successful bidder has the entire responsibility for any and all injury to the public and to individuals. The successful bidder expressly agrees to indemnify, defend and hold the District, its Board Members, managers and employees free and harmless from and against any and all loss, liability, expense, claims, cost, suits and damages including attorneys' fees arising out of contractor's operation or performance under this Agreement.

NON APPROPRIATION OF FUNDS

Notwithstanding any of the foregoing provisions, if for any fiscal year of this agreement the governing body of the San Ramon Valley Unified School District fails to appropriate or allocate funds for future payments under the Agreement, San Ramon Valley Unified School District will not be obligated to make any payments remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and either party hereto may terminate the Agreement as provided.

TERMINATION

This Agreement may be terminated by District at any time upon thirty (30) days written notice. In the event of termination, the Vendor shall be entitled to compensation for services performed and/or provided; or items delivered and accepted to the effective date of termination. However, the District may condition payment of such compensation upon acceptance with full satisfaction of the deliverables.

FAILURE TO PERFORM

The San Ramon Valley Unified School District, upon written notice to the Vendor, may immediately terminate this Contract should the Vendor fail to perform properly and correct any of its obligations hereunder or any substandard performance that is unacceptable to the District. In the event of such termination, the District may proceed with the work in any reasonable manner it chooses. The cost to the District of completing the Vendor's performance shall be deducted from any sum due to the Vendor under this Contract, without prejudice to the District's rights to recover damages.

ATTORNEY'S FEES

In the event a suit is brought by either party in connection with this agreement, the prevailing party shall have judgment for court costs and a reasonable attorney's fee.

PREVAILING WAGE

If applicable, the Successful Bidders/Proposers hereby stipulate that Sections 1771 and 1777.5 of the Labor Code of the State of California shall be complied with and shall forfeit as a penalty to the San Ramon Valley Unified School District not more than fifty dollars (\$50.00) for each calendar day or portion thereof for each worker paid less than the general prevailing rates of per diem wages as determined by the Department of Industrial Relations for such work or craft in which such worker is employed on The Work in violation of the Labor Code of the State of California, in particular the provisions of Sections 1770 to 1780, Inclusive, thereof. Copies of the general prevailing wages are available at: http://www.dir.ca.gov/dlsr/PWD/index.htm

The Contractor shall maintain payrolls and basic records relating thereto during the course of the work for all laborers and mechanics, including apprentices, trainees, watchmen, and guards working at the site of the work. Such records shall contain the name and address of each employee, his correct classification, rate of pay (including rates of contributions for, or costs assumed to provide various fringe benefits), daily and weekly number of hours worked, deductions made, and actual wages paid.

SUBCONTRACTS

Pursuant to the Subletting and Subcontracting Fair Practices Act, Government Code Section 4100-4114, inclusive, every bidder shall, on the enclosed form set forth the name and location of the place of business of each subcontractor who will perform work or labor or render service to the bidder in or about the work in an amount in excess of one-half (1/2) of one percent (1%) of the bidder's total bid and the portion of the work which will be done by each subcontractor. If the bidder fails to specify a subcontractor for any portion of the work performed under the contract in excess of one-half (1/2) of one percent (1%) of the bidders total bid, bidder agrees that bidder is fully qualified to and will perform that portion of the work. The successful bidder shall not, without the consent of the District, either substitute any person as subcontractor in place of the subcontractor designated in the original bid, permit any subcontractor to be voluntarily assigned or transferred, allow the work to be performed by anyone other than the original subcontractor listed in the bid or sublet or subcontract any portion of the work in excess of one-half (1/2) of one percent (1%) of the total bid as to which the bidder's original bid did not designate a subcontractor. SRVUSD shall have the authority to approve changes of, or additions of, subcontractors. Such permission shall be requested in writing and must be approved in writing. Nothing contained in the contract documents shall be held to

create a direct contractual relationship between any subcontractor and the District.

No subcontractor will be recognized as such; all persons engaged this contract will be considered employees of the Supplier, and he will be held responsible for their work that shall be subject to all the provisions of the contract document.

See SB854 Fact Sheet http://www.dir.ca.gov/dlse/PublicWorks/SB854FactSheet_6.30.14.pdf for additional information regarding requirements and registration with the Department of Industrial Relations on all projects awarded on or after April 1, 2015.

CHANGE ORDERS

SRVUSD may prescribe a modification of requirements or methods of work, and for such purposes, the District may, at any time during the life of the contract, by written order make such changes, as he shall find necessary. If such changes increase or reduce the quantity or amount of work to be done, the contract price shall be subject to an equitable adjustment.

All contract changes, such as changes in the scope of work, must be handled as Contract Change Orders. Contract Change Orders shall be in writing and authorized in advance by both the Project Manager and the Purchasing Department.

The Contractor shall proceed to immediately perform the changed work upon receipt of a written order to make the changes, notwithstanding the fact that an agreement has not been reached regarding the cost of the changes, or in time required to complete the contract due to the changes.

COMPLIANCE WITH OSHA

Bidder agrees that all items offered comply with all applicable Federal and the State Occupational Safety and Health Act, laws, standards and regulations, and that Bidder will indemnify and hold the District harmless for any failure to so conform.

INSURANCE REQUIREMENTS

During the term of this agreement, successful bidder will maintain and keep in force insurance of the types and in the minimum amounts set forth below:

| Insurance | Minimum Limits of Liability |
|------------------------------------|--|
| Worker's Compensation | \$1,000,000 |
| Employer's Liability Comprehensive | \$1,000,000 |
| General Liability | \$1,000,000 per occurrence/\$3,000,000 aggregate |
| Automobile Liability | \$1,000,000 |

All insurance policies must be primary. Within ten (10) days of the Effective Date, Vendor will provide District with certificates of insurance confirming that Vendor maintains required insurance, along with a second page endorsement naming "the San Ramon Valley Unified School District, its board members, agents, attorneys, employees, and consultants" as additional insured under the respective policy. All insurance policies and certificates of insurance will contain a provision for thirty (30) days advance notice to District of all, policy changes, including without limitation, cancellation.

Supplier waives all rights of subrogation against District. Supplier's failure to comply with these requirements will constitute a material breach of this agreement. Supplier warrants that each of its significant subcontractors will maintain insurance coverage as described above.

COMPLETION AND LIQUIDATED DAMAGES

Time is of the essence in this Contract, and the time of completion for this Project shall be in accordance with the dates established in the milestone schedule.

Milestone Schedule

Date Activity

Week of June 27th Notice to Proceed

July 29, 2016 Completion of all work as specified

August 5, 2016 Punch list complete
August 8, 2016 Contract complete

Liquidated damages apply as of;

- July 29, 2016 scope pursuant to the Milestone Schedule.
- August 8, 2016 contract completion.

Liquidated damages will accrue and may be assessed as provided in the Contract Documents. Should said Work not be completed within the time limit as may be extended as herein provided, damages will be sustained by the Owner. It is understood and agreed that it is and will be impracticable or extremely difficult to determine the actual amount of damages which the Owner will sustain in the event of and by reason of such delay, and it is therefore agreed that the Contractor will pay the Owner the sum of (ENTER AMOUNT (\$400.00) per calendar day for each and every day's delay beyond the time specified as and for liquidated damages, during or as a result of each calendar day by which completion of the Project milestones is delayed beyond the completion date; in case the Contractor fails to make such payment, the Owner may deduct the amount thereof from any money due or that may become due the Contractor under the Contract. Should such money not be sufficient, the Owner shall have the right to recover the balance from the Contractor or its sureties.

DISABLED VETERAN BUSINESS ENTERPRISES

In accordance with Education Code 17076.11, the Owner has a participation goal for disabled veteran business enterprises of at least 3 percent per year of the overall dollar amount of funds expended each year by the Owner on projects that use funds allocated to the Owner by the State Allocation Board pursuant to the Leroy f. Green School Facilities Act of 1998 for construction or modernization. The contractor shall provide the Prime Bidder Certification of DVBE Enterprise Participation form to the Owner with return of executed contract so that the Owner can assess its success at meeting this goal.

NON-INTEREST OF DISTRICT OFFICIALS

The Contractor hereunder represents that the only persons or parties interested in this transaction as principals are those named herein; that no director, officer, Board Member or employee of the San Ramon Valley Unified School District is in any manner interested directly or indirectly in this transaction or in the profits to be derived therefrom.

FINGERPRINTING

Section 45125.1 of the California Education Code is hereby made part of this bid solicitation as if written in its entirety herein.

REGISTRATION WITH DEPARTMENT OF INDUSTRIAL RELATIONS (DIR)

For any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015, a contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal (subject to the requirements of Section 4104 of the Public Contract Code), or engage in the performance of, any contract for public work, as defined by Division 2, Part 7, Chapter 1 (§§1720 et seq.) of the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the Labor Code.

See SB854 Fact Sheet http://www.dir.ca.gov/dlse/PublicWorks/SB854FactSheet_6.30.14.pdf for additional information regarding requirements and registration with the Department of Industrial Relations on all projects awarded on or after April 1, 2015.

SPECIAL PROVISIONS SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

CONTRACT DOCUMENTS

Identification of Contract Documents: The Contract Documents are hereby defined to include but not limited to: all Bidding Documents (including Notice to Bidders, Request for Bid, Addenda [if any], and Bid Forms); the Purchase Order; Master Purchase/Contract Agreement, Exhibits, Survey/Questionnaire, District boundary map, Forms, Schedule A - G and Provisions of SRVUSD.

SUBMITTALS – Non-submittal will disqualify bidders.

| CHECKLIST:BID FORM |
|---|
| Bid Form is a required submittal item and will be used as basis of award along with the vendor's suitability to provide the District with the best overall value. |
| LIST OF REFERENCES (Schedule A) – must be returned along with the bid form Provide a list of three (3) references with similar scope to this project, which have been performed within the past three (3) years. Use provided reference list form. |
| FINGERPRINT FORM (FORM B) - must be returned along with the bid form |
| SURVEY/QUALIFICATION/QUESTIONNAIRE FORM (Schedule C) - must be returned along with the bid form. |
| ADDENDA (Schedule D) - must be returned along with the bid form |
| NON COLLUSION (Schedule E) - must be returned along with the bid form |
| WORKER'S COMPENSATION FORM (Schedule F) - must be returned along with the bid form |
| DESIGNATION OF SUBCONTRACTORS (Schedule G) - must be returned along with the bid form |
| BID BOND (Schedule H) – must be returned along with the bid |
| Payment Bond (Sched H.1) – submitted by successful bidder with the signed contract |
| Performance Bond (Sched H.2) – submitted by successful bidder with the signed contract |
| PROOF OF INSURANCE – submitted by successful bidder with the signed contract |
| STATE OPERATOR'S LICENSE – must be provided along with the bid |

GENERAL REQUIREMENTS

- 1. Must possess all C-39 Roofing Contractor's License, permits, and professional credentials necessary to supply products and perform services as specified in this BID. Licenses, permits, certifications and credentials must stay current and remain valid for the entirety of the contract.
- 2. Bidder shall possess a minimum of three (3) years demonstrated successful operation of this type of service, servicing similar or equal size facilities.
- 3. Bidder has continuously engaged in the business of roofing installation for at least three (3) years.
- 4. Proper conduct is expected from the Contractor's personnel when on any District site. This includes adhering to non-smoking policy, drug or alcohol free work place. District has the right to request removal of any of the Contractor's personnel not adhering to these policies. All work shall be performed in a professional manner according to generally accepted industry standards.
- 5. Contractor's personnel shall carry appropriate identification, uniform, badges when working on any of the District site. During business hours, contractor's personnel are required to check-in with the site's office manager or front desk.
- 6. District may or may not require a site or tour visit of the central station prior to award of this bid.

ACCOUNT MANAGER/SUPPORT STAFF

Contractor provider shall provide adequate, competent support staff that is assigned to the District's account during normal working or business hours, Monday through Friday. Representative(s) shall be knowledgeable about the contract, services provided, products and able to identify and resolve quickly any issues including but not limited to orders and billing issues.

WORKMANSHIP AND QUALITY LEVEL

All work shall be performed by experienced and qualified staff that are directly employed and supervised by the Contractor. The Contractor shall provide management and technical supervision through a competent foreman as required to implement modern methods and procedures.

The Contractor shall be responsible for the skills, methods and actions of all employees, subcontractors and for all work done.

The Contractor shall cooperate with the representative authorized by the San Ramon Valley Unified School District to enable them to determine the Contractor's conformity with these specifications and the adequacy of the work being performed. The Contractor shall give personal supervision to the work and be available for consultation with the Director of Maintenance and Grounds or designated representative, a minimum of twice per month, or at a schedule mutually agreed upon.

WARRANTY

Contractor guarantees and warrants that the work provided in accordance with generally accepted industry standards, practices, and principles applicable; be of merchantable quality; be fit for San Ramon Valley Unified School District's particular needs and purposes; and not infringe any patent, trademark, copyright, or any other rights of third parties. If any of the forgoing warranties is breached, Contractor shall correct all defects and nonconformities; be liable for all direct, indirect, consequential, and other damages suffered by District or other persons; and defend and indemnify the District from any claim asserted by any person resulting in whole or in part from such breach.

See section 01 7400 for details on Warranties/Guarantees.

LIABILITY FOR DAMAGES

The Contractor shall be fully responsible for any and all damages done to the District's property that resulted from the Contractor's operations. This shall include, but not limited to, the repair, removal and replacement, at Contractor's expense, of shrubs, trees, vines, turf grass, groundcover or other landscape items that are lost or damage due to negligence in pest and disease control practices; and/or due to improper watering, fertilizing, herbicide damage, or lack of proper maintenance and operations. This shall also include any damage done to buildings and other improvements due to Contractor's negligence. The Director of Maintenance and Grounds or designee shall determine the negligence. The District shall be responsible for replacing any plant material that has died as a result of vandalism or theft.

PROTECTION AND SECURITY OF WORK SITES

The Contractor shall be responsible for the protection and securing of certain work sites. This may include opening and closing of said sites. The Contractor shall obtain the necessary keys from the Director of Maintenance and Grounds for use in securing all gates and locks associated with said sites.

CERTIFIED PAYROLL RECORDS

Upon request in writing by the San Ramon Valley Unified School District, the contractor shall, within five (5) working days, furnish a certified copy of the latest payroll period prior to the date of said request. The request may be on a monthly basis to verify prevailing wage. This record shall reflect payments for all of the Contractor's employees working under this contract during the payroll period. The District may request copies of any or all such payrolls during the life of this contract.

CONTRACTOR INVOICE AND PAYMENT INFORMATION

1. Billing Instructions

Unless otherwise specified, all invoices shall be billed to: San Ramon Valley Unified School District, Accounts Payable Section, 699 Old Orchard Drive, Danville, CA 94526-4331. Each invoice shall indicate Contractor's name and mailing address, SRVUSD's agreement and/or Purchase Order number, and the beginning and ending billing dates.

2. Payment

Unless a specific term discount is offered, SRVUSD will make payment within 30 calendar days after receipt of invoice by the District. Where the Contractor offers a payment discount, the District will take this into consideration when making payment. The District, at its option, may verify the correctness of the invoice.

3. Right to Withhold Payment

The San Ramon Valley Unified School District may withhold or nullify the whole or any part of any payment due the Contractor to such extent as may be reasonably necessary to protect the District from loss as a result of:

a) Defective work not remedied in accordance with provisions of the Contract Documents

- b) Claims or liens filed or reasonable evidence indicating probable filing of claims or liens
- c) Failure of the Contractor to make payments properly for labor, services, materials, equipment or other facilities or to subcontractors
- d) Damage to other work or property
- e) Failure of the Contractor to maintain all records as required; submitting progress schedules, weekly payroll records and any other such items as may be required by this specification.

BID FORM

For

Reroofing at Education Center - Main Building

Pursuant and in compliance with your Instructions and Conditions and all other documents relating thereto, the undersigned offeror, having familiarized himself with the terms of the contract, the local conditions affecting the performance of the contract, the cost of the work at the place where the work is being done, and with the specifications and other contract documents, hereby propose and agrees to perform within the time stipulated, in contract, including all of its component parts, and everything required to be performed, and to provide and furnish any and all of the labor, materials, tools, expandable equipment, applicable taxes and all utility and transportation services necessary to perform all of the work required in connection with:

BID #677

All in strict conformity with the specifications and other contract documents, including any addenda issued and on file at the Office of the Director of Purchasing.

| Furnish all labor, materials, equipment, transportation, disposal, travel, taxes, and all costs to complete project: Reroofing | | |
|--|---|--|
| BASE BID | | |
| | Ś | |
| (Amount in words) | | |
| | | |
| FERMS - Cash terms (if applicable)% Days | | |
| FOB – Destination | | |
| PRICING | | |

VENDOR'S LICENSE STATEMENT

| License No | Expiration Date | |
|--------------------------------------|---------------------------------------|--|
| Classification No. & Title | | |
| PROJECT START DATE | | |
| Within working days o | f issuance of Purchase Order and Cont | ract Agreement. |
| ******** | ********* | ******** |
| THE REPRESENTA | TIVES MADE HEREIN ARE MADE UNDER | R PENALTY OF PERJURY. |
| COMPANY. SUBMITTED BY: COMPANY NAME: | ITED ON THIS FORM AND SIGNED BY AUTI | |
| TELEPHONE: | EMAIL: | |
| | NAME: | |
| (Authorized Agent | t) (Ple | ase Print) |
| TITLE: | DATE: | |
| NOTE: If bidder is a corpora | | hall be set forth above, together with |

individual, his signature shall be placed above.

THIS DOCUMENT MUST BE COMPLETED, EXECUTED AND SUBMITTED WITH THE BID FORM SCHEDULE A

BIDDER'S REFERENCE AND STATEMENT OF EXPERIENCE

The bidder is required to state below work of similar character to that included in the proposed contract he has done and provide references which will fully disclose his responsibility, experience, skill and business standing. Please list below your qualified commercial references of similar size contract within the last five (5) years within a 30-mile radius of SRVUSD so that we may inspect the area if necessary:

| Company Name | |
|-------------------------------|----|
| Address | |
| Contact | |
| Phone # | |
| Email Address | |
| Name of Project | |
| Date/Period of Service | |
| Total Amount of Project | \$ |
| Brief Description of Project: | |
| | |
| | |
| | |
| Company Name | |
| Address | |
| Contact | |
| Phone # | |
| Email Address | |
| Name of Project | |
| Date/Period of Service | |
| Total Amount of Project | \$ |
| Brief Description of Project: | |
| | |
| | |
| | |
| Company Name | |
| Address | |
| Contact | |
| Phone # | |
| Email Address | |
| Name of Project | |
| Date/Period of Service | |
| Total Amount of Project | \$ |
| Brief Description of Project | : |
| | |
| | |
| <u> </u> | |

THIS DOCUMENT MUST BE COMPLETED, EXECUTED AND SUBMITTED WITH THE BID FORM

SCHEDULE B

Employee Fingerprint & Criminal Background Check Certification to the San Ramon Valley Unified School District

| (vendor/contractor name) | |
|--|--|
| | |
| that Education Code Section 45125.1 applies to contracts f as janitorial, administration, landscaping, transportation, 45125.1 requires that employees who will come into cont fingerprinted and their fingerprint cards must be submitte Federal Bureau of Investigation for a criminal records chewith pupils after January 5, 1997, until the records check conviction for a serious or violent felony may be assigned contact with pupils without the prior written approval of such approval. | , food-related and similar services. Sect tact with pupils of the school district must ed to the California Department of Justice eck. No such employee may come into con is completed. No employee with a record to perform services which will place them. |
| It is hereby certified to the San Ramon Valley Unified record of conviction for a serious or violent felony will existing contract with San Ramon Valley Unified School come in close contact with pupils unless the school district the school district grants written permission under condition | I be assigned to perform services, under District which will permit or require then of first receives notice from the contractor |
| I,(please print name) | |
| (please print name) | , as an officer/owner/agent |
| | , as an officer/owner/agent |
| | , as an officer/owner/agent |
| | |
| (vendor/contractor name) authorized to enter into the above certification. | , hereby certify that I am duly |
| of(vendor/contractor name) | |

SCHEDULE C

SURVEY – QUALIFICATION and QUESTIONAIRE FORM

| ١. | now many employees in your mine now many are assigned to the district account: |
|----|--|
| 2. | How many years have been in business? |
| 3. | Provide copy of current C-39 Roofing Contractor State license to perform the work in conformance with the provisions of the State Business and Professions Code. |
| 4. | Office location supporting the District's account. |
| 5. | Describe the functional structure of your organization (ie. supervision of maintenance staff, office staff, etc). |
| | |
| | |
| | |
| 6. | Describe experience and qualifications as it applies to past and current references. |
| | |
| | |
| | |
| | |
| | |
| 7. | List any additional information relevant to this bid solicitation that will be helpful in evaluating your ability to successfully operate the business. |
| | |
| 8. | Are you engaged in any litigation, which could affect your ability to perform under this agreement? |
| | YES NO If yes, give details in an attached statement. |

| 9. | If awarded the contract, the Bidder intends to carry on the business as: an individual (Partnership (), Joint Venture (), Corporation (), other (). If "other", attach an explain | | | | |
|-------|--|--|-----------------------------------|--|--|
| 10. | If partnership or joint ventor agreement and identify the | ure, attach a copy of the partners e participants: | hip agreement or joint venture | | |
| NAM | E | _ | SHARE | | |
| Date | of Organization: | | | | |
| Gene | eral or Limited Partnership: | | (if applicable) | | |
| Agre | ement Recorded: | (County); | (State); (date) | | |
| Regis | stered in California?(y | ves) (no), If yes, when? _ | | | |
| 11. | Have you ever had a bond or surety denied, canceled, or forfeited? | | | | |
| | | ves, state name of bonding compa on or forfeiture in an attached sta | • • | | |
| 12. | Have you ever declared ba | ankruptcy or been declared bankr | rupt? | | |
| | | ves, state date, court jurisdiction, assets in an attached statement. | docket number, amount of | | |
| 13. | Have any agreements held end of contract date? | d by you for the same or similar p | rojects ever been canceled before | | |
| | YES NO If y | ves, give details in an attached sta | tement. | | |
| 14. | | by another jurisdiction or Contraction or Contraction or Contraction of the contraction o | | | |
| | YES NO If y | ves, give details in an attached sta | tement. | | |

9.

$*THIS\ DOCUMENT\ MUST\ BE\ COMPLETED,\ EXECUTED\ AND\ SUBMITTED\ WITH\ THE\ BID\ FORM*$

SCHEDULE C.1

QUALITY ASSURANCE

Submit a sample of detailed description of your quality assurance program intended to ensure a successful workmanship and materials warranty.

THIS DOCUMENT MUST BE COMPLETED, EXECUTED AND SUBMITTED WITH THE BID FORM

SCHEDULE D

ACKNOWLEDGMENT OF ADDENDA

Failure to execute the following may be considered as an irregularity in the bid. Receipt of the following addenda issued during the time of bidding is acknowledged, and the information contained therein has been considered in the preparation of this bid:

| [|] | None | [|] | No. 3 |
|---|---|-------|---|---|-------|
| [|] | No. 1 | [|] | No. 4 |
| Γ | 1 | No. 2 | ſ | 1 | No. 5 |

(Check Appropriate Space(s) for Addenda Received)

| ۱Λ. | /ai | 'ni | nc |
|-----|-----|-----|-----|
| vv | aı | | 115 |

If an addendum or addenda have been issued by the District and not noted above as being received by the bidder, this Proposal may be rejected.

SCHEDULE E

NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID.

| The undersigned declares |)• | |
|--|--|--|
| partnership, company, a collusive or sham; that the put in a false or sham bid with any bidder or anyon the bidder has not in an conference with anyone profit, or cost element of against the public body a statements contained in submitted his or her bid information or data relipartnership, company as to effectuate a collusive of | e bidder as not directly or indirectly and has not directly or indirectly and indirectly and fix the bid price of the bidder of the bid price, or of that of a warding the contract of anyon the bid are true; and further, the difference of any breakdown the ative thereto, or paid, and sociation, organization, bid de | , the party making the of or on behalf of, any undisclosed person or poration; that the bid is genuine and no rectly induced or solicited any other bidder to ectly colluded, conspired, connived, or agreed that anyone shall refrain from bidding; that ally sought by agreement, communication, over or any other bidder or to fix any overhead any other bidder or to secure any advantage interested in the proposed contract; that all that the bidder has not, directly or indirectly ereof, or the contents thereof, or divulged will not pay, any fee to any corporation pository, or to any member or agent thereo |
| SIGNATURE: | | |
| PRINT NAME: | | |
| DATE: | | |

SCHEDULE F

CONTRACTOR'S CERTIFICATE REGARDING WORKER'S COMPENSATION

LABOR CODE SECTION 3700

"Every employer except the State and all political subdivisions or institutions thereof, shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.
- (b) By securing from the Director of Industrial Relations a certificate of consent to selfinsure, which may be given upon furnishing proof satisfactory to the City of Industrial Relations of ability to self-insure and to pay any compensation that may become due to this employees.'

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of this contract.

| SIGNATURE: | |
|-------------|--|
| | |
| | |
| Print Name: | |
| | |
| | |
| Date: | |

(In accordance with Article 5 [commencing at Section 1860], Chapter I, Part 7, Division 2 of the Labor Code, the above certificate must signed and filed with the awarding body prior to performing any work under this contract.)

THIS DOCUMENT MUST BE COMPLETED, EXECUTED AND SUBMITTED WITH THE BID FORM

SCHEDULE G

DESIGNATION OF SUBCONTRACTORS

In compliance with the provisions of the Government Code of the State of California each bidder shall set forth below the name and the mill, shop, or office of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement to be performed under these specifications and the portion of the work which will be done by each subcontractor.

If the Contractor fails to specify a subcontractor for any portion of the work to be performed under the contract, he shall be deemed to have agreed to perform such portion himself, and he shall not be permitted to subcontract that portion of the work under the conditions hereinafter set forth.

Subletting or subcontracting of any portion of the work as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding reduced to writing as a public record of the legislative body of the CITY.

IF THERE ARE NO SUBCONTRACTORS, PLEASE STATE "NONE".

| TRADE | NAME | CONTRACTOR'S LICENSE NUMBER | EXPIRATION DATE |
|-------|------|--------------------------------|--------------------|
| | | | _ |
| | | | _ |
| | | | |
| | | | |
| | | | _ |
| | | | _ |
| | | | |

THE REPRESENTATIONS MADE HEREIN ARE MADE UNDER PENALTY OF PERJURY.

SCHEDULE H

BID BOND

| KNOW ALL MEN BY THESE PRESENTS that | |
|---|--|
| | as Surety, are hereby held and firmly bound unto the |
| | Contra Costa County, State of California, "Owner" in the sum of |
| |) for payment of which sum, well and truly to be made, we |
| hereby jointly and severally bind ourselves, our | heirs, executors, administrators, successors and assigns. |
| The condition of the above obligation is such t | hat whereas the Principal has submitted to the Owner a certain |
| - | nereof, to enter into a Contract in writing for the construction of |
| | lance with Contract Documents. |
| NOW, THEREFORE, | |
| a. If said bid shall be rejected, or, in the a | alternative: |
| • | rincipal shall execute and deliver a contract in the form of |
| | execute and deliver Performance and Payment Bonds in the |
| _ | mpleted in accordance with said bid), and shall in all other |
| respects perform the agreement creat | |
| Then this obligation shall be void otherwise t | the same shall remain in full force and effect, it being expressly |
| _ | Surety for any and all default of the Principal hereunder shall be |
| the amount of this obligation as herein stated. | Surety for any and an default of the fillicipal hereunder shall be |
| the amount of this obligation as herein stated. | |
| Surety, for value received, hereby stipulates | and agrees that no change, extension of time, alteration or |
| | call for bids, or to the Work to be performed hereunder, or the |
| | any way affect its obligation under this bond, and it does hereby |
| | time, alteration or addition to the terms of said Contract or the |
| call for bids, or to the Work, or to the specificat | |
| IN WITNESS WHEREOF the above-hounder na | rties have executed this instrument under several seals this |
| | e and corporate party being hereto affixed and these presents |
| | pursuant to authority of its governing body. In the presence of: |
| daily signed by its undersigned representative, | sursuant to dutionly of its governing souly. In the presence on |
| (Notary Seal) | |
| | Principal |
| | Business Address |
| | |
| | Corporate Surety |
| | Business Address |
| | Du |
| | Ву: |
| The arts an area with a fill to be | manufacture and the state of th |
| ine rate or premium of this bond is | per thousand, the total amount of premium |
| charged, \$ | |

(The above must be filled in by Corporate Surety).

Submitted by successful bidder with the signed contract Schedule H.1

PAYMENT BOND (Labor and Material)

KNOW ALL MEN BY THESE PRESENTS:

| That WHEREAS, San Ramon Valley Unified School District of Contra Costa County, State of California, (the "Owner" of the public works project described below) and |
|---|
| |
| Reroofing – Education Center, Main |
| Which said agreement dated,, and all of the Contract Documents are hereby referred to and made a part hereof; |
| And |
| WHEREAS, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by whom the Contract is awarded to secure the claims arising under said agreement. |
| NOW, THEREFORE, THESE PRESENTS WITNESSETH: |
| That the said Principal and the undersigned ("Surety") are held and firmly bound unto all laborers, material men, and other persons, and bound for all amounts due, referred to in Civil Code section 9554, subdivision (b), in the sum of Dollars (\$) which sum well and truly be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents. |
| The condition of this obligation is that if the said Principal or any of its subcontractors, or the heirs, executors, administrators, successors, or assigns of any, all, or either of them, shall fail to pay any of the persons named in Civil Code section 9100, or any of the amounts due, as specified in Civil Code section 9554, subdivision (b), that said Surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay costs and reasonable attorney's fees to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered. |
| It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims so as to give a right of action to them or their assigns in any suit brought upon this bond. |
| Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect. |
| And the said Surety, for value received, thereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of said contract or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration, or addition. |

| (To be signed by |) | | |
|---------------------------------|--------------------|-----------|-------------|
| (Principal and Surety, |) | | |
| (and acknowledged and |) | | |
| (Notarial Seal attached |) | | |
| | | | |
| | | | |
| | | Principal | |
| | | Surety | |
| | | Ву: | |
| | | | ney-in-Fact |
| | | | |
| The above bond is accepted and | d approved this | of | |
| The above bollu is accepted and | approved tills day | 01 | |

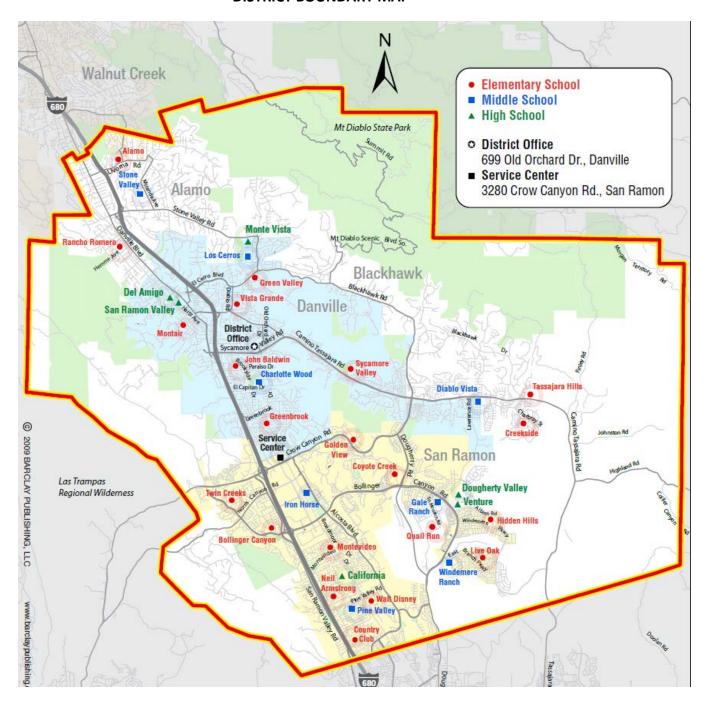
Submitted by successful bidder with the signed contract Schedule H.2

Performance Bond

| KNOW ALL MEN BY THESE PRESENTS | that we, (Contractor/Address) | <u>)</u> as Principal and |
|---|-----------------------------------|---|
| | | are held and firmly bound unto the San |
| Ramon Valley Unified School District | t, in the County of Contra Cost | ta, State of California, hereinafter called the |
| "Owner", in the sum of | Dolla | ars (\$) for the payment of |
| which sum well and truly made, we b | oind ourselves, our heirs, execu | utors, administrators, and successors, jointly |
| | | ontract with the Owner, the terms of which |
| are incorporated herein by reference, | | |
| | | |
| | Reroofing – Education Center, | , Main |
| The condition of this obligation is s | uch that, if the Principal shal | ll well and truly perform and fulfill all the |
| undertakings, covenants, terms, cond | ditions, and agreements of sai | id Contract during the original term of said |
| Contract and any extensions thereof | that may be granted by the O | wner, with or without notice to the Surety, |
| and for the period of time specified | d in the Contract after compl | letion for correction of faulty or improper |
| materials and workmanship and duri | ng the life of any guaranty or | warranty required under the Contract, and |
| shall also well and truly perform and | fulfill all the undertakings, cov | enants, terms, conditions and agreement of |
| any and all duly authorized modificati | ions of said Contract that may | hereafter be made, then this obligation is to |
| be void, otherwise to remain in full fo | rce and virtue. | |
| And the said Surety for value rece | aived hereby stimulates and : | agrees that no change, extension of time, |
| • • | | Work to be performed thereunder or the |
| | | obligation on this bond, and it does hereby |
| – | | addition to the terms of the Contract, or to |
| the Work, or to the specifications. | ension of time, afteration of a | addition to the terms of the contract, of to |
| the work, or to the specifications. | | |
| No further agreement between Suret | ty and Owner shall be required | d as a prerequisite to the Surety performing |
| its obligations under this bond. | ., and Gwiler shall be required | and a prerequisite to the surety performing |
| Ties obligations ander this bond. | | |
| IN WITNESS WHEREOF, the above-bo | ounden parties have executed t | this instrument under their several seals this |
| day of | , hereto affixed and th | nese presents duly signed by its undersigned |
| representative, pursuant to authority | | |
| | , | |
| (To be signed by |) | |
| (Principal and Surety, |) | |
| (And acknowledged and |) | |
| (Notarial Seal attached |) | |
| (Affix Corporate Seal) | | |
| , | | (Individual Principal) |
| | | , , , |
| | | |
| | | (Business Address) |
| (Affix Corporate Seal) | | |
| | | (Corporate Principal) |
| | | . , |
| | | (During and Julyana) |
| | | (Business Address) |

| (Affix Corporate Seal) | |
|---|--------------------|
| | (Corporate Surety) |
| | |
| | (Business Address) |
| | |
| | Ву: |
| | |
| The rate of premium on this bond is per thousand. | |
| The total amount of premium charged is | |
| (The above must be filled in by Corpor | ate Surety) |

DISTRICT BOUNDARY MAP



SAN RAMON VALLEY UNIFIED SCHOOL DISTRICT GENERAL PROVISIONS FOR PURCHASES OF WORK AND SERVICES

If these general provisions are incorporated by reference into a Purchase Order for work and/or services, all references to "Bidder" or "Vendor" shall be construed to mean the Seller from whom work and services are purchased by the District. The work and services described in the accompanying Purchase Order hereinafter shall be designated as "The Work".

- 1.01 Laws to be Observed: The Vendor shall keep itself fully informed of all existing and future State and Federal laws, including O.S.H.A. standards, and all regulations of the District which in any manner affect those engaged or employed in The Work or the materials used in The Work, or which in any way affect the conduct of The Work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same.
- 1.02 Labor Discriminations: No discrimination shall be made in employment of persons upon The Work because of the race, color or religion of such persons, and any Successful Bidder which violates this Section is subject to all the penalties imposed for a violations of Chapter 1, Part 7, Division 2, of the Labor Code of the State of California in accordance with the provisions of Section 1735 thereof.
- 1.03 Prevailing Wage: The Vendor hereby stipulates that Sections 1771 and 1777.5 of the Labor Code of the State of California shall be complied with and shall forfeit as a penalty to the District not more than fifty dollars (\$50.00) for each calendar day or portion thereof for each worker paid less than the general prevailing rates of per diem wages as determined by the Department of Industrial Relations for such work or craft in which such worker is employed on The Work in violation of the Labor Code of the State of California, in particular the provisions of Sections 1770 to 1780, Inclusive, thereof.

Copies of the general prevailing wages are available at: http://www.dir.ca.gov/dlsr/PWD/index.htm

- <u>1.06 Patents:</u> The Vendor shall assume all responsibilities arising from the use of patented materials, equipment, devices, or processes used on or incorporated in The Work.
- 1.08 Responsibility for Damage: The Vendor shall take all responsibility for the Work, shall bear all losses and damages directly or indirectly resulting to the Vendor, to any subcontractor, to the District, to District employees, or to parties designated in any purchase order provision, on account of the performance or character of The Work, unforeseen difficulties, accidents, occurrences or other causes predicted on active or passive negligence of the District, or of parties designated in any purchase order provisions. Said Vendor shall assume the defense of and shall indemnify and hold harmless the District, its officers, officials, directors, employees and agents from and against any or all loss, liability, expense, claim, costs, suits and damages of every kind, nature and description directly or indirectly arising from the performance of The Work.

Approval of the insurance contract does not relieve the Vendor or subcontractors from liability under this clause.

- 1.09 Responsibility for Work: Except as provided above, until the formal acceptance of The Work by the District, the Vendor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of The Work. The Vendor shall rebuild, repair, and restore, and make good all injuries or damages to any portion of The Work occasioned by any of the above causes before final acceptance and shall bear the expense thereof, except such injuries or damages occasioned by acts of the Federal Government or of the public enemy.
- 1.10 No Personal Liability: Neither the District, officers, employees or agents of the San Ramon Valley Unified School District, nor any other officer or authorized assistant or agent shall be personally responsible for any liability arising from or in connection with The Work.
- 1.11 Responsibility of District: The San Ramon Valley Unified School District shall not be held responsible for the care or protection of any material or parts of The Work prior to final acceptance, except as expressly provided for in these specifications.
- 1.12 Vendor Not an Agent of the District: The right of general supervision of the District shall not make the Vendor an agent of the District; and the liability of the Vendor for all damages to persons or to public or private property arising from the Vendor's execution of The Work shall not be lessened because of such general supervision.
- 1.13 Inspection and Payments Constitute No Waiver of Order Provisions: Neither the Inspection of Authorized District employee nor any payment of money, nor acceptance of any part or whole of The Work by the District or its agents shall operate as a waiver of any provision of the order.
- 1.14 Insurance Requirements: Vendor shall promptly obtain, at the Vendor's own expense, all the insurance required by this section and shall submit a completed copy of Coverage Verification signed by the Vendor's agent or broker to the District's Purchasing Division for review and approval. Insurance requirements must be met prior to issuance of purchase order. It is highly recommended that Vendor confer with their insurance carrier or broker to determine in advance submission of the availability of insurance coverage and endorsements as prescribed and provided herein.
- (1) The Vendor shall take out and maintain during the life of the purchase order statutorily sufficient Workers' Compensation and Employer's Liability Insurance for all of the Vendor's employees to be engaged on The Work. Should any work be sublet, the Successful Bidder shall require the subcontractor similarly to provide Workers' Compensation and Employer's Liability Insurance, all in strict compliance with State laws and to fully protect the District from any and all claims arising out of occurrences on The Work.
- (2) The Vendor shall take out and maintain in the name of the Vendor and the District as a Named Insured during the life of the purchase order, such Public Liability Insurance as shall protect itself, the District, its officials, officers, directors, employees and

agents from claims which may arise from operations under the purchase order, whether such operations be the Vendor, by the District, its officials, officers, directors, employees and agents, any subcontractors, or by anyone directly or indirectly employed by either of them. This Liability Insurance shall include, but shall not be limited to, protection against claims arising from bodily and personal injury and damage to property, resulting from the Vendor's, District's or subcontractor's operations, use of owned or non-owned automobiles, products, and completed operations. The amounts of insurance shall not be less than the following:

Single Limits Coverage Applying to Bodily and Personal Injury

Worker's Compensation \$1,000,000 Employer's Liability Comprehensive \$1,000,000

General Liability \$1,000,000 per occurrence/\$3,000,000 aggregate

Automobile Liability \$1,000,000

If Commercial General Liability Insurance or other form with a General Aggregate Limit is used, either the General Aggregate Limit shall be twice the required occurrence limit.

The following endorsements must be attached to the policy:

- (a) If the Insurance policy covers on an "accident" basis, it must be changed to "occurrence".
- (b) The policy must contain a Cross Liability or Severability of Interest Clause.
- (c) The policy must cover complete Contractual liability. Exclusions of contractual liability as to bodily injuries, personal injuries and property MUST BE ELIMINATED from the basic policy endorsements.
- (f) An endorsement shall be provided which states that the coverage is PRIMARY INSURANCE and that no other insurance affected by the District will be called upon to contribute to a loss under this coverage.
- (g) Cancellation, non-renewal or reduction in limits shall be sent to the District with at least 10 days prior written notice, by certified mail, return receipt requested.
 - (h) Insurance is to be placed with California Admitted Insurers with an A.M. Best's Rating of no less than A.XI.

Vendors shall not commence work until such insurance has been approved by the District. The Vendor shall not allow any subcontractor to commence work on its subcontract until all similar insurance required of the subcontractor has been obtained. Such insurance shall remain in full force and effect at all times during the prosecution of The Work and until the final completion and acceptance thereof.

- 1.15 Disposal of Material Outside the Public Right of Way: The Vendor shall make his own arrangements for disposing of materials outside the public right of way, and he shall pay all costs involved.
- 1.16 Preservation of Property: Attention is directed to Section 1.08, "Responsibility for Damage." Due care shall be exercised to avoid injury to existing improvements or facilities, adjacent property and real or personal property that is not to be removed.
- 1.18 Assignment: The performance of The Work may not be assigned except upon the written consent of the Purchasing Director. Consent will not be given to any proposed assignment which would relieve the Vendor or its surety of their responsibilities under the order.
- 1.19 Time of Completion: The Vendor shall complete all or any designated portion of The Work in all parts and requirements within the time set forth in the order.
- 1.20 Care and Protection: The Vendor shall be entirely responsible for any damage to the District's or adjacent property due to hauling materials or other causes attributable to the conduct of his work, and all such damage will be repaired by the Vendor when and as directed by the District's representative, and as required to place the property in as good condition as before the commencement of The Work.
- 1.21 Nondiscriminatory Employment Practices: In the performance of this contract the contractor or subcontractor agrees as follows:

(1) AFFIRMATIVE ACTION - GENERAL

The Vendor shall not discriminate against any applicant for employment or employee on the grounds of race, color, religion, national origin, ancestry, place of birth, sex, sexual orientation, age, or disability. The contractor or subcontractor will take affirmative action to ensure that its recruitment, selection, and evaluation practices do not discriminate against any applicant for employment or employee. The contractor or subcontractor shall also ensure that its personnel policies, practices and procedures, including, but not limited to, the transfer, promotion, demotion, suspension, layoff, or termination, rates of pay and other form of compensation, and the selection for training programs, apprenticeship, and on-the-job training do not discriminate against any employee. The contractor or subcontractor shall post in conspicuous places that are accessible to applicants for employment and employees notices setting forth this Nondiscriminatory Employment Practices Provision.

- (2) The Vendor agrees to seek the inclusion in all union agreements, to which it is a party, clauses prohibiting discrimination based upon race, color, religion, national origin, ancestry, place of birth, sex, sexual orientation, age, or disability. To the maximum extent consistent with applicable labor agreements, the contractor or subcontractor will attempt to recruit applicants without regard to race, color, religion, national origin, ancestry, place of birth, sex, sexual orientation, age, or disability.
- 1.25 Hazardous Material Requirements: The Vendor shall comply with all government laws, rules and regulations concerning the use of hazardous materials and the disposal of hazardous wastes at the job site, including but not limited to the following:
- (1) The Vendor shall not bring hazardous materials onto the job site or deliver hazardous materials without providing the District, in advance, the Material Safety Data Sheets for each hazardous material introduced. Where applicable, materials must be labeled in accordance with Section 5194, Title 8, of the California Administrative Code. No hazardous material will be introduced onto the job site until the District gives written approval for each hazardous material.

- (2) All hazardous material shall be stored and used in a safe manner and shall not be stored or used in any vehicular or pedestrian traffic lanes.
- (3) Any hazardous products, waste or empty containers used or generated shall not be poured down any drain or sewer nor disposed of in any trash container or dumpster.
- (4) The Vendor will be considered to be the hazardous waste generator and will be responsible for the legal transport and disposal of all hazardous waste. No containers or trash will be left in any building or on any job site.
- (5) Violation of any of the above procedures shall be sufficient cause for the District to stop all work. Any expense incurred by the District caused by the work stoppage will be borne by the Vendor. These expenses will include all costs to return the job site and all other areas contaminated by the contractor to a hazard-free condition.
- (6) The Vendor will be solely responsible for all the costs, including fines and penalties, for the investigation and cleanups of any suspected hazardous materials the contractor used, left on the job site, or dumped down a city drain or sewer, and any damage to property and/or injury to any person.
- 1.26 Recycled Materials: Vendors are encouraged to use recycled materials, reusable, environmentally sustainable green products, and products designed to be recycled. However, products must not compromise the performance or operational effectiveness of the product or material. Green products must not detrimentally affect the health and safety of the staff, students or all other employees of the District.

1.27 REGISTRATION WITH DEPARTMENT OF INDUSTRIAL RELATIONS (DIR)

For any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015, a contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal (subject to the requirements of Section 4104 of the Public Contract Code), or engage in the performance of, any contract for public work, as defined by Division 2, Part 7, Chapter 1 (§§1720 et seq.) of the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the Labor Code.

See SB854 Fact Sheet http://www.dir.ca.gov/dlse/PublicWorks/SB854FactSheet_6.30.14.pdf for additional information regarding requirements and registration with the Department of Industrial Relations on all projects awarded on or after April 1, 2015.

SECTION 01 0100

All other Contract Documents for this project are complementary and applicable to this section of the specification.

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS:

- A. The General Conditions, Special Conditions, and Division 1, General Requirements, apply to the Work of all Sections.
- B. The work of this contract comprises construction of all the work shown on the drawings and described in the specification.
 - 1. Provide all material and labor required for the completion of Work described in these documents consisting of installation of a thermoplastic single-ply roofing material, rigid insulation panels, new flashings, gutter assemblies, wall coverings, etc. related to existing sloped metal roof sections.
 - 2. Where conflicts exist between this specification, detail drawings and/or manufacturer warranty requirements, the more stringent shall apply in all instances. Items referenced within this specification or in the detail drawings shall be considered to be referenced in both.

1.02 SCOPE OF WORK

- A. The Contractor shall supply all labor, transportation, material, apparatus, and tools necessary for all work described herein and within the overall specification/contract document/bid package.
- B. Designated Roof Areas: A, B, C and D (Refer to the attached Site Plan).

Each building is comprised of a central equipment well surrounded by a sloped shingle mansard that transitions to vertical shingle walls at the well perimeters. Built-up roofing systems are in place on the low slope portions of each well. Shingle wall systems line the inside vertical walls, and shingle systems are in place on the perimeter mansard areas.

Roof Area D is a low slope roof area central to the complex, which connects Buildings A, B and C. A center open courtyard area is positioned between Buildings A and B.

C. Existing roofing systems consist of:

Built-Up Roofing - Equipment Wells

The roofing system in place within each Equipment Well consists of a mineral-surfaced fiberglass cap sheet set into hot asphalt over 3 fiberglass plies, each set into hot asphalt over a layer of 1/2 inch thick wood fiber insulation mechanically-attached to plywood substrates.

SECTION 01 0100

Built-Up Roofing - Roof Area D

The roofing system in place on Roof Area D consists of a mineral-surfaced fiberglass cap sheet set into hot asphalt over 4 fiberglass plies, each set into hot asphalt over a layer of 3/4 inch thick perlite insulation set in hot asphalt to a plywood substrate. It should be noted that Area D includes the Lower Canopy roof adjacent to the west side of Building A. Please refer to the attached Roof/Site Plan for proper orientation.

Shingle Wall Systems - Vertical

The vertical shingle systems, in place at the interior walls of the equipment well on each building, consist of 30 year dimensional, asphalt composition fiberglass shingles installed over a 30# felt underlayment to plywood substrates.

Shingle Wall Systems - Sloped 30:12

Shingle systems are in place along the outside walls of each equipment well on an approximate 30:12 slope, and consist of identical 30 year dimensional, asphalt composition fiberglass shingles installed over a 30# felt underlayment to plywood substrates.

Shingle Mansard Systems - Sloped 4:12

The same shingle systems are in place on the sloped mansard roof areas at the perimeter of each building in an approximate 4:12 slope.

D. New roofing systems to consist of:

The extent of work is indicated on the drawings and by provisions of this Section and is defined to include removal of all present roofing materials, underlayments, penetration flashings, vents, designated mechanical units, and other items designated at the Pre-Bid Walk and installation of new roofing systems as follows:

Equipment Wells (Low Slope and Vertical Walls)

New roofing systems in each Well will consist of 60 mil thick, tan thermoplastic single-ply (PVC) membrane mechanically-attached on the low slope areas over a layer of 1/4 inch thick DensDeck board mechanically-attached to the existing plywood substrate. On the adjacent vertical walls, the new membrane will consist of 60 mil thick, tan felt or fleece backed thermoplastic single-ply (PVC) membrane fully-adhered to the existing plywood substrate. This membrane will transition to the low slope membrane to form a monolithic, watertight assembly.

Roof Area D and the Low Slope Roof adjacent to Building A

The new roofing system in will consist of 60 mil thick, tan thermoplastic single-ply (PVC) membrane mechanically-attached over a layer of 1/4 inch thick DensDeck board mechanically-attached to the existing plywood substrate.

SECTION 01 0100

At the perimeter of Section D where transition to shingle systems occurs, this interface will be addressed with sections of 24 ga. tan Kynar coated metal placed between the new shingle and single-ply systems. Prior to metal placement the new single-ply will be extended a minimum of 18 inches beyond the anticipated edge of new shingles.

Shingle Wall Systems - Sloped 30:12

The new roofing systems on each Building will consist of 40 year dimensional, asphalt composition fiberglass shingles installed over a 30# felt underlayment to plywood substrates utilizing 6 fasteners per shingle. When installation is complete, each individual shingle will be hand-tabbed by placing a quarter sized dab of roofing cement under each individual tab corner. New shingles will be positioned at the top of the wall approximately 2 inches below the bottom edge of the new coping metal and will be finished with a new 24 ga. tan Kynar coated metal counterflashing skirt in a "Z" configuration. The new skirt will have a 3/8 inch hemmed return and a 1/2 inch outward kick. At the base of the vertical wall, incorporate a 24 ga. tan Kynar coated shed metal to extend a minimum of 6 inches up the vertical wall behind the underlayment system and a minimum of 6 inches onto the 4:12 sloped shingle system. The lower edge of this metal will be configured with a 3/8 inch hemmed return and a 1/2 inch outward kick and will be mechanically-fastened through the shingle system with grommeted fasteners in a 12 inch staggered pattern. Do not overdrive these fasteners to avoid "oil-canning" the metal.

Shingle Mansard Systems - Sloped 4:12

The new roofing systems on each Building will consist of 40 year dimensional, asphalt composition fiberglass shingles installed over 2 layers of 30# felt underlayment to plywood substrates utilizing 5 fasteners per shingle. The new shingle systems will be positioned at the bottom edge to overlap the Kynar metal counterflashing the new single-ply systems by 14 inches, leaving 4 inches of metal exposed. Snap lines and follow to ensure even, consistent and true shingle system edges.

E. Additional Scope Items to consist of:

- 1. Removal of the wood walking deck within the Building C Equipment Well and the temporary shoring of the HVAC equipment to allow roofing demolition and installation of new roofing systems. During the reroofing process, new 2 x 10 inch pressure-treated cross joists will be installed with new Simpson hangers in an east/west orientation to permanently support the present 6 x 6 inch unit sleepers. The new cross joists will be fully encapsulated into the new single-ply roofing system to form a monolithic assembly. Sections of specified walkpad material will be installed over the encapsulated joists to provide protection to the new membrane surface.
- 2. New Kynar coated eave, shed and counterflashing metal will be incorporated where specified elsewhere within this specification.
- 3. New 24 ga. Kynar coated coping metal will be installed to replace the existing at the top of equipment well walls.

SECTION 01 0100

- 4. At all plumbing and electrical penetrations in the new single-ply system, including vertical Equipment Well walls, install new single-ply boot flashings, split flashings or field fabricated flashings. Seal the top edge of each flashing with a stainless steel cinchband and continuous, specified sealant application. Remove all asphalt residues from the penetrations so as not to contaminate the new flashings. If necessary, wrap the penetration with self-adhering, foil-faced tape to prevent asphalt contact.
- 5. Install new galvanized "B" style vents to replace existing heater, cylindrical, bathroom and miscellaneous vent flashings. Wrap each base portion with fully-adhered, unsupported single-ply material as detailed. Include storm collars as necessary with high heat sealant. Where rusted flues are encountered replace the flue with a new, matching item. Orient all flues to be plumb and not 90 degrees to the roof surface.
- 6. At penetrations through the shingle wall systems, incorporate new 4# split lead flashings field-soldered and completed with stainless steel drawbands and urethane sealant.
- 7. Fabricate and install new pipe and conduit support blocks from pressure treated lumber and wrap 4 sides with the specified membrane material. Secure all pipes or conduits to the block with new, material specific and loose fitting hasps and hangers.
- 8. Install the specified walkpad material to replicate the present pattern. Install additional sections at the service side of each mechanical unit and in other locations as outlined during the Pre-Bid Walk.

1.03 WORK BY OTHERS:

A. The Contractor shall provide access to other District vendors as required during completion of the project.

1.04 PERMITS, FEES, AND NOTICES

- A. The Owner shall pay for any required governmental agency plan checking fees.
- B. The Contractor shall pay for all other required governmental agency <u>permits</u>, <u>fees</u>, licenses, etc. required by the Contract Documents and <u>shall</u> be reimbursed by the Owner at direct cost to Contractor. No mark-up of any kind shall be allowed.

1.05 CONTRACTOR'S USE OF PREMISES

- A. By placing a bid for consideration, each bidder acknowledges the obligation to create and enforce worksite rules and regulations for his/her workmen commensurate with activities on a site of this nature. Such rules are to include but are not limited to:
 - 1. No musical devices will be allowed on the property.
 - 2. No shouting, raised voices or foul language will be tolerated.

SECTION 01 0100

- 3. The site has a zero tolerance policy regarding the use of tobacco products of any nature and/or vapor devices.
- 4. Any workman found non-compliant with District rules and regulations will be promptly removed from the site by the Contractor upon his/her discovery of non-compliance or at District or Consultant request. The Contractor will be fully responsible for activities of his/her workmen while engage on the school site.
- B. The Contractor shall take all reasonable precautions for the safety of District employees, students and site visitors throughout the construction period.
- C. The site of the work is shown on the drawings. Contractor shall coordinate with the District for use of a portion of the site for storage of materials, staging and placement of sanitary facilities, etc. This area will be identified by the District and will be fenced with an opaque screen and locked during non-work hours. When and where it is necessary, in order to comply with the performance requirements of this contract, and if the Contractor needs to work outside these areas they shall work within limits and conditions approved in advance by the District.
- D. All materials required by the Specification for construction shall be brought to the site by the Contractor or his/her agents and the work shall be conducted in a manner to avoid interference with the facility or its normal operations.
- E. Use of paved access routes and routing of construction traffic will be designated by the District.
- F. The Contractor shall mount a constant and diligent daily effort to eliminate noise, dust and debris around the job site. Debris dropped on roads, streets or elsewhere on District grounds or surrounding roadways shall be promptly removed by the Contractor to the satisfaction of the District.
- G. Parking spaces for use by construction personnel shall be made available in areas designated by the District at no cost to the Contractor. If the District so provides, refer to requirements set forth regarding parking and traffic planning.

1.06 INSPECTION

- A. Persons performing work shall examine surfaces to receive their work and shall report in writing to the District, with a copy to the Consultant, conditions encountered considered detrimental to the work.
 - 1. Failure to examine and report makes the person responsible, at no increase in Contract Sum, for corrections the District may require.
 - 2. Commencement of work constitutes acceptance of surfaces.

SECTION 01 0100

1.07 SURROUNDING SITE CONDITION SURVEY

- A. Prior to commencement of work, the Contractor shall review the District site in and around the anticipated work areas to document all existing damage to finishes, grounds, landscaping, paving, buildings and shall present a list of existing damage to the District in a bound, written and photographic format clearly identifying the exact location(s).
- B. The District will rely on this documentation in review of post-construction conditions and will document any unreported damage for presentation to the Contractor. The Contractor will be responsible for the entire cost of repair or replacement of any such unreported damage.

1.08 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. Contractor shall locate existing above and below grade structure, drainage lines, storm drains, sewers, water, gas, electrical, and other similar items and utilities before driving heavy equipment or loads over these locations, or other operations which may cause damage. The Contractor shall maintain them in service where appropriate, and shall repair any damage to them caused by the work, at no increase in the Contract Value.
- B. If additional utilities, whose locations are unknown to the District, are suspected to be present, the Contractor shall alert the District prior to performing work in those areas.

1.09 OWNER OCCUPANCY

- A. The Contractor shall allow the District to take possession of and use any completed or partially completed portion of the structure during the progress of the work as soon as is possible without interference to the work.
- B. Possession, use of structure or work, and placing and installation of equipment by the District shall not in any way evidence the completion of the work or any part of it.
- C. Use and occupancy by District prior to acceptance of the work does not relieve Contractor of his responsibility to maintain insurance and bonds required under the Contract until entire work is completed and accepted by the District.

END OF SECTION

FINAL CLEANING SECTION 01 7100

All other Contract Documents for this project are complementary and applicable to this section of the specifications.

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Perform cleaning operations continually during construction to prevent accumulation of debris, trash, scrapes, etc.
- B. Responsibility for keeping the jobsite clean, free from waste material and debris caused by the Contractor, his employees, his work, subcontractors employees or their work, lies solely with the Contractor. The Project Manager will require the job to be kept in a neat condition, and he may call for additional clean-up if deemed necessary. Dispose of all waste, trash, and debris in a safe, acceptable manner, in accordance with all local ordinances and as prescribed by authorities having jurisdiction.
- C. Comply with regulatory requirements and anti- pollution ordinances during conduct of cleaning and disposal operations.
- D. At the end of each work day the Contractor will police the roof work area, surrounding roof areas and the grounds below work areas and will remove all construction related debris, dust, etc. At the end of each work day the general grounds and site will be returned to their pre-construction condition and level of cleanliness. The Contractor will promptly correct any cleanliness deficiencies when brought to his/her attention by the Consultant, Project Manager or other District personnel.

PART 2 - PRODUCTS

2.01 CLEANING MATERIALS

A. Use cleaning materials which will not create hazards to health or property, and which will not damage surfaces, and are recommended by manufacturer of surfaces to be cleaned.

PART 3 - EXECUTION

3.01 DUST CONTROL

A. Use water misting or other means to eliminate dust transmission during the demolition process at the roof or ground level, at disposal bins and during transport of demolition materials across the site.

3.02 FINAL CLEANING

- A. At the conclusion of the project the Contractor will remove all markings from the new roof surfaces.
- B. Clean debris from roof areas, gutters, downspouts and drainage systems.

FINAL CLEANING SECTION 01 7100

3.03 FINAL SITE CLEAN-UP

A. At the conclusion of the project prior to acceptance by the District, the Contractor will review the site, confer with the Project Manager and perform those additional cleaning regimens as necessary for District acceptance.

END OF SECTION

WARRANTIES/GUARANTEES

SECTION 01 7400

All other Contract Documents for this project are complementary and applicable to this section of the specification.

PART 1 - GENERAL

1.01 SUBMITTALS REQUIRED

- A. As an expressed condition required before final completion, the Contractor and each of his subcontractors shall submit to the District a workmanship guarantee for a **period of two (2) years** from the date of Notice of Completion. The Contractor shall endorse each of the subcontractor's guarantees. Each guarantee shall be in the form attached to these specifications and submitted on the company letterhead of the firm initiating the guarantee.
- B. Manufacturer's Warranty, Low Slope Thermoplastic Roofing Systems

As an expressed condition required before final acceptance, the Contractor shall deliver to the District the roofing material manufacturer's Full System, Labor and Material No Dollar Limit warranty with a duration of 20 years.

- C. Manufacturer's Warranty, Vertical and Sloped Shingle Roofing Systems
 - 1. Lifetime Limited Warranty.
 - 2. Warranty Supplement (Certainteed SureStart, or equal) to cover labor and materials in the event of a material or installation defect for a period of Ten (10) Years following installation and acceptance by the District.
- D. During the guarantee periods the Contractor or Material Manufacturers shall not be held responsible for damages due to misuse, negligence, willful damage, improper maintenance, or accidents caused by others.

1.02 FORM OF SUBMITTALS

Number of original signed copies required: Two each.

Bind in commercial quality, 8-1/2 x 11 inch, three-ring binders with hardback, cleanable, plastic covers.

Label cover of each binder with typed or printed title ROOFING REPLACEMENT WARRANTIES, with title of project; name, address and telephone number of the Contractor and each Manufacturer. Include the names of responsible Contractor principals.

Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Specifications, with each item identified with the number and title of the specification section in which specified, and the name of the product or work item.

Separate each warranty/guarantee with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principals.

WARRANTIES/GUARANTEES

SECTION 01 7400

1.03 PREPARATION OF SUBMITTALS

Obtain warranties/guarantees, executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item or work. Except for items put into use with District's permission, leave date of beginning of time of warranty until the Date of Substantial Completion is determined. Verify that documents are in proper form, contain full information, and are notarized. Co-execute submittals when required. Retain warranties /guarantees until time specified for submittal.

1.04 TIME OF SUBMITTALS

Provide submittals within 10 days after Date of Notice of Completion, and prior to final Application for Payment.

For items of work when acceptance is delayed beyond Date of Notice of Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

1.05 FORM OF WARRANTY/GUARANTEE

Provide the following written workmanship guarantee for the scope of work on the Contractor's letterhead:

SECTION: Written Warranty for:

New Roofing Installation, District Education Center Reroof

| We hereby warrant and guarantee that | |
|---|--------|
| which we have provided in | |
| has been completed in accordance with the Specification and all other Contract Do | cument |
| requirements. | |

We agree to replace or repair any or all of our work, and all adjacent work which may be damaged by such repair of replacement, which is defective in workmanship and/or materials, within the period of time prescribed by law, or latently defective in its workmanship and/or materials, within the period of time prescribed by law from the date of the Certificate of Substantial Completion for the area of:

WARRANTIES/GUARANTEES

SECTION 01 7400

If we do not comply with the above mentioned conditions within 14 calendar days of written notice by the District, we collectively and separately do hereby authorize the District to have said defective work and damages repaired or replaced to our expense and will honor and pay for the costs and charges upon demand.

| Signe | d |
|--------------|--|
| C | ROOFING CONTRACTOR (Name/Address/License/Date) |
| | |
| | |
| | OR |
| | |
| | |
| Signe | |
| | SUBCONTRACTOR (Name/Address/License/Date) |
| Countersigne | d |
| • | ROOFING CONTRACTOR |

END OF SECTION

SELECTIVE DEMOLITION

SECTION 02 4119.13

PART 1 GENERAL

1.01 SCOPE

- A. This section applies to removal and disposal of non-asbestos containing roofing and related materials. Set-up and placement of demolition bins/trucks and loading/storage areas will be established in locations that least interfere with day-to-day building activities and staff/visitor safety. Each firm submitting a bid for the specified work understands and acknowledges the nature of the site and that necessary compromises and work interruptions during the roofing process will be inevitable and customary. Each bidder is to account for such eventualities in his/her bid and further acknowledges that no related financial relief will be provided during the course of the project.
- B. By placing a bid for consideration, each bidder acknowledges the obligation to create and enforce worksite rules and regulations for his/her workmen commensurate with activities on a site of this nature. Such rules are to include but are not limited to:
 - 1. No musical devices will be allowed on the property.
 - 2. No shouting, raised voices or foul language will be tolerated.
 - 3. The site has a zero tolerance policy regarding the use of tobacco products of any nature and/or vapor devices.
 - 4. Any workman found non-compliant with District rules and regulations will be promptly removed from the site by the Contractor upon his/her discovery of non-compliance or at District or Consultant request. The Contractor will be fully responsible for activities of his/her workmen while engage on the school site.
- C. The Contractor executing demolition work will be responsible for damage to any related surfaces including building components, landscaping, paving, concrete and other non-roofing related District property. He/she will repair or replace damaged materials to the District's satisfaction.

1.02 EXECUTION

- A. The Contractor shall remove and discard mechanical units, curbs, platforms, vents and other such materials as may be identified during the Pre-Bid Walk or as clearly designated at the roof level with conspicuous markings. Tear-off of existing materials will only be performed when new materials can be installed and the area made watertight in the same day. No exceptions to this requirement will be allowed regardless of weather forecast. The Contractor is to properly gauge his workday based on the size of his crew and their experience.
- B. The Contractor may remove disposal items intact from the roof level or may dismantle such items and remove in a piecemeal fashion. Utilize a crane, hoist or other mechanical means to safely remove materials. Only enclosed chutes or enclosed debris bins removed by crane are to be employed. No open slides or site-constructed chutes are to be utilized. All chutes are to be placed to allow easy flow of demolition materials into disposal bins or trucks. A heavy gauge tarp is to be employed over the end of each chute to eliminate the possibility of disposal debris overflowing or otherwise falling from the bin or truck.

SELECTIVE DEMOLITION

SECTION 02 4119.13

Such tarps are to be fully secured to the truck or bin as well as the base of the chute to prevent even small particles from escaping. When the chute is removed, secure the chute opening in the tarp to prevent materials from escaping when the bin or truck is removed from the site. Each Bidder acknowledges the nature of roofing demolition debris and understands the need to take precautions to prevent contamination of the site by such materials. Any demolition or construction materials allowed to contaminate the site will be immediately removed by the Roofing Contractor at his own expense.

C. The Roofing Contractor is required to coordinate demolition times with the District project Manager to minimize disruption of site activities on a daily basis. For bidding purposes, demolition work, removal of debris from the roof and site clean-up will be completed by 10:00 a.m. each workday, unless preapproved by the District. All debris binds, trucks, etc. will be removed from the site by 10:30 daily, unless otherwise approved by the Project Manager.

PART 2 - PRODUCTS

2.01 EQUIPMENT

- A. Products and/or equipment required for removal and disposal of this nature include:
 - 1. Hammers, pry bars, screw drivers, power drill drivers, etc.
 - 2. Enclosed chutes or enclosed bins for confined transport of debris to the ground level to minimize dust and scattering of materials beyond the disposal containers, vehicles, etc.
 - 3. No powered cutters are to be use in demolition work. All materials will be removed by hand.
 - 4. Other products and tools, as approved by the Consultant and/or District, required for the safe and orderly removal and conveyance of debris material.

PART 3 - EXECUTION

3.01 REMOVAL

- A. The Roofing Contractor shall remove all materials stated in the scope of work. Where materials to be removed are adjacent to materials to remain, care is to be taken to not damage the non-removal items. Any damage that does occur will be promptly repaired by the Contractor at his/her expense to the satisfaction of the District.
- B. The Contractor is to keep the roof and premises clean and free from accumulation of tear-off materials and trash at all times. Contractor is to remove all debris, scrap, and debris from the work area daily. Disposal material shall not be thrown or dropped from the roof, no free-fall of debris will be permitted for any reason; fixed and fully enclosed chutes are to be used to prevent injury or damage to personnel, equipment, building or premises.

SELECTIVE DEMOLITION

SECTION 02 4119.13

3.02 DISPOSAL OF MATERIALS

- A. All materials to be disposed of shall be loaded directly from the roof into trucks or disposal containers by approved methods that will prevent damage to the building and grounds and minimize dust and general disruption of the site. The Contractor shall wrap or otherwise prepare each truckload of debris to prevent accidental disbursement of demolition materials during transport through the neighborhood and municipalities in route to the final disposal site.
- B. No accumulation of materials to be disposed of will be permitted at any time in any staging area. The Contractor is responsible for prompt removal of all tear-off and related debris from the site and its disposal in accordance with all Federal, State, and Local codes and ordinances.
- C. At the end of each workday the Contractor shall police the grounds at and adjacent to each disposal location and will remove all debris and shall return the site to its original state of cleanliness on a daily basis. If the District is required to perform additional cleaning due to Contractor's failure to adhere to these guidelines the cost for such additional cleaning will be borne by the Contractor when presented by the District.

END OF SECTION

SECTION 07 3113

SECTION 07 3113 ASPHALT SHINGLES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Mechanically-attached shingle vertical wall and low slope systems.
- B. Felt underlayments.
- C. Self-adhering flashing materials.
- D. Metal flashings.
- E. Sealants and various accessories.

1.02 RELATED REQUIREMENTS

- A. Section 01 0100 Summary of Work
- B. Section 02 4119 Selective Demolition
- C. Section 07 5419 Thermoplastic Roofing System

1.03 REFERENCE STANDARDS

- A. ASTM D 226, Standard Specification for Asphalt-Saturated Organic Felt used in roofing.
- B. ASTM D 3462, Standard Specification for Asphalt Shingles made from glass felt and surfaced with mineral granules.

1.04 SUBMITTALS (Following Contract Award)

A. Product Data Sheets:

- 1. Provide data sheets for each system component including shingle, underlayments, self-adhering flashings, fasteners, metal flashings, and all other materials specified and/or required for a warranted system. Where multiple products, sizes or colors are shown on a single sheet, clearly indicate which item is being submitted.
- 2. Provide a Kynar metal color chart for District use.
- B. Shop Drawings: Provide shop drawings of any alternate detail being proposed for installation. If none are provided it shall be interpreted that the installation will be per the Specification, Manufacturer, NRCA, WSRCA, and/or SMACNA standards with the most stringent to apply.

SECTION 07 3113

- C. Manufacturer's Installation Instructions: Provide Manufacturer instructions if they augment or enhance the instructions provided within this Specification or address an issue or situation not previously addressed.
- D. Manufacturer's Certificate: Certification on Manufacturer's letterhead acknowledging that submitted products meet or exceed specified requirements.
- E. Warranties: Submit examples of the Roofing Contractor's and Material Manufacturer's warranties.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's original containers/wrappers, dry, undamaged, with seals and labels intact.
- B. Store products in weather protected environment, clear of ground contact and moisture contamination.

1.06 FIELD CONDITIONS

- A. Do not apply roofing materials during inclement weather or during high wind.
- B. Do not apply roofing materials when the ambient temperature is below 40 degrees F.
- C. Do not apply roofing materials to damp or wet surfaces or when precipitation is expected or occurring.
- D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be made watertight the same day.

1.07 WARRANTY

- A. Contractor Warranty: Provide a Contractors 2 year Workmanship Warranty stating that all workmanship defects encountered within 2 years of system installation will be remedied by the Contractor at no additional cost to the District.
- B. Manufacturer Warranty:
 - 1. Lifetime Limited Warranty.
 - 2. Warranty Supplement (Certainteed SureStart, or equal) to cover labor and materials in the event of a material or installation defect for a period of Ten (10) Years following installation and acceptance by the District.

SECTION 07 3113

1.08 QUALITY ASSURANCE

- A. Perform work in accordance with this Specification, Manufacturer's published guidelines, NRCA Roofing and Waterproofing Manual, WSRCA and SMACNA requirements with the more stringent requirements to be adhered to in all instances.
 - Maintain a copy of this Specification and copies of all other supporting documents at the roof level at all times to be used for reference by installation personnel, the Consultant, Project Inspector, and District representatives. Provide access to these documents upon request.
- B. Installer Qualifications: Licensed (C-39) Roofing Contractor specializing in performing the work of this section with a minimum 5 years experience and Material Manufacturer approval. Provide an approval letter from the Manufacturer with the initial submittal package, as noted above.

1.09 GENERAL SCOPE OF WORK

- A. The Contractor shall supply all labor, transportation, material, apparatus, and tools necessary for all work described herein and within the overall specification/contract document/bid package.
- B. Designated Roof Areas: <u>District Education Center</u>, Roof Areas A, B, C and D
- C. Existing roofing systems consist of asphalt composition dimensional shingles over 2 layers of 30# felt underlayment.
- D. The extent of work is indicated on the drawings and by provisions of this section and is defined to include removal of all debris, designated mechanical units, shingles, penetration flashings, and other items designated at the Pre-Bid Walk followed by installation of a new, underlayment and shingle systems inclusive of new metal flashings, new penetration flashings, new coping metal, and roof accessories integrally related to the specified installation.
 - 1. Remove existing shingles, shed metal, coping metal and penetration flashings to expose the substrates. These items are to be replaced with new materials following new shingle system installation.
 - 2. Inspect the substrates and replace any compromised materials with new to match the existing at the Unit Price bid following discussion with and approval of the District.
 - 3. Install the new shed metal, counterflashing metal and coping metal and attach per current SMACNA standards.
 - 4. Shingle Wall Systems Sloped 30:12

The new roofing systems on each Building will consist of 40 year dimensional, asphalt composition fiberglass shingles installed over a 30# felt underlayment to plywood substrates utilizing <u>6 fasteners per shingle</u>. When installation is complete, each individual shingle will be hand-tabbed by placing a quarter sized dab of roofing cement under each individual tab corner.

SECTION 07 3113

New shingles will be positioned at the top of the wall approximately 2 inches below the bottom edge of the new coping metal and will be finished with a new 24 ga. tan Kynar coated metal counterflashing skirt in a "Z" configuration. The new skirt will have a 3/8 inch hemmed return and a 1/2 inch outward kick. At the base of the vertical wall, incorporate a 24 ga. tan Kynar coated shed metal to extend a minimum of 6 inches up the vertical wall behind the underlayment system and a minimum of 6 inches onto the 4:12 sloped shingle system. The lower edge of this metal will be configured with a 3/8 inch hemmed return and will be mechanically-fastened through the shingle system with grommeted fasteners in a 12 inch staggered pattern. Do not overdrive these fasteners to avoid "oil-canning" the metal.

5. Shingle Mansard Systems - Sloped 4:12

The new roofing systems on each Building will consist of 40 year dimensional, asphalt composition fiberglass shingles installed over 2 layers of 30# felt underlayment to plywood substrates utilizing 5 fasteners per shingle. The new shingle systems will be positioned at the bottom edge to overlap the Kynar metal counterflashing the new single-ply systems by 14 inches, leaving 4 inches of metal exposed. Snap lines and follow to ensure even, consistent and true shingle system edges.

6. At the perimeter of Section D where transition to shingle systems occurs, this interface will be addressed with sections of 24 ga. tan Kynar coated metal placed between the new shingle and single-ply systems. Prior to metal placement the new single-ply will be extended a minimum of 18 inches beyond the anticipated edge of new shingles.

PART 2 PRODUCTS

2.01 STANDARDS

This specification sets minimum standards for materials and workmanship. Manufacturer's specification requirements or applicable building codes shall apply where they impose higher standards.

2.02 Shingles

A. Asphalt Fiberglass Shingles:

Basis of Design: CertainTeed Landmark conforming to ASTM D 3018 Type I, Self-Sealing; UL Certification of ASTM D 3462, ASTM D 3161 Class "F" (110-mph)/UL997 Wind Resistance, glass fiber mat base; ceramically colored/UV resistant mineral surface granules across entire face of shingle; two-piece laminate shingle.

- B. Weight: 229-240 pounds per square (100 square feet).
- C. Color: As selected by the District from manufacturer's standards.

2.03 Hip and Corner Shingles

A. Shadow Ridge Accessory Shingles. Color to match the primary shingles.

SECTION 07 3113

2.04 Sheet Materials

A. Shingle Related

- 1. Primary Underlayment: CertainTeed "Roofers' Select, ASTM D 6757.
- 2. Self-Adhering Flashing Sheet: CertainTeed "WinterGuard", conforming to ASTM D 1970.
- 3. Self-Adhering "High Temperature" Flashing Sheet: W.R. Grace Vycor Ultra, or equal.
- 4. Starter Strip: Certainteed Swiftstart Starter, color to match the selected shingle color.

2.05 Adhesives

A. Plastic Roof Cement - ASTM D 4586 Type I or II.

2.06 Fasteners

A. Underlayment

Ring shank fastener with 1 inch integral plastic head of sufficient length to penetrate the substrate by 1/8 inch. Staples will not be permitted.

B. Shingles

Standard round wire type roofing nails, corrosion resistant, hot dipped zinc-coated steel. Minimum 3/8 inch diameter head with minimum 11 or 12 gage shank diameter. Shanks to be of sufficient length to penetrate through the roof sheathing or 3/4 of an inch into solid wood. . Staples will not be permitted.

C. Metal to Wood

#8 galvanized or otherwise corrosion resistant fastener with 3/8 inch diameter head of sufficient length to penetrate the substrate by 1/8 inch and into wood members by 1-1/4 inch. Coil nails will not be permitted to attached metal flashings.

2.07 Eave, Shed, Counterflashing, and Penetration Flashing Metal

- A. Eave: 24 gauge tan Kynar coated 3 x 3 inch metal nosing.
- B. Shed Metal: 24 ga. tan Kynar coated 6 x 6 inch shed metal to extend a minimum of 6 inches up the vertical wall behind the underlayment system and a minimum of 6 inches onto the 4:12 sloped shingle system. The lower edge of this metal will be configured with a 3/8 inch hemmed return. In corner locations, fabricate a corner saddle from the same material to extend a minimum of 6 inches on either side of the corner, and to the top and bottom of the shed metal. Form a 3/8 inch hem at the bottom.
- C. Counterflashing Metal: 24 ga. tan Kynar coated metal counterflashing skirt in a "Z" configuration. The new skirt will have a 3/8 inch hemmed return and a 1/2 inch outward kick.

SECTION 07 3113

- D. Penetration Flashings: Shall be hard type, split lead, complying with Federal Specification No. QQ-L-201; weighing four (4) pounds per square foot.
 - 1. Soldering flux shall conform to Federal Specification O-F-506C, Type I, Form A or B.
 - 2. Solder shall conform to ASTM B 32-70 alloy grade 58: 50% tin, 50% lead.

2.08 Coping Metal

- A. 24 ga. tan Kynar coated metal in a standing seam configuration with corner underplates.
 - 1. Continuous 24 ga. galvanized cleat to comply with ANSI/SPRI ES-1 wind up lift.
 - 2. Threaded fasteners through steel/neoprene washers.

2.09 Gutters and Screens

- A. 24 ga. bonderized sheet metal configured to match the existing gutter profile. Etch, prime and paint to District color scheme.
- B. Corrosion resistant metal debris screens to replicate the existing, configured to attach to new gutters.
- 2.10 Penetration Flashing Sealants and Drawbands
 - A. Sealant: One part Urethane, NP-1, Sika-flex 1a, or equal.
 - B. Drawband: Stainless steel, worm-drive type.

PART 3 - EXECUTION

3.01 Roof Preparation

- A. Prior to installation of new roofing, Contractor shall inspect existing conditions and verify that the new roof system may be installed in compliance with the specification, the manufacturer's current recommendations, and all other pertinent codes and regulations.
 - 1. No new roofing will be applied until surfaces are fully reviewed by the Contractor and accepted.
 - 2. Any deteriorated or damaged decking encountered shall be replaced by the Contractor at the unit price bid, following District concurrence.
 - 3. Commencement of roofing application over any section will denote acceptability by the Contractor of that section and he/she will be responsible for any corrective work which may be occasioned by his/her having started over an unsatisfactory surface.
- B. Clean all surfaces of debris before proceeding with application of the new roof system. Do not install new materials over a wet substrate for any reason.

SECTION 07 3113

3.02 Underlayment and Eave Metal

- A. Install the new eave metal and attach per current SMACNA standard or 3 inches on center in a staggered pattern.
- B. Install a 36 inch, or full width sheet, of the specified self-adhering flashing material at the eave and extend to a point 1/2 inch short of the outside edge of the edge metal. Follow with the Install a 24 inch wide sheet centered over each hip.
- C. Install the specified 2 layers of underlayment material starting at the eave edge and overlap the eave metal by 1/2 inch. Lay the underlayment such that the 1/2 inch reveal is maintained along the entire eave and is equal at all hip locations. Follow with subsequent sheets and overlap each side lap by 4 inches. Overlap each end lap by 6 inches. At each hip, wrap each underlayment layer over the hip to form a double wrap. Attach with 1 inch square head roofing nails per shingle manufacturer requirements. Align all sheets to meet at each hip. Lay each true and straight without wrinkles. At the transitions to vertical walls, turn each sheet up the vertical wall by 4 inches minimum. At the edge of the new single-ply system, start the underlayment by overlapping the new transition metal by 14 inches and proceed to lay subsequent sheets as outlined above.
- D. Install the specified starter course to the same distance beyond the eave metal. Attach with coil nails on 6 inch centers in a staggered pattern. Trim at each hip.
- E. On the vertical walls, install the specified shed metal and nail on specified centers. Position the corner saddles over the shed metal in a full bed of specified sealant and fasten through the shed metal with grommeted fasteners. Install a 12 inch wide section of the specified self-adhering flashing to extend 3 inches onto the top flange of the shed metal and 9 inches onto the wood substrate. Press to form a positive bond to both surfaces. Install additional 12 inch wide sections over each corner location and extend from the top of the wall to the same bottom distance. Proceed to install the felt underlayment in a horizontal pattern maintaining the overlap as previously described.

3.03 Shingles

- A. Proceed to install the new shingle system in conformance with this specification and the manufacturer's published guidelines with the more stringent to take precedent. Align shingles at the eave with the underlayment and starter course. Lay out shingles per the manufacturer's publish guidelines and attach with a minimum of 5 fasteners per shingle on the 4:12 slopes and 6 fasteners on the vertical walls.
- B. Snap chalk lines to maintain alignment and a consistent exposure of 5-5/8 inch. Wavy or inconsistent shingle lines will not be accepted and will be replaced at the Contractor's cost to the Owner's satisfaction.
 - 1. Install shingles in compliance with CertainTeed's Five-Course Diagonal Method (6 and 11 inch).

SECTION 07 3113

- 2. A starter course must be utilized. Install the first starter shingle in the lower left corner of the first section adjacent to the bottom of the hip. Make sure this shingle overhangs the eave metal by ½ inch to align with the starter course and underlayment. Continue with full-length starter shingles to complete this installation. Trim at the opposite end to the next hip.
- 3. First Course: Apply a full shingle at the lower left corner of the initial section and cut to conform outline of the starter course shingle.

4. Second through Fifth Course:

Caution. Failure to follow instruction steps 1 through 5 below will bring joints too close together resulting in an unattractive pattern. Unacceptable shingle patterns will be removed and replaced at no cost to the Owner.

- a. Cut 6 inches off the left end of a shingle and save this piece for later use. Apply the 32-3/4 inch long section over and above the first course shingle. Leave the bottom 5-5/8 inch tab portion of the first course exposed.
- b. Cut 11 inches off the first shingle of the third course and save this for later use. Install the 27-3/4 inch long section over and above the second course shingle.
- c. Apply the previously removed 11 inch long section over and above the third course shingle.
- d. Apply the previously removed 6 inch section from the second course over and above the fourth course shingle.
- e. Install a full shingle against the right edge of each shingle in courses one through five.
- f. Beginning again with a full shingle, repeat the five course pattern up the left side. Be sure to trim the shingles as required tight to each hip. Fill in courses across the roof section in a stepped, diagonal manner using full shingles. Do not run courses straight across the roof.
- g. When complete, move to the adjacent section and repeat the above process until all sections between hips are complete.

Important: Do not align joints of shingles closer than 3-1/2 inches from one another.

5. Hip Installation:

- a. Apply the shingle systems between hips and trim flush.
- b. Prepare a 7 inch starter shingle by cutting off the lower 5 inch non-color portion of one shingle. Apply the 7 inch starter piece with the raised overlay edge over the bottom corner of the hip, overhanging the corner by 1/2 inch while bending the starter shingle along its centerline to form into place. Install a nail on each side approximately 3 inches up from the starter shingle's exposed butt edge and 1 inch in from each side edge of the shingle.

SECTION 07 3113

- c. Apply a full shingle bending the shingle along its centerline and forming it into place over the hip flush with the bottom and side edges of the starter shingle. Fasten with 2 nails 1-3/4 inches long with one nail on each side of the shingle 5-5/8 inches up from the butt edge and 1 inch in from each side edge.
- d. Continue application of hip shingles up the hip forming each shingle over the hip and fastening as described. Maintain exposures at 5 inches to ensure coverage of all fasteners. Remove and replace any non-conforming hip shingles.
- e. To assist in proper alignment, snap a chalk line parallel to each hip along the line where the side edges of hip shingles should rest.

C. Contractor will adhere to the following guidelines:

- 1. Comply with all published instructions and recommendations of the shingle manufacturer, except where more stringent requirements are specified herein.
- 2. Roofing materials will not be installed during inclement weather.
- 3. Roofing materials will not be applied when moisture in any form, such as dew, can be seen or felt on the surface to which those materials are to be applied.
- 4. All exposed deck must be covered and made watertight at the end of each workday. All roof terminations and openings will be made watertight by the Roofing Contractor at the end of each workday.
- 5. Properly secure all wrappers, underlayment and shingle scrap and other debris to prevent such items from falling from the roof level. Under no circumstances will construction materials or work related debris be allowed to contaminate the grounds or parking areas.
- 6. All other flashings not specifically detailed within this specification will be applied in accordance with the shingle manufacturer's published requirements.

3.04 Coping Metal Installation

- A. Following shingle installation and completion of the single-ply wall coverings within each equipment well, proceed to install the specified coping metal in the following manner:
- B. Following shingle installation, install flashings at vertical transitions in the following manner:
 - 1. Install a continuous cleat along the outside of the wood nailer to meet ANSI/SPRI ES-1 requirements. Place over the single-ply membrane previously wrapped over the wood nailer and secured to the outside vertical face.
 - 2. Install the new standing seam coping metal by securing to the outside cleat and rotating to sit flush with the top of the nailer. Place the specified underplates in each corner location and place the new coping sections into a bed of urethane sealant over the underplates. Secure the new coping along the inside face with threaded, grommeted fasteners on 18 inch centers.

SECTION 07 5419

SECTION 07 5419 THERMOPLASTIC MEMBRANE ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Mechanically-attached thermoplastic roofing membrane.
- B. Fiberglass-wrapped gypsum-core insulation board.
- C. Fully-adhered baseflashing and wall covering assemblies.
- D. Flashings, clad metal.
- E. Sealants, walkway pads, and various accessories.

1.02 RELATED REQUIREMENTS

- A. Section 01 0100 Summary of Work
- B. Section 02 4119 Selective Demolition
- C. Section 07 31 13 Shingle System

1.03 REFERENCE STANDARDS

- A. ASTM C1177 Specification for Gypsum Core Board.
- B. ASTM D4434 Specification for Poly Vinyl Chloride Sheet Roofing.
- D. FM P7825 Approval Guide; Factory Mutual Research Corporation; current edition.
- E. FM DS 1-28 Wind Design; Factory Mutual Research Corporation; 2007.
- F. NRCA ML104 The NRCA Roofing and Waterproofing Manual; National Roofing Contractors Association; Fifth Edition, with interim updates.
- G. SPRI RP-4 Wind Design Standard for mechanically attached Single-Ply Roofing Systems; Single Ply Roofing Institute; 2008 (ANSI/SPRI RP-4).
- H. UL (RMSD) Roofing Materials and Systems Directory; Underwriters Laboratories Inc.; current edition.

SECTION 07 5419

1.04 SUBMITTALS (Following Contract Award)

A. Product Data Sheets:

- 1. Provide data sheets for each system component including membrane materials, insulation, flashing materials, fasteners, and all other materials specified and/or required for a warranted system. Where multiple products, sizes or colors are shown on a single sheet, clearly indicate which item is being submitted.
- 2. Provide a Kynar metal color chart.
- B. Shop Drawings: Provide shop drawings of any alternate detail being proposed for installation. If none are provided it shall be interpreted that the installation will be per the Specification, Manufacturer, NRCA and/or SMACNA standards with the most stringent to apply.
- C. Manufacturer's Installation Instructions: Provide Manufacturer instructions if they augment or enhance the instructions provided within this Specification or address an issue or situation not previously addressed. All Manufacturer instructions are to be in keeping with the 20 Year NDL Warranty requirement.
- D. Manufacturer's Certificate: Certification on Manufacturer's letterhead acknowledging that submitted products meet or exceed specified requirements.
- E. Warranties: Submit examples of the Roofing Contractor's and Material Manufacturer's warranties.
- F. Manufacturer's Approved Status: Certification on Manufacturer's letterhead acknowledging that the submitting Contractor is approved to install the manufacturer's materials and provide the specified 20 Year warranty to the District.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's original containers/wrappers, dry, undamaged, with seals and labels intact.
- B. Store products in weather protected environment, clear of ground contact and moisture contamination.

1.06 FIELD CONDITIONS

- A. Do not apply roofing materials during inclement weather or during high wind.
- B. Do not apply roofing materials when the ambient temperature is below 40 degrees F.
- C. Do not apply roofing materials to damp or wet surfaces or when precipitation is expected or occurring.
- D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be made watertight the same day.

SECTION 07 5419

1.07 WARRANTY

- A. Contractor Warranty: Provide a Contractors 2 year Workmanship Warranty stating that all workmanship defects encountered within 2 years of system installation will be remedied by the Contractor at no additional cost to the District.
- B. Manufacturer Warranty: Provide the Material Manufacturer's 20 Year Total System, Labor and Material, No Dollar Limit (NDL) warranty.

1.08 QUALITY ASSURANCE

- A. Perform work in accordance with this Specification, Manufacturer's published guidelines, NRCA Roofing and Waterproofing Manual, WSRCA and SMACNA requirements with the more stringent requirements to be adhered to in all instances.
 - Maintain a copy of this Specification and copies of all other supporting documents at the roof level at all times to be used for reference by installation personnel, the Consultant, Project Inspector, and District representatives. Provide access to these documents upon request.
- B. Membrane Manufacturer Qualifications: Company specializing in self-manufacturing of the products specified in this section with a minimum three years of documented experience.
- C. Installer Qualifications: Licensed (C-39) Roofing Contractor specializing in performing the work of this section with a minimum 5 years experience and Material Manufacturer approval. Provide an approval letter from the Manufacturer with the initial submittal package, as noted above.

1.09 GENERAL SCOPE OF WORK

- A. The Contractor shall supply all labor, transportation, material, apparatus, and tools necessary for all work described herein and within the overall specification/contract document/bid package.
- B. Designated Roof Areas: District Education Center Roof Areas A, B, C and D

The new roofing system will consist of the new 60 mil tan, PVC membrane mechanically-attached over a layer of 1/4 inch gypsum core insulation mechanically-attached to the existing plywood substrate. The new system will be inclusive of the base flashings, penetration flashings, specified accessory items including new Kynar coated coping metal.

PART 2 - PRODUCTS

2.01 Membrane

A. Roof Membrane: Basis of Design, Carlisle SureFlex 60 mil, tan PVC, thermoplastic single-ply membrane conforming to ASTM D 4434.

SECTION 07 5419

B. Base Flashing/Wall Coverings: Basis of Design, Carlisle SureFlex 60 mil, tan fleeceback PVC, thermoplastic single-ply membrane conforming to ASTM D 4434.

2.03 Insulation and Insulation Attachment

- A. Field: Fiberglass faced gypsum core board, 1/4 inch thick, DensDeck, or equal.
- B. Pre-assembled 3 inch diameter plastic plates and standard #12 insulation fasteners, or as required by the manufacturer for horizontal applications. Fastener length to be sufficient to penetrate the substrate by 1/2 inch. Install 6 plates and screws per 4 foot by 8 foot board.

2.04 Related Materials

A. Membrane Fasteners:

Membrane to substrate: Heavy duty corrosion resistant screws and plates as provided by the membrane manufacturer. Fasteners are to be of sufficient length to accommodate insulation thickness and penetrate the substrate by 1/2 inch. Install on 12 inch centers unless manufacturer requirements are more stringent to meet warranty or specified FM requirements.

- B. Membrane Cleaner: As approved by the membrane manufacturer.
- C. Termination Bar: As approved by the membrane manufacturer.
- D. Sealant: As approved by the membrane manufacturer.
- E. Water Cut-off Mastic: Two-Part Urethane Insulation Adhesive, as recommended by the Membrane Manufacturer.
- F. Adhesives: For base flashings, etc. California VOC compliant as provided by the membrane manufacturer. Two coats required, apply first coat to the substrate as a primer coat and allow to dry completely before installing the second coat and membrane materials.

G. Penetration Flashings:

- 1. Prefabricated PVC Boots. Install at all open pipe penetrations.
- 2. Unreinforced .060 inch thick PVC membrane for field fabrication at closed pipes, electrical conduits and vent assemblies.

H. Inside/Outside Corner Flashings:

Prefabricated PVC Corners

I. T Patches:

Prefabricated, round sections of the specified 60 mil PVC membrane. Install at all field membrane intersections and where 3 membrane sections join.

SECTION 07 5419

J. PVC Clad Metal:

Install where specified/detailed or as determined necessary by field conditions. Confer with the Consultant prior to installation in unspecified locations.

K. Walkpad: PVC walkpad, as provided by the membrane manufacturer.

PART 3 - EXECUTION

3.01 Roof Preparation:

- A. Prior to installation of the new roofing systems, the Contractor will inspect existing roof conditions and verify that the new roofing system may be installed in compliance with the specified design, the manufacturer's current published recommendations and all other pertinent codes and regulations. Commencement of roofing application over any section will denote acceptability by the Contractor of that section, and he/she will be responsible for any corrective work required by his/her having started over an unsatisfactory surface.
- B. The Contractor will remove and discard the existing field membrane, insulation, base flashings, wall coverings, designated metal components, penetration flashings and other items as identified during the Pre-Bid Walk. Dispose of all tear-off debris in accordance with local, state and federal codes and regulations. The Contractor will remove only as much roofing as can be replaced and made completely watertight in the same day. Use only fixed and enclosed chutes or enclosed debris boxes and crane to remove demolition materials from the roof into proper disposal vehicles. No three-sided, site fabricated wooden slides will be allowed. All materials to be disposed of shall be loaded directly from the roof into trucks or disposal containers by means of approved methods that will prevent damage to the building, grounds and to preclude pollution. The Contractor will keep the roof and premises clean and free from accumulation of waste materials and rubbish at all times.
- C. Clean all surfaces of debris and moisture before proceeding with application of the new roof system. Disconnect, remove and reconnect as necessary any vents, electrical lines, etc., to allow proper installation of the new roofing system and flashings. Utilize the services of a licensed mechanical, plumbing or electrical subcontractor as necessary.
- D. Materials are not to be stockpiled on the roof. The Contractor will be responsible for all damage resulting from overloading the roof decks and their related structure.

3.02 Installation of Roof Insulation:

A. Following inspection of the substrate and correction of deficient conditions, the DensDeck insulation shall be attached with manufacturer approved #12 screws and plates. All fastener lengths will be sufficient to penetrate the substrate by 1/2 inch. Install 8 fasteners per board. Conform to Roofing System Manufacturer's Warranty standards if more stringent.

SECTION 07 5419

- B. Install the insulation and offset each sheet by a 1/2 sheet. At no point should the stagger be less than 18 inches. Carefully butt each sheet to ensure that no gaps exist.
- C. The following applies to all roof insulation:
 - 1. No damaged, damp, moist, wet, broken, warped, torn, weathered or otherwise compromised insulation shall be delivered to or installed on this project. All materials will be subject to the acceptance of the Architect.
 - 2. Deliver insulation to the project site and remove all factory wrappings if inclement weather is anticipated during the roofing replacement process. Replace with breathable canvas coverings and secure to the pallets so that all insulation is protected from exposure to UV, rain, wind or other undesirable elements.
 - 3. Lay all insulation boards to moderate contact without forcing joints. Cut boards to fit neatly to perimeters and around all protrusions through the roof. Any joint over 1/4 inch wide shall be filled with matching insulation.
 - 4. Broken corners or damaged boards will not be accepted.
 - 5. Insulation shall not be left exposed to the weather. No more insulation shall be applied than can be completely covered with the finished roof system on the same day and made watertight.
 - 6. Install temporary water cut-offs and tie-ins at the end of each workday using PVC materials and appropriate adhesive.
 - a. Do not cut staggered insulation pieces. Straighten the staggered side of the day's work by laying in dry pieces (deadmen) of cut insulation. Do not attach the dry pieces.
 - b. Install the cut-offs and tie-ins to the original roof system so that the day's work and the balance of the roof system is completely protected from water intrusion.
 - c. Remove the water cut-offs, deadmen and tie-ins at the beginning of the next day's work to allow the whole edge of the attached insulation to be observed. Remove any new materials that may have become compromised.

3.03 Membrane Installation:

A. Precautions:

1. Do not install the membrane or related products near fire or flame. Do not use open flames to expedite drying of any surface. If for any reason you as the installer are uncomfortable with the fire safety of your work environment you are to immediately inform the Owner's Representative and Consultant.

SECTION 07 5419

- 2. Avoid breathing solvent, sealant or adhesive vapors. These products are intended to be used with adequate ventilation. Use fans to discharge vapors away from work area if necessary but avoid directing fumes toward air intakes. Cover intakes as necessary to avoid fumes reaching the interior. Consult with the Consultant as required. Avoid prolonged skin contact with these or related products. Long sleeve shirts should be worn when performing such work.
- 3. Consult the Material Safety Data Sheets and container labels for specific safety instructions and properly inform all workers of appropriate information.
- B. Unroll the membrane and position in place. Allow the membrane to relax a minimum of 30 minutes when the temperature is above 60 degrees F and 45 minutes if less. Inspect the membrane for damage and remove any sections that are creased or damaged in any manner. Repeat this process for each and every sheet to be installed. Only quality sheets and final appearance will be acceptable.
- C. The PVC roofing membrane shall be mechanically-attached over the 1/4 inch fiberglass faced gypsum core board. The installation shall be accomplished in accordance with these specifications, detail drawings and the manufacturer's requirements if they are more stringent. Details provided are for reference and may require augmentation based on field conditions. Bidders are to verify field conditions and base their bid on determined requirements. The following guidelines should be considered minimum and may be overruled by manufacturer requirements if they are determined to be more stringent.
 - 1. The field membrane shall be installed in relationship to the insulation per manufacturer's written guidelines.
 - 2. All membrane overlaps will be installed so as not to buck water.
 - 3. At roof projections wider than 24 inches, fasten the membrane as close to the projection as possible at a minimum of 12 inches on center and then flash in accordance with the appropriate Detail Drawing.
 - 4. Hot-air weld all overlapping sheets according to the manufacturer's recommendations and the following:
 - a. Weld areas must be clean and free of any adhesive, dirt, debris, etc. that could interfere with the welding process.
 - b. Automatic hot-air welders and hand-held welders are required for installation of this membrane. As the automatic welding machines require 218 to 230 volts for operation, all bidders should assume that portable generators will be required. Power being provided by the Owner should not be presumed. All bidders are advised that typical hand-held welders for detailing draw 16 amps and will trip standard 15 amp rated breakers.

SECTION 07 5419

- c. All field seams shall be welded with an automatic hot-air welder. Machines are to be run in straight, true lines to avoid wrinkles or other abnormalities. Any uneven seams or buckling of the membrane will require removal and replacement. Weld voids typically occur where the use of the welding machine is stopped and the balance of the seam is completed by hand. Close attention is to be paid to these instances to avoid such voids.
- d. Hand-held hot-air welders shall be used for flashings and other areas where the automatic welder cannot be used. Following insertion of the preheated nozzle tip in the lap area, the material will start to flow. Immediately follow with a hand roller to press the heated membrane surfaces together with slow and even movements. Keep the roller within 1 inch of the nozzle tip and angle the hot air tool so that the flowing air faces the roller. The temperature of the hot air tool shall be adjusted so that material from the bottom of the sheet begins to soften and flow from the seam.
- e. All hot-air welds shall be probed their entire length with an approved blunt probing tool after they have cooled completely to verify seam consistency. Any voids, fishmouths or other deficiencies shall be repaired immediately to the satisfaction of the Consultant.
- f. Destructive testing of the welds will be performed by the Contractor on a daily basis. A minimum of 2 seam samples will be taken per day on a 3 inch wide area of seam weld to verify the peel strength and overall seam integrity. Properly welded seams will have membrane delamination from the scrim prior to weld failure. Destructive test shall be performed on the first weld of the day and any subsequent welds performed after the automatic welder has been allowed to cool down. In addition, destructive testing of the welds shall be performed during any extreme weather changes. Any welds found to be deficient will be corrected by the Roofing Contractor per manufacturer's written guidelines. The Roofing Contractor will retain all seam test samples, numbered and identified by corresponding numbering on the membrane, and provide them to the Consultant during the Consultant's review of the work.
- 6. All cut edges of the membrane shall be sealed with the specified product sealant.
- 7. If the membrane is exposed for any period of time that allows potential contamination or in the case of overnight exposure, the Roofing Contractor shall clean all lap surfaces in the following manner:
 - a. Remove any visible dirt and debris with a clean rag and water. For heavily contaminated surfaces, scrubbing with a detergent cleaner (i.e. 409®, etc.) followed by a water rinse may be necessary.
 - b. With a clean scrub pad saturated with approved seam cleaner, aggressively agitate the seaming area. With a clean white rag follow over the seaming area with a final swipe, being careful not to redeposit any contaminate back onto the cleansed surface.

SECTION 07 5419

- c. Allow the seam cleaner to completely flash off prior to welding.
- d. Follow the standard hot-air welding procedure with an approximated 20% reduction in speed.
- e. Test cuts shall be performed after seven calendar days to verify proper weld strength has been achieved.
- D. Perimeter Fastening: Membrane shall be fastened with the specified membrane screws and plates per membrane manufacturer's publish guidelines to meet the stated FM 1-60 wind uplift requirements, if different that specified herein. Fasten on 12 inch centers at all projections measuring 24 inches or greater in width.

E. Flashings:

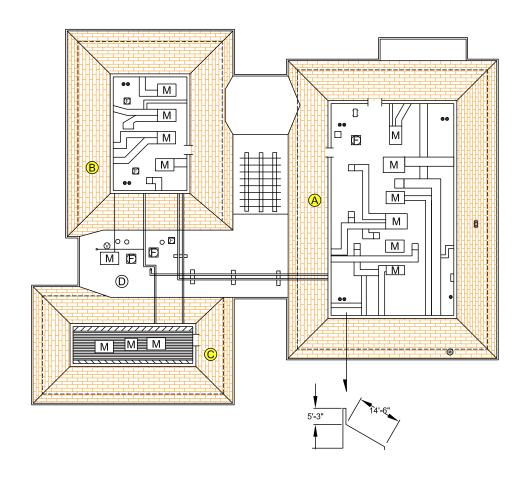
- 1. All flashings shall be installed as written, shown in the details provided or per manufacturer details, with the more stringent to apply. Flashings shall include necessary metal counterflashing components as detailed or required to provide a warrantable watertight condition. All flashings will be installed concurrently with the roof membrane as the project progresses. Phasing of the work will not be allowed. If moisture of any kind or quantity is allowed to enter the membrane due to incomplete, improper or temporary flashings, all damaged or compromised materials will be removed and replaced by the Roofing Contractor at his/her sole expense. The Roofing Contractor will be responsible for any damage to the building interior or contents resulting from non-compliance with this provision.
- 2. All flashings to vertical surfaces shall be 100% continuously bonded with the manufacturer's approved bonding adhesive. Unadhered or partially adhered flashings will be rejected. All surfaces to receive flashings are to be compatible, dry and smooth with no excessive roughness.
- 3. Following proper preparation of the existing wall/curb substrates, apply adhesive using a 1/2 inch minimum nap paint roller per manufacturer requirements. Apply the adhesive in a smooth, even coat at the prescribed quantity. The amount of adhesive required will vary depending on the substrate and environmental conditions at the time of application. The Roofing Contractor is obligated to apply the correct amount of adhesive regardless of circumstances to achieve the necessary adhesion of the membrane material.
- 4. The first application of bonding adhesive shall be allowed to dry completely. Follow with the second application to the wall and the first to the flashing sheet. Bonding adhesive will not be applied to any portion of the flashing that overlaps onto itself so as not to interfere with the hot air welding of laps. Allow the adhesive to dry until tacky to finger touch and until it does not string or stick to a dry finger. Roll the flashing into the dry adhesive. Care must be taken to assure that the flashing does not bridge where there is any elevation or directional change. Completely roll the flashing membrane against the substrate using a hand roller, J-roller or similar device applying pressure to the entire surface area.

SECTION 07 5419

- 5. All flashings shall extend a minimum of 3 inches onto adjoining flashings and 6 inches onto the field membrane and be fully welded. Wall flashings will extend to the bottom of the outside face of the nailer and will be secured on 6 inch centers with appropriate fasteners.
- 6. Base flashings at unit curbs, etc. shall be secured at the top edge with a termination bar and sealant unless the unit has been lifted and the flashing can be wrapped and secured to the inside of the curb. Secure the termination bar through each factory provided hole with manufacturer approved fasteners. Install new 24 ga. tan Kynar coated counterflashing metal as previously described to properly counterflash the membrane termination.
- 7. Install pipe flashing boots per the appropriate detail or the manufacturer's published requirements.
- 8. Any clad metal will be fastened with suitable fasteners to provide a pull out strength of not less than 150 lbs. Install fasteners on 3 inch centers in a staggered pattern. Fasteners shall be galvanized metal or corrosion resistant material with a head diameter of not less than 3/8 inch and with fastener penetration into the substrate of not less than 1-1/2 inches.
- 9. Install temporary water cutoffs around incomplete edges of the roofing assembly at the end of each workday and when work must be postponed because of anticipated weather. Water cut-offs will be installed daily regardless of current, anticipated or forecasted weather. Install cut-offs in such a manner that new and existing materials are fully protected from the elements. Any damage to new or existing materials due to water infiltration will be corrected by the Roofing Contractor to the satisfaction of the Consultant at the Roofing Contractor's sole expense.

3.04 Roof Protection Material:

- A. Install the specified walk pad material to replicate the current pattern, at the perimeter of each mechanical unit and in other locations designated during the Pre-Bid Walk.
- B. The roof protection material shall be installed in accordance with the following guidelines:
 - 1. Lay out areas where the walkpad is to be installed. Where the pad will cross a field seam, thoroughly probe the seams to confirm seam integrity. If failures are noted, rework the seam prior to installing the pads. Provide a 2 inch gap between pads.
 - 2. The roof membrane must be clean and dry. With a clean scrub pad saturated with seam cleaner, aggressively agitate the application area. With a clean white rag follow over this area with a final swipe, being careful not to redeposit any contaminate back onto the cleansed surface. Allow the cleaner to completely flash off prior to welding.
 - 3. Heat weld the entire perimeter of the properly positioned walkpad. All welds to be a minimum of 1-1/2 inch.





ROOF PLAN - 2016 Roof Replacement

1/32'' = 1' - 0''

EDUCATION CENTER

| | D | EFICIENCIES | | LEGEND | ROOF STATISTICS |
|---|----------------|-----------------|-----------|---------------------|-----------------------------|
| | X | GEN. DEFICIENCY | MD | MECH. UNIT / DUCT | YEAR OF INSTALLATION: 98' |
| 4 | | PONDING | RH S | ROOF HATCH/SKYLIGHT | BUILDING A: $6,755$ SQ. FT. |
| $\lfloor \!\!\! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$ | 0 | BLISTER | F V | EXHAUST FAN/VENT | BUILDING B: 3,486 SQ. FT. |
| _ | \limits | BARE SPOT | \otimes | DRAIN | BUILDING C: 2,314 SQ. FT. |
| | €€€€ | RIDGING | | T-TOP VENT/VENT | ROOF AREA D: 1,972 SQ. FT. |
| | { | SPLIT | | SCUPPER | |
| | A | TEST CUT | EJ | EXPANSION JOINT | |

ALL RIGHTS RESERVED. COPYRIGHT © 2015 BY I.R.C. TECHNOLOGIES, INC.

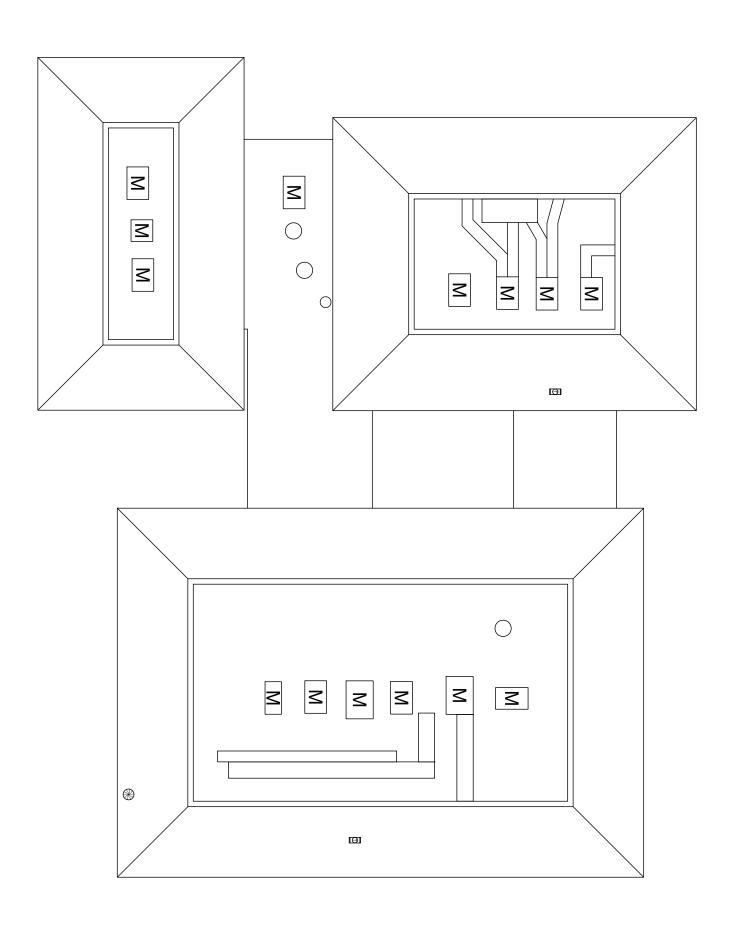


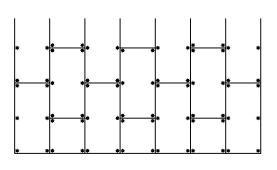
SAN RAMON VALLEY UNIFIED SCHOOL DISTRICT

699 OLD ORCHARD DRIVE - DANVILLE, CALIFORNIA

DWG.NO. 8814BW01 LAST REV: 10/26/15

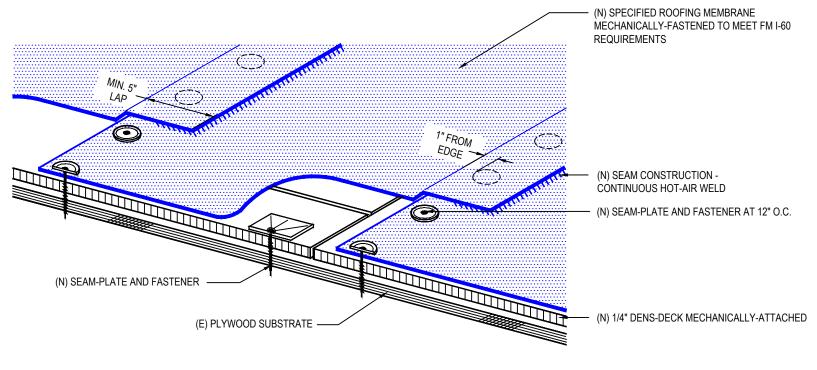
DB: *DJV* RB: *DJV*





6 FASTENERS PER 4'X8' BOARD - FIELD 4 FASTENERS PER 4'X4' BOARD - FIELD

(OR AS REQUIRED TO MEET FM I-60)



Independent Roofing Consultants

5674 STONERIDGE DRIVE SUITE #115 PLEASANTON, CA 94588 (925) 460-0220 (925) 460-0230 FAX

WWW.IRCTECH.COM

NOTES:

PROJECT NAME:

SRVUSD

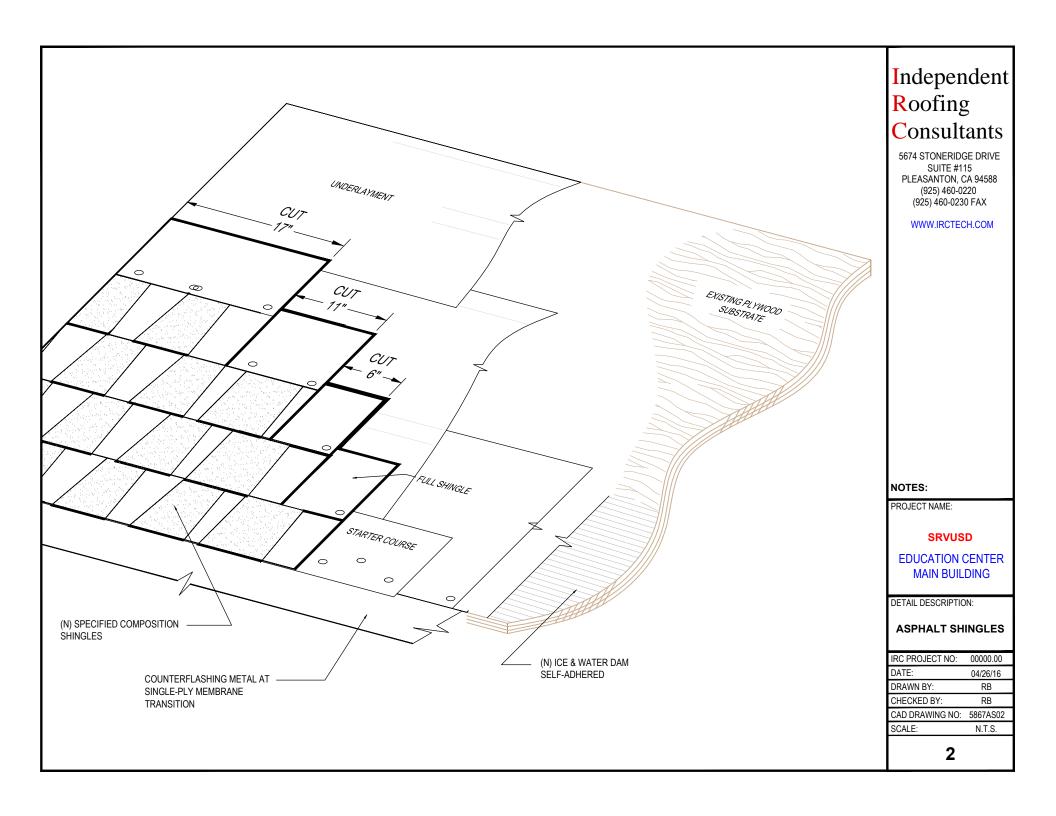
EDUCATION CENTER MAIN BUILDING

DETAIL DESCRIPTION:

TYPICAL SECTION

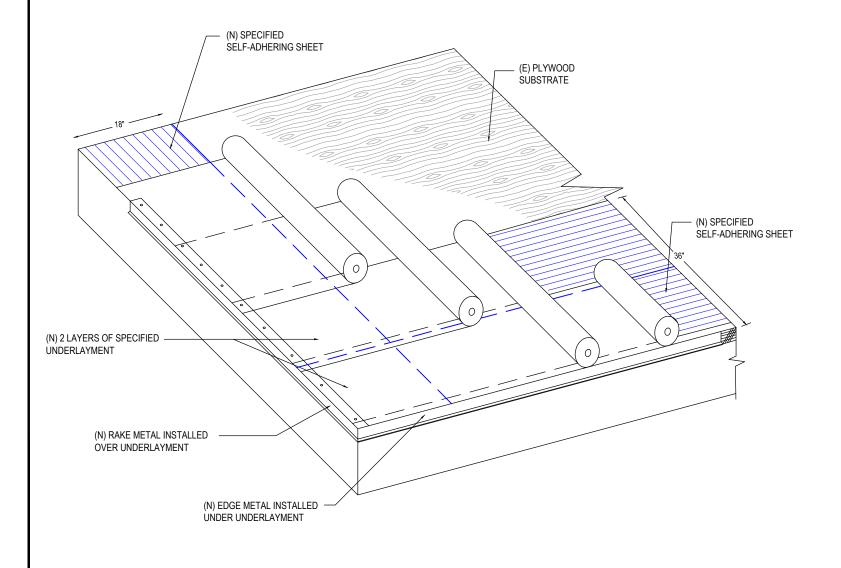
| IRC PROJECT NO: | 00.0000 |
|-----------------|----------|
| DATE: | 04/26/16 |
| DRAWN BY: | RB |
| CHECKED BY: | RB |
| CAD DRAWING NO: | 5867TS01 |
| SCALE: | N.T.S. |

1



NOTES:

- 1. 12 INCH OVERLAP AT BREAKS IN UNDERLAYMENT.
- 2. CAP EDGES BY 4" AND ENDS BY 6".
- 3. GUTTER HAS BEEN REMOVED FOR CLARITY.



Independent Roofing Consultants

5674 STONERIDGE DRIVE SUITE #115 PLEASANTON, CA 94588 (925) 460-0220 (925) 460-0230 FAX

WWW.IRCTECH.COM

NOTES:

PROJECT NAME:

SRVUSD

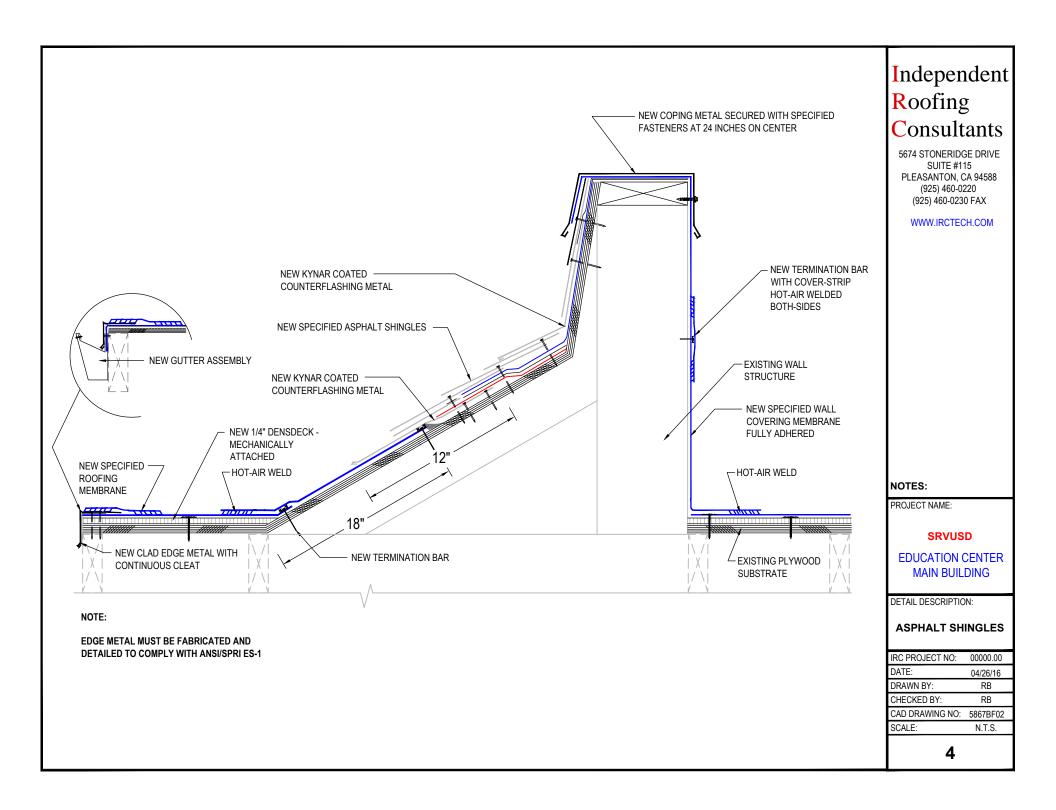
EDUCATION CENTER MAIN BUILDING

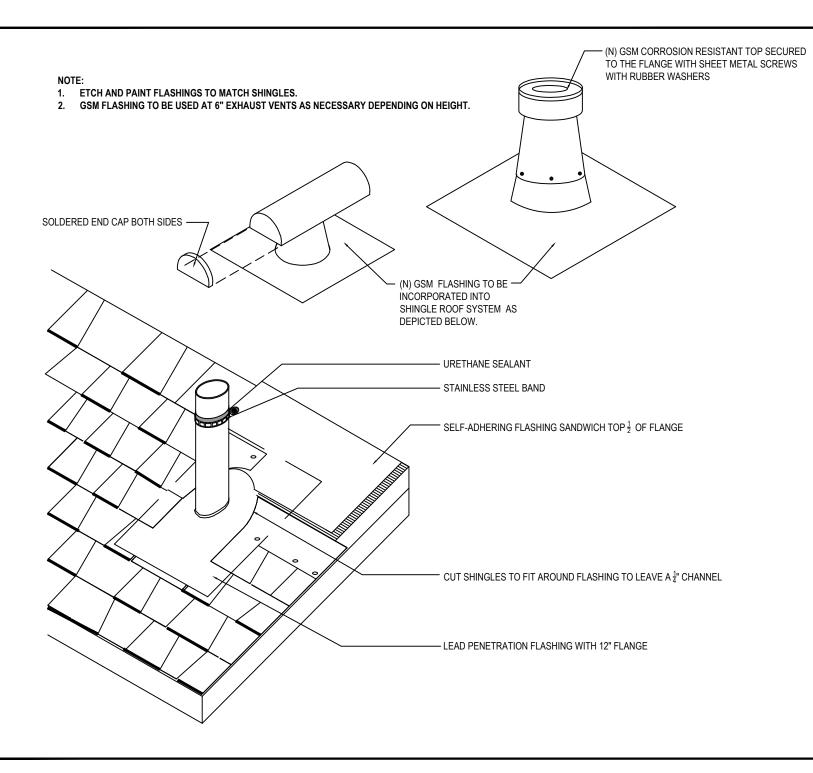
DETAIL DESCRIPTION:

SHINGLE UNDERLAYMENT

| IRC PROJECT NO: | 00.0000 |
|-----------------|----------|
| DATE: | 04/26/16 |
| DRAWN BY: | RB |
| CHECKED BY: | RB |
| CAD DRAWING NO: | 5867UL01 |
| SCALE: | N.T.S. |
| | |

3





Independent Roofing

Consultants

5674 STONERIDGE DRIVE SUITE #115 PLEASANTON, CA 94588 (925) 460-0220 (925) 460-0230 FAX

WWW.IRCTECH.COM

NOTES:

PROJECT NAME:

SRVUSD

EDUCATION CENTER MAIN BUILDING

DETAIL DESCRIPTION:

PENETRATION FLASHING

| IRC PROJECT NO: | 00.0000 |
|-----------------|----------|
| DATE: | 04/26/16 |
| DRAWN BY: | RB |
| CHECKED BY: | RB |
| CAD DRAWING NO: | 5867CL01 |
| SCALE: | N.T.S. |
| | |

5