SECTION 00 91 01

ADDENDUM NO. 1

SUMMARY

This document includes requirements that clarify or supersede portions of the Project Manual. This Addendum is a Contract Document.

General

The following changes, additions and deletions shall be made to the following document(s); all other conditions shall remain the same. Bidders are to review the referenced documents to confirm the full extent of the changes and clarifications listed below.

I. SPEC	IFICATIONS	
Item No.	Reference Description	
A.	Document 00 01 10	Table of Contents V.2 dated April 20, 2015 supersedes V.1 dated April 6, 2015. Changes include: 00 91 01 Addendum No. 1 – added
		01 22 00 Unit Prices – added
В.	Document 00 01 15	List of Drawings V.2 dated April 20, 2015 supersedes V.1 dated April 6, 2015. List of Drawings V.2 replaces all project drawings dated April 2, 2015 with project drawings identified as Addendum #1 and dated April 16, 2015.
C.	Document 00 11 19	Instructions to Bidders V.2 dated April 20, 2015 supersedes V.1 dated April 6, 2015. Paragraph 6: Document 00 73 17 OCIP Qualification Form is removed as a required bid form.
D.	Document 00 41 00	 Bid form V.2 dated April 20, 2015 supersedes V.1 dated April 6, 2015. Changes include: Unit Pricing for roof drains has been added to the bid form. Paragraph 5 has been changed to state: "The low bid will be determined by the sum of Bid Items #1 through 7." Paragraph 6.1 is added: "Unit pricing – the unit price amounts entered in the "Unit Price" column of lines 5 of the Bid Form, must be utilized to calculate the "Work Allowance" entered in the "Total" column. These unit price values will become the

SPECIFICATIONS

		 contractual basis for additive and deductive modifications to the Contract Sum per Section 01 22 00 Unit Prices. The individual Unit Price values will not be used to determine the low bid. Paragraph 6.2 is added: "Work allowance - the sums entered in the "Total" column as the specific total for line item5 5 will be awarded with the contract. These funds will be drawn from the individual Work Allowance only by approval of the Owner and authorization of Change Orders by the Construction Manager and Engineer of Record per Section 01 29 00 (Measurement and Payment), Section 01 22 00 (Unit Prices) and Section 00 41 00 (Bid Form). The Work Allowance will be used to determine the low bid, per item 5 of this section."
E.	Document 00 52 00	Agreement V.2 dated April 20, 2015 supersedes V.1 dated April 6, 2015. Changes include:The following documents are added to Article 6.1:Section 00 91 01Addendum #1Section 01 21 00AllowanceSection 01 22 00Unit Prices
F.	Document 00 73 17	 Insurance V.1 dated April 20, 2015 is added to the project manual. Bidders should note: The Contractor Enrollment Form is not required with bid, but will be required post award from the awarded bidder. Per paragraph 1.5.E. Additional coverage is required for asbestos abatement.
G.	Section 01 10 00	Summary of Work V.2 dated April 20, 2015 supersedes V.1 dated April 6, 2015. Changes include: Paragraph 1.2.B.1.c. is added: "Unit pricing and a Work Allowance are required to replace 5 roof drains at the CSM Colonnades. Refer to Section 01 22 00, Unit Prices, and 01 21 00, Allowance, for further details. The unit prices provided will be used to add to or deduct from the Contract Sum for the actual quantities replaced for the materials listed above. The Contractor shall consult with the project Construction Manager and Engineer of Record. The estimated quantity to be replaced will be field verified by the Contractor, Engineer of Record and Construction Manager for recommendation to and approval by the District. In order to establish a replacement cost for additional work, the District is asking the contractor to provide a unit cost based on an estimated quantity of 5."

		Paragraph 1.17.a.2. is changed to state: "District Office – Designated Facilities Maintenance parking space located to the rear of the building adjacent the stairwell."	
H.	Section 01 21 00	Allowance V.2 dated April 20, 2015 supersedes V.1 dated April 6, 2015.	
		Changes include:	
		Title Changed from "Owner's Allowance" to "Allowance."	
		Paragraph 1.2.C & D added:	
		"C. Section 01 22 00 – Unit Prices	
		D. Document $00 41 00 - Bid Form$ "	
		Paragraph 1.3 title changed to: "Owner's Allowance for Non-	
		Specified Work"	
		 Paragraph 1.4 added: "1.4 SPECIFIED WORK ALLOWANCE A. Include in the Contract, a stipulated sum/price for bid items #5 (Concrete Deck Roof Drains). B. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding and equipment rental will be included in Change Orders authorizing expenditure of funds from this Allowance. C. Funds will be drawn from Allowance only by approval of the Owner and authorization of Change Orders by the Construction Manager and Engineer of Record per Section 01 29 00 (Measurement and Payment), Section 01 22 00 (Unit Prices) and Section 00 41 00 (Bid Form). D. At closeout of Contract, funds remaining in Allowance will be credited to Owner by Changer Order." 	
I.	Section 01 22 00	Unit Prices V.1 is added to the project manual.	
J	Sections 02 00 80 -	Technical spec sections referenced have been amended to include	
	22 14 13	updated headers and footers. No material changes have been made;	
		formatting changes only.	

II. PLANS

Item No.	Reference	Description	
А.	Plans	Plans All project drawings dated April 2, 2015 are replaced in their	
		entirety with the set identified as Addendum #1, dated April 16,	
		2015 by Allana Buick & Bers.	

III. CLARIFICATIONS

Item No.	Reference	Description

A.	RFI #1	A contractor submitted a written RFI regarding asbestos sampling and removal. The District consultant (The Denali Group) has provided responses to these questions addressing these issues and this information will be included in this addendum. See attached document.	
B.	Section 00 73 17	 Regarding Insurance V.1 dated April 20, 2015, bidders should note: 1. The Contractor Enrollment Form is not required with the bid but, will be required post award from the awarded bidder. 2. Per paragraph 1.5.E., additional coverage is required for asbestos abatement. 	

END OF ADDENDUM

DOCUMENT 00 01 10

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INTRODUCTORY INFORMATION

Document	Title
00 01 01	Title Page
00 01 07	Seals Page
00 01 10	Table of Contents
00 01 15	List of Drawings

BIDDING REQUIREMENTS

Document	Title
00 11 13	Advertisement for Bids
00 11 19	Instructions to Bidders
00 21 14	Bid Submittal Vicinity Map
00 21 15	Project Site Campus Map
00 31 19	Reports, Surveys and Existing Conditions
00 41 00	Bid Form
00 43 10	Indemnity and Release Agreement
00 43 13	Bond Accompanying Bid
00 43 25	Substitution Request
00 43 33	Schedule of Major Equipment and Materials Suppliers
00 43 36	Subcontractors List
00 43 45	Escrow Agreement for Security Deposit
00 45 00	Bidder Certifications
00 45 14	Key Personnel
00 45 19	Non-Collusion Affidavit

CONTRACTING REQUIREMENTS

Document	Title
00 50 00	Notice to Proceed
00 51 00	Notice of Award
00 51 01	Notice of Intent to Award for Construction
00 52 00	Agreement
00 61 00	Construction Performance Bond
00 62 00	Construction Labor and Material Payment Bond
00 65 36	Guaranty
00 65 73	Agreement and Release of Any and All Claims

CONDITIONS OF THE CONTRACT

Section	Title
00 71 00	General Conditions
00 73 00	Supplementary Conditions
00 73 05	Supplementary Conditions – Hazardous Materials
00 73 17	Insurance OCIP
00 73 37	Apprenticeship Program
00 91 01	Addendum No. 1
00 91 02	Addendum No. TBD
00 91 03	Addendum No. TBD
00 91 04	Addendum No. TBD

SPECIFICATIONS

Division 1 - General Requirements

Section	Title
01 10 00	Summary of Work
01 21 00	Allowance
01 22 00	Unit Prices
01 23 00	Alternates
01 26 00	Modification Procedures
01 29 00	Measurement and Payment
01 31 19	Project Meetings
01 32 16	Progress Schedules and Reports
01 32 19	Submittal Procedures
01 35 00	Special Procedures
01 35 27	Project Labor Agreement
01 41 00	Regulatory Requirements
01 41 01	Regulatory Requirements – Hazardous Materials
01 42 00	References and Definitions
01 45 23	Testing and Inspection
01 51 00	Temporary Facilities and Controls
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01 76 01	Existing Underground Facilities
01 77 00	Contract Closeout
01 78 39	Project Record Documents
02 00 80	Hazardous Materials Abatement (Asbestos)
Division 2 and A	bove – Technical Requirements
02 00 80	Hazardous Materials Abatement
02 41 22	Selective Demolition
06 10 00	Rough Carpentry
07 56 00	Fluid-Applied Roofing and Waterproofing
07 62 00	Sheet Metal Flashing & Trim
April 20, 2015	00 01 10 - Page 2 of 3 Bid No. 86709
V.2	College of San Mateo Colonnades and District Office Deck Waterproofing Project
	concept of sum many continues and promote procest material project

22 14 13 Facility Storm Drain Piping

END OF DOCUMENT

DOCUMENT 00 01 15

LIST OF DRAWINGS

All project drawings included in the set identified as Addendum #1, dated April 16, 2015 by Allana Buick & Bers. Pages with changes are "Delta" as #1.

END OF DOCUMENT

DOCUMENT 00 11 19

INSTRUCTIONS TO BIDDERS

Bids are requested for a general construction contract, or work described in general, as follows:

THE COLLEGE OF SAN MATEO COLONNADES AND DISTRICT OFFICE DECK WATERPROOFING PROJECT

1. **RECEIPT OF BIDS.** Sealed Bids will be received by the District at their office (see paragraph 2 below) **no** later than 2:00 pm, on April 28, 2015. District will receive Bids from pre-qualified contractors in a sealed envelope that is clearly labeled with the name and number of the bid. All Bids will be time stamped to reflect their submittal time. District will reject all Bids received after the specified time and will return such Bids to Bidders unopened. Bidders must submit Bids in accordance with this DOCUMENT 00 11 19.

2. CONTACT INFORMATION:

Bid Submittal and Mailing address: San Mateo County Community College District c/o Facilities Planning Department 3401 CSM Drive San Mateo, CA 94402

Contact Name: Paula Reyes

Telephone: (650) 358-6733

Fax: (650) 574-6203

Email (acceptable for informal communication, but not legal notice):

reyesp@smccd.edu

- **3. BID SUBMISSION.** Bidder should mark its Bid envelope as BID FOR THE DISTRICT, BID NUMBER 86709, COLLEGE OF SAN MATEO COLONNADES AND DISTRICT OFFICE DECK WATERPROOFING PROJECT. Bids shall be deemed to include the written responses of the Bidder to any questions or requests for information of District made as part of Bid prior to submission of Bid. Bidder's failure to submit all required documents strictly as required entitles District to reject the Bid as non-responsive.
- 4. Not used.
- 5. Not used.
- 6. REQUIRED BID FORMS. All Bidders must submit Bids using, where applicable, documents supplied in this Project Manual, including without limitation Document 00 41 00 (Bid Form), Document 00 43 10 (Indemnity and Release Agreement), 00 43 13 (Bond Accompanying Bid), Document 00 43 36 (Subcontractors List), Document 00 43 33 (Schedule of Major Equipment and Material Suppliers), Document 00 45 00 (Bidder Certifications), Document 00 45 14 (Key Personnel) and Document 00 45 19 (Non-collusion Affidavit). District will reject as non-responsive any Bid not submitted on the required forms. Bids must be full and complete. Bidders must complete all Bid items and supply all information required by Bidding Sections. District reserves the right in its sole discretion to reject any Bid as non-responsive as a result of any error or omission in the Bid. Bidders may not modify the Bid Form or qualify their Bids. Bidders must submit clearly and distinctly written Bids. Bidders must clearly make any changes in their Bids by crossing out original entries, entering new entries,

and initialing new entries. District reserves the right to reject any Bid not clearly written.

7. REQUIRED BID SECURITY. Bidders must submit with their Bids either cash, a cashier's check, or certified check from a responsible bank in the United States, or corporate surety bond furnished by a surety authorized to do business in the State of California, of not less than ten percent of amount of total Bid, including Owner's Allowance, payable to District. All Bidders choosing to submit a surety bond must submit it on the required form, Document 00 43 13 (Bond Accompanying Bid). District will reject as non-responsive any Bid submitted without the necessary Bid security.

The District may retain Bid securities and Bid bonds of other than the Apparent Low Bidder for a period of ninety (90) Days after award or full execution of the Contract, whichever first occurs. Upon full execution of the Contract, and upon request by Bidder, District will return to the respective unsuccessful Bidders their Bid securities and Bid bonds.

- 8. **REQUIRED SUBCONTRACTORS LIST.** All Bidders must submit with their Bids the required information on all Subcontractors in Document 00 43 36 (Subcontractors List) for those Subcontractors who will perform any portion of the Work, including labor, rendering of service, or specially fabricating and installing a portion of the Work or improvement according to detailed drawings confined in the plans and specifications, in excess of one half of one percent of total Bid. Violation of this requirement may result in Bid being deemed non-responsive and not being considered.
 - A. SUBCONTRACTORS LIST. Public Contract Code Section 4104 is hereby incorporated in full by this reference. In compliance with PCC 4104 as of July 1, 2014, bidders must list all <u>SUBCONTRACTORS, AND THEIR ADDRESS</u>, that will fabricate and install a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor's total bid.
- **9. PREVAILING WAGE and CONTRACTOR REGISTRATION.** The successful bidder shall be required to pay its workers on this project a sum not less than the general prevailing wage rate of per diem wages and not less than the general prevailing rate for holiday and overtime work for work of a similar character in the locality in which the project is performed as provided under California Labor Code section 1770 et sec. The District has determined the prevailing rate of per diem wages and the general prevailing rate for holidays and overtime work in the locality in which this project is to be performed for each craft, classification or type of work needed to execute the work.

Contractor shall be required to post job site notices, at each job site, including a copy of such prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations, prescribed by regulation.

Each Bidder submitting a bid to complete the work, labor, materials and/or services ("Work") subject to this project must be a Department of Industrial Relations registered contractor pursuant to Labor Code §1725.5 ("DIR Registered Contractor"). A Bidder who is not a DIR Registered Contractor when submitting a bid for the Work is deemed "not qualified" and the bid of such a Bidder will be rejected for non-responsiveness. Pursuant to Labor Code §1725.5, all Subcontractors identified in a Bidder's Subcontractors' List shall be DIR Registered Contractors. If awarded the Contract for the Work, at all times during performance of the Work, the Bidder and all Subcontractors, of any tier, shall be DIR Registered Contractors. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations pursuant to Labor Code Section 1771.5.Not used.

10. MANDATORY PRE-BID CONFERENCE and SITE VISIT. District will conduct two (2) Mandatory Pre-Bid Conferences and Site Visits, per Document 00 11 13 (Advertisement for Bids). District reserves the right to schedule and organize the Site Visit to minimize congestion and disruption to existing facilities and congestion. Bidders are encouraged to submit written questions in connection with the Site Visit. District will transmit to all parties recorded as having received Bidding documents such Addenda as District in its discretion considers necessary in response to written questions. Bidders shall not rely on oral statements. Oral statements will not be binding or legally effective. Other Pre-Bid Site visits may be scheduled at District's sole discretion, depending on staff availability.

- **11. OTHER REQUIREMENTS PRIOR TO BIDDING.** Submission of Bid signifies Bidder's careful examination of Bidding Documents and complete understanding of the nature, extent, and location of Work to be performed. As a condition to Bidding, Bidder must complete tasks listed in Document 00 52 00 (Agreement), Article 5. Submission of Bid shall constitute Bidder's express representation to the District that Bidder has fully completed these tasks.
- **12. EXISTING DRAWINGS AND GEOTECHNICAL DATA.** Bidders may examine any available existing conditions information (e.g., record documents, specifications, studies, drawings of previous work) by giving District reasonable advance notice, as well as applicable environmental assessment information (if any) regarding the Project. Document 00 31 19 (Reports, Surveys and Existing Conditions) Reports, Surveys and Existing Conditions) applies to all supplied existing conditions information and geotechnical reports and all other information supplied regarding existing conditions either above ground or below ground. Documents are available for onsite review at the Facilities Planning Department field office, 3401 CSM Drive, San Mateo, CA 94402, or may be purchased at American Reprographics Company starting April 6, 2015 by calling (415) 495-8700, or online at http://www.e-arc.com/locations/303.
- **13. ADDENDA.** Bidders must direct all questions about the meaning or intent of Bidding Documents to District Representative in writing. Interpretations or clarifications considered necessary by District in response to such questions will be issued by Addenda mailed, faxed, or delivered to all parties recorded by District as having received Bidding Documents. Addenda will be written and will be issued to each bidder to the address or fax number supplied District by Bidder. District may not answer questions received after 2:00 pm on Wednesday, April 22, 2015. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
 - A. Addenda may also be issued to modify the Bidding Documents as deemed advisable by District.
 - B. Addenda shall be acknowledged by number with signature in Document 00 41 00 (Bid Form) and shall be part of the Contract Documents. A complete listing of Addenda may be secured from District.
- 14. SUBSTITUTIONS. Bidders must base Bids on products and systems specified in Contract Documents or listed by name in Addenda.
 - A. Except as provided in paragraph 15.c below, District will consider substitution requests on for "or equal items." Bidders wanting to use "or equal" item(s) may submit Document 00 43 25 (Substitution Request Forms) items no later than thirty (30) days after the date of the Notice to Proceed. After that date, the District will not accept "or equal" substitution requests. To assess "or equal" acceptability of product or system, submittals of substitutions shall contain the information required in Document 00 43 25 (Substitution Request Forms) and set forth in Section 01 60 00 (Product Requirements). Insufficient information will be grounds for rejection of substitution. District shall, within a reasonable period of time after having received a request for substitution, issue in writing its decision as to whether the proposed substitute item is an "or equal" item. District's decision shall be conclusive on all Bidders.
 - B. Approved substitutions shall be listed in Addenda and become part of contact Documents.
 - C. Substitutions may be requested after submitting Bids and Award of contract only in accordance with requirements specified in Section 01 60 00 (Product Requirements).
 - D. As further limitation on Bidder's privilege to substitute items, District has found that certain items are designated as District standards and certain items are designated to match existing items in use on a particular public improvement, either completed or in the course of completion, and/or are only available from one source. As to such items, District will not permit substitution. District will not permit substitutions for the following items:
- **15. WAGE RATES.** Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the contract, as determined by Director of the State of California Department of Industrial Relations, are available through the Department of Industrial Relations and are deemed included in the Bidding Documents. See http://www.dir.ca.gov/dirdatabases.html. Upon request, District will make available copies to any interested party In addition, Contractor shall post the applicable prevailing wage rates at the Site.
- **16. EQUAL EMPLOYMENT OPPORTUNITY.** Contractor shall comply with all applicable federal, state, and local laws, rules, and regulations in regard to nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, marital status, age, medical conditions, disability, or any other reason.

- **17. BID OPENING.** District will open all bidders' envelopes, initially evaluate them for responsiveness, and determine an Apparent Low Bidder as specified herein.
- **18. DETERMINATION OF APPARENT LOW BID.** Apparent Low Bid will be based solely on the total amount of all Bid items (including any alternates) based on assumptions contained in Document 00 41 00 (Bid Form). All Bidders are required to submit Bids on all Bid items (including any alternates).
- 19. Not used.
- **20. BID EVALUATION.** District may reject any or all Bids and waive any informalities or minor irregularities in the Bids. District also reserves the right, in its discretion, to reject any or all Bids and to re-bid the Project. District reserves the right to reject any or all nonconforming, non-responsive, unbalanced, or conditional Bids, and to reject the Bid of any Bidder if District believes that it would not be in the best interest of Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by District. For purposes of this paragraph, an "unbalanced Bid" is one having nominal prices for some work items and enhanced prices for other work items.
 - A. In evaluating Bids, District will consider Bidders' qualifications, whether or not the Bids comply with the prescribed requirements, omit prices and other data, as may be requested in Document 00 41 00 (Bid Forms) or prior to the Notice of Award.
 - B. District may conduct reasonable investigations and reference checks of Bidder, proposed Subcontractors, suppliers and other persons and organizations as District deems necessary to assist in the evaluation of any Bid; ability qualifications, financial ability proposed Subcontractors, suppliers, and to establish Bidder's responsibility, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to District's satisfaction within the prescribed time. Submission of a Bid constitutes Bidder's consent to the foregoing. District shall have the right to consider information provided by sources other than Bidder. District shall also have the right to communicate directly with Bidder's surety regarding Bidder's bonds.
 - C. Discrepancies between the multiplication of units of Work and limit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between written words and figures will be resolved in favor of the words.
 - D. Quantities stated in the Bidding Documents are approximate only and are subject to correction upon final measurement of the Work, and are subject further to the rights reserved by the District to increase or diminish the amount of work under any classification as advantages to design or construction needs require.
 - E. District may determine whether a Bidder is qualified in its sole discretionary judgment.
- **21. AWARD.** If the contract is to be awarded, it will be awarded to the lowest responsible responsive Bidder. Following completion of all required District procedures and receipt of all District approvals, District will issue Document 00 51 00 (Notice of Award) to successful Bidder.
- **22. BID PROTEST.** Any Bid protest must be submitted in writing to the District's offices, before 2:00 pm of the fifth (5) day following opening of Bidder's Envelopes.
 - A. The initial protest document must contain a complete statement of the basis for the protest.
 - B. The protest must refer to the specific portion of the document that forms the basis for the protest.
 - C. The protest must include the name, address, and telephone number of the person representing the protesting party.
 - D. Only Bidders who the District otherwise determines are responsive and responsible are eligible to protest a Bid; protests from any other Bidder will not be considered. In order to determine whether a protesting Bidder is responsive and responsible, District may conduct the same investigation and evaluation as District is entitled to take regarding an Apparent Low Bidder.
 - E. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.
 - F. The procedure and time limits set forth in this paragraph are mandatory and are Bidder's sole and exclusive remedy in the event of Bid protest. Bidder's failure to comply with these procedures shall constitute a waiver

of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings. A Bidder may not rely on a protest submitted by another Bidder, but must timely pursue its own protest.

- G. Bid protests shall be submitted directly to the district at their offices located at:
 - San Mateo County Community College District
 - c/o José D. Nuñez, Vice Chancellor, Facilities Planning, Maintenance & Operations
 - 3401 CSM Drive
 - San Mateo, CA 94402
 - * a copy of this protest shall be sent to Pepper Powell, Project Coordinator, Facilities Planning, Department.
- 23. POST-NOTICE OF AWARD REQUIREMENTS. After Notice of Award, the successful Bidder must execute and submit the following documents as indicated below.
 - A. Submit the following documents to District by 4:00 p.m. of the tenth (10) day following Notice of Award. Execution of Contract by District depends upon approval of these documents:
 - 1) Document 00 52 00 (Agreement): To be executed by successful Bidder. Submit two originals, each bearing an original signature.
 - 2) Document 00 61 00 (Construction Performance Bond): To be executed by successful Bidder and surety, in the amount set forth in Document 00 61 00 (Construction Performance Bond). Submit one original.
 - 3) Document 00 62 00 (Construction Labor and Material Payment Bond): To be executed by successful Bidder and surety, in the amount set forth in Document 00 62 00 (Construction Labor and Material Payment Bond). Submit one original.
 - 4) Insurance certificates and endorsements required by Section 00 71 00 (General Conditions) Article 4. Submit one original set.
 - 5) The Guaranty in the form set forth in Document 00 65 36 (Guaranty). Submit one original, bearing an original signature.
 - 6) OCIP Insurance Enrollment Forms as set forth in Section 00 73 17 (Insurance). Submit one original.
 - 7) Project Stabilization Agreement Letter of Assent as set forth in Section 01 35 27 (Project Labor Agreement). Submit one original.
 - B. District shall have the right to communicate directly with Apparent Low Bidder's proposed performance bond surety, to confirm the performance bond. District may elect to extend the time to receive performance and labor and material payment bonds.
 - C. Successful Bidder's failure to submit the documents required herein, in a proper and timely manner, entitles District to rescind its award, and to cause Bidder's Bid security to be forfeited as provided herein.
- 24. FAILURE TO EXECUTE AND DELIVER DOCUMENTS. If Bidder to whom contact is awarded shall, within the period described in paragraph 23A of this Document 00 11 19, fail or neglect to execute and deliver all required Contract Documents and file all required bonds, insurance certificates, and other documents, District may, in its sole discretion, foreclose on Bidder's deposit surety bond, or deposit Bidder's cashier's check or certified check for collection, and retain the proceeds thereof as liquidated damages for Bidder's failure to enter into the Contract Documents. Bidder agrees that calculating the damages District may suffer as a result of Bidder's failure to execute and deliver all required Contract Documents would be extremely difficult and impractical and that the amount of Bidder's required Bid security shall be the agreed and presumed amount of District's damages. In addition, upon such failure District may determine the next Apparent Low Bidder and proceed accordingly.
- **25. MODIFICATION OF COMMENCEMENT OF WORK.** District expressly reserves the right to modify the date for the Commencement of Work under the Contact and to independently perform and complete work related to the Project.
- **26.** WITHDRAWAL OF BIDS. Bidders may withdraw their Bids at any time prior to the Bid opening time fixed in this Document 00 11 19, only by written request for the withdrawal of Bid filed with the District's representative. Bidder or its duly authorized representative shall execute request to withdraw Bid. The submission of a Bid does not commit the District to award a contract for the Project, to pay costs incurred in the preparation of a Bid, or to procure or contract for any goods or services.

27. PUBLIC RECORDS ACT REQUESTS.

A. Per the Public Records Act, District will make available to the public all correspondence and written questions submitted during the Bid period, all Bid submissions opened in accordance with the procedures of this Document 00 11 19, and all subsequent Bid evaluation information. All submissions not opened will

remain sealed and eventually be returned to the submitter. Except as otherwise required by law, District will not disclose trade secrets or proprietary financial information submitted that has been designated confidential by Bidder. Any such trade secrets or proprietary financial information that a Bidder believes should be exempted from disclosure shall be specifically identified and identified as such. Blanket-type identification by designating whole pages or section shall not be permitted and shall be invalid. The specific information must be clearly identified as such.

- B. Upon a request for records regarding this Bid, District shall notify Bidder involved within ten (10) Days from receipt of the request of a specific date when the records will be made available for inspection. If the Bidder timely identifies any impropriety, trade secret, or confidential commercial or financial information that Bidder determines is not subject to public discloses and requests District to refuse to comply with the records request, Bidder shall take all appropriate legal action and defend District's refusal to produce the information in all forums; otherwise, District will make such information available to the extent required by applicable law, without restriction.
- C. Information disclosed to the District and the attendant submissions are the property of District unless Bidder makes specific reference to data that is considered proprietary. Subject to the requirements in the Public Records Act, reasonable efforts will be made to prevent the disclosure of information except on a need-to-know basis during the evaluation process.
- **28. CONFORMED CONSTRUCTION DOCUMENTS.** Following Award of Contract, District will prepare a conformed set of Contract Documents reflecting Addenda issued during bidding, which will, failing objection, constitute the approved set of Contract Documents.
- **29. DEFINITIONS.** All abbreviations and definitions of terms used in this Document 00 11 19 are set forth in Section 01 42 00 (References and Definitions).

END OF DOCUMENT

DOCUMENT 00 41 00

BID FORM TO BE EXECUTED BY ALL BIDDERS AND SUBMITTED WITH BID

To be submitted as part of bid by the time and date specified in Section 00 11 19 (Instructions to Bidders), paragraph 1.

TO THE HONORABLE BOARD OF TRUSTEES OF THE SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

THIS BID IS SUBMITTED BY:

(Firm/Company Name)

Re: BID NUMBER 86709, THE COLLEGE OF SAN MATEO COLONNADES AND DISTRICT OFFICE DECK WATERPROOFING PROJECT

- 1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with the San Mateo County Community College District ("District") in the form included in the Contract Documents, Section 00 52 00 (Agreement), to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Sum and within the Contract Time indicated in this Bid and in accordance with all other terms and conditions of the Contract Documents.
- 2. Bidder accepts all of the terms and conditions of the Contract Documents, Section 00 11 13 (Advertisement for Bids), and Section 00 11 19 (Instructions to Bidders), including, without limitation, those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for sixty (60) Days after the day of Bid opening.
- 3. In submitting this Bid, Bidder represents:
 - (a) Bidder has examined all of the Contract Documents and the following Addenda (receipt of all of which is hereby acknowledged).

Addendum No.	Addendum Date	Signature of Bidder

- (b) Bidder has visited the Site and performed tasks, reviews, examinations, and analysis and given notices, regarding the Project and the Site, as set forth in Section 00 52 00 (Agreement), Article 5.
- (c) N/A.
- (d) Bidder has given District prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and as-built drawings and actual conditions and the written resolution thereof through Addenda issued by District is acceptable to Contractor.
- (e) Bidder and all Subcontractors identified in Bidder's Subcontractors' List are a Department of Industrial Relations registered contractor pursuant to Labor Code §1725.5. At all times during the performance of all Work, the Bidder and all Subcontractors, of any tier, shall be DIR Registered Contractors.

4. In submitting this Bid, Bidder represents that the value of its bid for the Work of the Contractor Documents reflects a credit for insurance coverage provided by the Owner Controlled Insurance Program.

	Signature of Bidder
Bidder's signature represents	
acknowledgement of OCIP	
credit in Bidder's bid	

5. Based on the foregoing, Bidder proposes and agrees to fully perform the Work within the time stated and in strict accordance with the Contract Documents for the following sums of money listed in the following Schedule of Bid Prices:

SCHEDULE OF BID PRICES

All Bid items must be filled in completely. Section 01 10 00 (Summary of Work) describes the scope of work to be performed under this contract. Quote in figures only, unless words are specifically requested.

ITEM	DESCRIPTION	UNIT PRICE	TOTAL
1.	All Work of Contract Documents other than Work separately provided for under other Bid items	[LUMP SUM]	\$
	College of San Mateo Colonnades Waterproofing -Building 14-16 Colonnade		
2.	College of San Mateo Colonnades Waterproofing and Asbestos Abatement -Building 16-18 Colonnade	[LUMP SUM]	\$
3.	College of San Mateo Colonnades Waterproofing and Asbestos Abatement -Fountain Colonnade South	[LUMP SUM]	\$
4.	College of San Mateo Colonnades Waterproofing and Asbestos Abatement -Fountain Colonnade North	[LUMP SUM]	\$
5.	All Concrete Deck roof drain replacement, UNIT PRICE and WORK ALLOWANCE. (BASED ON <u>5</u> LOCATIONS, THE ESTIMATED TOTAL FOR ALL OF COLONNADES LISTED ABOVE) Refer to Section 01 22 00 Unit Prices Unit Price No. 4 for description.	[UNIT PRICE} \$ / per each X 5 =	WORK ALLOWANCE: [TOTAL. TOTAL IS YOUR UNIT PRICE X 5 EACH ESTIMATED LOCATIONS] \$
6.	District Office Deck waterproofing -removal and replacement	[LUMP SUM]	\$
7.	Owner's Allowance FOR Non-Specified Work	= 10% OF SUM OF ITEMS #1 - 6	\$
8.	Total Bid Amount (Sum of Items #1 - 7)		\$

Total Bid Price (in words):

- 5. The low bid will be determined by the sum of Bid Items #1 through 7.
- 6. Subcontractors for work included in all Bid items are listed on the attached Document 00 43 36 (Subcontractors List).

- 6.1 Unit pricing the unit price amounts entered in the "Unit Price" column of line 5 of the Bid Form, must be utilized to calculate the "Work Allowance" entered in the "Total" column. These unit price values will become the contractual basis for additive and deductive modifications to the Contract Sum per Section 01 22 00 Unit Prices. The individual Unit Price values will not be used to determine the low bid.
- 6.2 Work allowance the sums entered in the "Total" column as the specific total for line items 5 will be awarded with the contract. These funds will be drawn from the individual Work Allowance only by approval of the Owner and authorization of Change Orders by the Construction Manager and Engineer of Record per Section 01 29 00 (Measurement and Payment), Section 01 22 00 (Unit Prices) and Section 00 41 00 (Bid Form). The Work Allowance will be used to determine the low bid, per item 5 of this section.
- 7. The undersigned Bidder understands that District reserves the right to reject this Bid.
- 8. If written notice of the acceptance of this Bid, hereinafter referred to as Notice of Award, is mailed or delivered to the undersigned Bidder within the time described in paragraph 2 of this Section 00 41 00 or at any other time thereafter before it is withdrawn, the undersigned Bidder will execute and deliver the documents required by Section 00 11 19 (Instructions to Bidders) within the times specified therein. These documents include, but are not limited to, Section 00 52 00 (Agreement), Section 00 61 00 (Construction Performance Bond), and Section 00 62 00 (Construction Labor and Material Payment Bond).
- 9. Notice of Award or request for additional information may be addressed to the undersigned Bidder at the address set forth below.
- 10. The undersigned Bidder herewith encloses cash, a cashier's check, or certified check of or on a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do a surety business in the State of California, in form specified in Section 00 11 19 (Instructions to Bidders), in the amount of ten percent (10%) of the total of Bid items 1 through 6 and made payable to "San Mateo County Community College District".
- 11. The undersigned Bidder agrees to commence Work under the Contract Documents on the date established in Section 00 71 00 (General Conditions) and to complete all work within the time specified in Section 00 52 00 (Agreement). The undersigned Bidder acknowledges that District has reserved the right to delay or modify the commencement date. The undersigned Bidder further acknowledges District has reserved the right to perform independent work at the Site, the extent of such work may not be determined until after the opening of the Bids, and that the undersigned Bidder will be required to cooperate with such other work in accordance with the requirements of the Contract Documents.
- 12. The undersigned Bidder agrees that, in accordance with Section 00 71 00 (General Conditions), liquidated damages for failure to complete all Work in the Contract within the time specified shall be as set forth in Section 00 52 00 (Agreement).
- 13. The names of all persons interested in the foregoing Bid as principals are:

(IMPORTANT NOTICE: If Bidder or other interested person is a corporation, give the legal name of corporation, state where incorporated, and names of president and secretary thereof; if a partnership, give name of the firm and names of all individual co-partners composing the firm; if Bidder or other interested person is an individual, give first and last names in full).

NAME OF BIDDER:

Where incorporated, if applicable

Principals

I certify (or declare) under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Signature of Bidder

NOTE: If Bidder is a corporation, set forth the legal name of the corporation together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Bidder is a partnership, set forth the name of the firm together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership.

Business Address:

Officers authorized to sign contracts:

Telephone Number(s):

Fax Number(s):

E-Mail address:

Federal ID Number:

Date of Bid:

END OF DOCUMENT

DOCUMENT 00 52 00

AGREEMENT

 THIS AGREEMENT, dated this ______ day of ______, 20____, by and between _______

 [Name of Contractor] whose place of business is located at ______, _____

 [Address of Contractor] ("Contractor"), and the SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT ("District") acting under and by virtue of the authority vested in the District by the laws of the State of California.

WHEREAS, District, by action of its Board of Trustees on the _____day of _____, 2015 awarded to Contractor the following contract:

BID NUMBER 86709

THE COLLEGE OF SAN MATEO COLONNADES AND DISTRICT OFFICE DECK WATERPROOFING PROJECT

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, Contractor and District agree as follows:

Article 1. Work

1.1 Contractor shall complete all Work specified in the Contract Documents, in accordance with the Specifications, Drawings, and all other terms and conditions of the Contract Documents.

Article 2. District's Representative, Architect/Engineer and Construction Manager

- 2.1 District has designated Swinerton Management and Consulting to act as District's Representative(s), who will represent District in performing District's duties and responsibilities and exercising District's rights and authorities in Contract Documents. District may change the individual(s) acting as District's Representative(s), or delegate one or more specific functions to one or more specific District's Representatives, including without limitation engineering, architectural, inspection and general administrative functions, at any time with notice and without liability to Contractor. Each District's Representative is the beneficiary of all Contractor obligations to District, including without limitation, all releases and indemnities.
- 2.2 District has designated Thomas Fakner to act as Construction Manager. District may assign all or part of the District Representative's rights, responsibilities and duties to Construction Manager. District may change the identity of the Construction Manager at any time with notice and without liability to Contractor.
- 2.3 District has designated Allana Buick, Bers Inc. to act as Architect/Engineer. District may change the identity of the Architect/Engineer at any time with notice and without liability to Contractor.
- 2.4 All notices or demands to District under the Contract Documents shall be submitted to the District's Representative at:

Thomas Fakner, Campus Construction Manager, Swinerton

College San Mateo Colonnades and District Office Deck Waterproofing Project

Skyline College, 3300 College Drive, Building 16

San Bruno, CA

or to such other person(s) and address(es) as District shall provide to Contractor.

Article 3. Contract Time and Liquidated Damages

3.1 <u>Contract Time</u>.

Contractor shall commence Work at the Site on the date established in the Notice to Proceed. District reserves the right to modify or alter the Commencement Date of the Work.

[PM- Consider interim milestones and add here if possible.]

Contractor shall achieve Substantial Completion of the entire Work within **74 consecutive (August 14, 2015)** days from the date when the Contract Time commences to run as provided in Section 00 71 00 (General Conditions). Contractor shall achieve Final Completion of the entire Work and be ready for Final Payment in accordance with Section 01 77 00 (Contract Closeout) within [45] days from the date of acceptance of Substantial Completion to run as provided in Section 00 71 00 (General Conditions).

3.2 <u>Liquidated Damages</u>.

District and Contractor recognize that time is of the essence of this Agreement and that District will suffer financial loss in the form of contract administration expenses (such as project management and consultant expenses), if all or any part of the Work is not completed including consequential loss of use and disruption of normal operations within the times specified above, plus any extensions thereof allowed in accordance with the Contract Documents. Consistent with Article 15 of Section 00 71 00 (General Conditions), Contractor and District agree that because of the nature of the Project, it would be impractical or extremely difficult to fix the amount of actual damages incurred by District because of a delay in completion of all or any part of the Work. Accordingly, District and Contractor agree that as liquidated damages for delay Contractor shall pay District:

- 3.2.1 **\$1000** for each Day that expires after the time specified herein for Contractor to achieve Substantial Completion of the entire Work, until achieved.
- 3.2.2 **\$500** for each Day that expires after the time specified herein for Contractor to achieve Final Completion of the entire Work, until achieved.

These measures of liquidated damages shall apply cumulatively and except as provided below, shall be presumed to be the damages suffered by District resulting from delay in completion of the Work.

3.3 Liquidated damages for delay shall only cover administrative, overhead, interest on bonds, and general loss of public use damages suffered by District as a result of delay or costs of substitute facilities. Liquidated damages shall not cover the cost of completion of the Work, damages resulting from defective Work, lost revenues or damages suffered by others who then seek to recover their damages from District (for example, delay claims of other contractors, subcontractors, tenants, or other third-parties), and defense costs thereof.

Article 4. Contract Sum

4.1 District shall pay Contractor the Contract Sum for completion of Work in accordance with Contract Documents as follows:

[PM- WILL ENTER FINAL CONTRACT AWARD PRICE HERE]

Article 5. Contractor's Representations

In order to induce District to enter into this Agreement, Contractor makes the following representations and warranties:

5.1 Contractor has visited the Site and has examined thoroughly and understood the nature and extent of the Contract Documents, Work, Site, locality, actual conditions, as-built conditions, and all local conditions, and federal, State and local laws and regulations that in any manner may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or

procedures of construction to be employed by Contractor and safety precautions and programs incident thereto.

- 5.2 Contractor has examined thoroughly and understood all reports of exploration and tests of subsurface conditions, as-built drawings, drawings, products specifications or reports, available for Bidding purposes, of physical conditions, including Underground Facilities, which are identified in Document 00 31 19 (Reports, Surveys and Existing Conditions), or which may appear in the Drawings. Contractor accepts the determination set forth in these Sections and Section 00 71 00 (General Conditions) of the extent of the information contained in such materials upon which Contractor may be entitled to rely.
- 5.3 Contractor has correlated its knowledge and its review of those items with the terms and conditions of the Contract Documents.
- 5.4 Contractor has given District prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and the written resolution thereof through Addenda issued by District is acceptable to Contractor.
- 5.5 Contractor is duly organized, existing and in good standing under applicable state law, and is duly qualified to conduct business in the State of California.
- 5.6 Contractor has duly authorized the execution, delivery and performance of this Agreement, the other Contract Documents and the Work to be performed herein. The Contract Documents do not violate or create a default under any instrument, agreement, order or decree binding on Contractor.
- 5.7 Contractor and all Subcontractors identified in Contractor's Subcontractors' List are a Department of Industrial Relations registered contractor pursuant to Labor Code §1725.5. At all times during the performance of all Work, the Contractor and all Subcontractors, of any tier, shall be DIR Registered Contractors.
- 5.8 Contractor has listed the following Subcontractors pursuant to the Subcontractor Listing Law, California Public Contracting Code §4100 et seq.

Name of Subcontractor and Location of Mill or Shop	Description of Work: Reference To Bid Items	Subcontractor's License No.	

[PM- TYPE IN SUBCONTRACTOR LIST USING TABLE BELOW]

Article 6. Contract Documents

6.1 Contract Documents consist of the following Sections, including all changes, addenda, and modifications thereto:

	Document 00 01 01	Title Page	
	Document 00 01 07	Seals Page	
	Document 00 01 10	Table of Contents	
	Document 00 01 15	List of Drawings	
	Document 00 31 19	Reports, Surveys and Existing Conditions	
	Document 00 41 00	Bid Form	
	Document 00 43 25	Substitution Request Form (if submitted and approve period)	ed during bid
	Document 00 43 33	Schedule of Major Equipment and Material Supplier	s
April 20, 2015		00 52 00 - Page 3 of 6	Bid No. 86709
V.2	Colleg	e of San Mateo Colonnades and District Office Deck Water	proofing Project

Document 00 43 36	Subcontractors List
Document 00 43 50	Escrow Agreement for Security Deposit in Lieu of Retention (if
Document 00 43 45	submitted by contractor)
Document 00 45 00	Bidder Certifications
Document 00 45 10	Key Personnel
Document 00 50 00	Notice to Proceed
Document 00 50 00	Notice of Award
Document 00 51 00	
Document 00 52 00	Agreement Construction Performance Bond
Document 00 61 00 Document 00 62 00	
Document 00 65 36	Construction Labor and Material Payment Bond Guaranty
Document 00 65 73	Agreement and Release of Any and All Claims
Section 00 71 00	General Conditions
Section 00 73 00	Supplementary Conditions
Section 00 73 05	Supplementary Conditions – Hazardous Materials (if included) Insurance
Section 00 73 17	
Section 00 73 37	Apprenticeship Program
Section 00 91 01	Addendum No. 1
Section 00 91 0X	Addendum No. X (if included)
Section 00 91 0X	Addendum No. X (if included)
Section 01 10 00	Summary of Work
Section 01 21 00	Allowance
Section 01 22 00	Unit Prices
Section 01 23 00	Alternates (if included)
Section 01 26 00	Modification Procedures
Section 01 29 00	Measurement and Payment
Section 01 31 19	Project Meetings
Section 01 32 16	Progress Schedules and Reports
Section 01 32 19	Submittal Procedures
Section 01 35 00	Special Procedures
Section 01 35 27	Project Labor Agreement
Section 01 41 00	Regulatory Requirements
Section 01 41 01	Regulatory Requirements – Hazardous Materials (if included)
Section 01 42 00	References and Definitions
Section 01 45 23	Testing and Inspection
Section 01 51 00	Temporary Facilities and Controls
Section 01 56 00	Site Security and Safety
Section 01 58 00	Project Identification and Signs
Section 01 60 00	Product Requirements
Section 01 74 00	Cleaning
Section 01 76 01	Existing Underground Facilities
Section 01 77 00	Contract Closeout
Section 01 78 39	Project Record Documents
Section 02 00 80	Hazardous Materials Abatement
Section 02 41 22	Selective Demolition
Section 06 10 00	Rough Carpentry
Section 07 56 00	Fluid-Applied Roofing and Waterproofing
Section 07 62 00	Sheet Metal Flashing and Trim
Section 22 14 13	Facility Storm Drainage Piping

6.2 There are no Contract Documents other than those listed in this Document 00 52 00, Article 6. Document 00 31 19 (Reports, Surveys and Existing Conditions), and the information supplied therein, are not Contract Documents. The Contract Documents may only be amended, modified or supplemented as provided in Section 00 71 00 (General Conditions).

April 20, 2015	00 52 00 - Page 4 of 6	Bid No. 86709
V.2	College of San Mateo Colonnades and District Of	ffice Deck Waterproofing Project

Article 7. Miscellaneous

- 7.1 Terms used in this Agreement are defined in Section 00 71 00 (General Conditions) and Section 01 42 00 (References and Definitions) and will have the meaning indicated therein.
- 7.2 It is understood and agreed that in no instance are the persons signing this Agreement for or on behalf of District or acting as an employee, agent, or representative of District, liable on this Agreement or any of the Contract Documents, or upon any warranty of authority, or otherwise, and it is further understood and agreed that liability of the District is limited and confined to such liability as authorized or imposed by the Contract Documents or applicable law.
- 7.3 Contractor shall not assign any portion of the Contract Documents, and may subcontract portions of the Contract Documents only in compliance with the Subcontractor Listing Law, California Public Contracting Code §4100 *et seq*.
- 7.4 In entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, Contractor or Subcontractor offers and agrees to assign to the awarding body all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. §15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time District tenders final payment to Contractor, without further acknowledgment by the parties.
- 7.5 Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are available through the Department of Industrial Relations and are deemed included in the Contract Documents by reference. See http://www.dir.ca.gov/dirdatabases.html Upon request, District will make available copies to any interested party.
- 7.6 Contractor shall be required to pay its workers on this project a sum not less than the general prevailing wage rate of per diem wages and not less than the general prevailing rate for holiday and overtime work for work of a similar character in the locality in which the project is performed as provided under California Labor Code section 1770 et sec. The District has determined the prevailing rate of per diem wages and the general prevailing rate for holidays and overtime work in the locality in which this project is to be performed for each craft, classification or type of work needed to execute the work.
- 7.7 Contractor shall be required to post job site notices, at each job site, including a copy of such prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations, prescribed by regulation.
- 7.8 Pursuant to Section 1861 of the Labor Code, Contractor represents that it is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor shall comply with such provisions before commencing the performance of the Work of the Contract Documents.
- 7.9 Contractor and each of Contractor's subcontractors agrees to complete and verify construction reports on a form prescribed by the Division of the State Architect and to file the reports no less than quarterly during construction as required by Title 24; at the completion of the Work; at the suspension of work for a period of more than one month; whenever the services of Contractor or any of Contractor's subcontractors are terminated for any reason; and at any time a special verified report is required by the Division of the State Architect.

- 7.10 Should any part, term or provision of this Agreement or any of the Contract Documents, or any document required herein or therein to be executed or delivered, be declared invalid, void or unenforceable, all remaining parts, terms and provisions shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby. If the provisions of any law causing such invalidity, illegality or unenforceability may be waived, they are hereby waived to the end that this Agreement and the Contract Documents may be deemed valid and binding agreements, enforceable in accordance with their terms to the greatest extent permitted by applicable law. In the event any provision not otherwise included in the Contract Documents is required to be included by any applicable law, that provision is deemed included herein by this reference (or, if such provision is required to be included in any particular portion of the Contract Documents, that provision is deemed included in that portion).
- 7.11 This Agreement and the Contract Documents shall be deemed to have been entered into in the County of San Mateo, State of California, and governed in all respects by California law (excluding choice of law rules). The exclusive venue for all disputes or litigation hereunder shall be in San Mateo County. Contractor accepts the Claims Procedure in Section 00 71 00, Article 12, established under the California Government Code, Title 1, Division 3.6, Part 3, Chapter 5.

IN WITNESS WHEREOF the parties have executed this Agreement in duplicate the day and year first above written.

DISTRICT:

CONTRACTOR:

SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

[Contractor's name]

By: _____ Kathy Blackwood Executive Vice Chancellor By: ___

Signature

END OF DOCUMENT

SECTION 00 73 17 INSURANCE

PART 1 GENERAL

1.0 Section Includes

- 1. Introduction and Owner-Controlled Insurance Program (OCIP) Overview
- 2. District-Provided Insurance
- 3. Required Contractor-Provided Insurance Coverage
- 4. Additional Requirements
- 5. Sample Forms

1.1 Introduction and Owner-Controlled Insurance Program (OCIP) Overview

The District has elected to implement an Owner Controlled Insurance Program ("OCIP"). The District agrees to pay all premiums associated with the OCIP and will be the sole recipient of any dividend(s) and/or return premium(s) generated by the OCIP. Contractor's / Subcontractor's bid shall exclude any and all costs for insurance coverage provided under the OCIP.

The OCIP will provide Workers' Compensation, Employer's Liability, General Liability, Contractors' Pollution Liability, and Builders Risk insurance for eligible Contractors/Subcontractors providing direct, <u>on-site</u> labor to the District's Project, hereinafter called the "Project". Coverage provided by the OCIP is project site specific. The Project Site consists of any and all projects that are endorsed to this policy, which includes the:

- 1. Ways and means adjoining the endorsed project site.
- 2. Adjacent locations to the endorsed projects sites where incidental operations are being performed, excluding permanent locations.

<u>Off-site locations, labor and operations are not covered by the OCIP.</u> It will be the responsibility of each contractor / subcontractor to maintain off-site insurance, as identified in Paragraph 3.0, which specifies coverage types and minimum limits. <u>Contractors/subcontractors are also required to provide Automobile Liability</u> coverage for both on-site and off-site activities.

Keenan & Associates, herein after called "Program Administrator", shall administer the OCIP on behalf of the District. All Contractors/Subcontractors are required to cooperate with the District and its Program Administrator in all aspects of administering the OCIP. The Program Administrator's contact information is as follows:

Keenan & Associates

SEWUP Department 2355 Crenshaw Blvd., Ste. #200 Torrance, CA. 90501 Attention: Ms. Sandy Nottingham, OCIP Administrator Phone: (310)212-3344 ext. 2006, Fax: (310)787-8838 E-mail: snottingham@keenan.com

1.2 **APPLICABILITY OF THE OCIP**

A. Eligibility

Eligible Contractors/Subcontractors includes those providing direct, on-site labor on the Project. Temporary labor services and leasing companies are to be treated as Eligible Contractors.

Ineligible Contractor includes, but is not limited to, consultants; suppliers who do not perform or do not subcontract installation; demolition that includes abatement and hazardous materials removal; vendors; materials dealers; guard services; non-construction janitorial services; and truckers, including trucking to the Project where delivery is the only scope of work performed. However, if contracted with an on-site installer, suppliers/vendors should be enrolled in the OCIP only for General Liability, as it pertains to the contractual relationship of the installer's on-site work.

Any questions regarding a Contractor's status as "Eligible" or "Ineligible" should be referred to the Program Administrator.

B. Participation

Participation in the OCIP is mandatory but not automatic. Pursuant to Government Code Section 4420.5, a Bidder and all identified Subcontractors must meet certain minimum standards for bids to be deemed responsive:

- 1. The number of allowable Serious and Willful violation findings (Labor Code Section 6300) against the Bidder's Contractor/Subcontractors by the Workers Compensation Appeals Board in the past five (5) years shall not exceed:
 - o 1 to 3 Contractor/Subcontractors a maximum of 1 Serious and Willful Violation
 - 4 to 6 Contractor/Subcontractors a maximum of 2 Serious and Willful Violations
 - o 7 or more Contractor/Subcontractors a maximum of 3 Serious and Willful Violations
- 2. 100% of the listed firms must provide evidence of an Injury and Illness Prevention Program (IIPP)
- 3. Bidder's current published Workers' Compensation Experience Modification Factor (EMR) at bid opening shall not be greater than 1.25. 75% of the listed subcontractors must have an EMR of 1.25 or less averaged over the last three published years.

Failure of prospective bidders to participate in the mandatory insurance qualification process pursuant to Government Code Section 4420.5 shall disqualify them from participating in the Project as a Contractor/Subcontractor.

C. Post- Contract Award Enrollment

Document 00 51 00 – Notice of Award requires submission of a completed *Contract Enrollment Form* and a *Certificate of Insurance* as referenced in Section 1.5 and 1.6. An eligible contractor/subcontractor is not enrolled in the OCIP until the Program Administrator validates the *Contract Enrollment Form* and *certificates* by issuing a written notification to contractor/subcontractor.

Any Contractor/Subcontractor who enrolls in the OCIP after their start date will have to provide a No-Known-Loss Letter to the Program Administrator, along with the enrollment documentation. Enrollment is not guaranteed until acceptance of the enrollment documentation by the insurance carrier.

- D. Reporting Requirements
 - 1. Payroll Reporting
 - Workers' Compensation Insurance Rating Bureau Requirements

Once an Eligible Contractor/Subcontractor is enrolled into the OCIP, the Program Administrator will issue a separate Workers' Compensation Policy. All Enrolled Contractors/Subcontractors will need to comply with the rules and regulations of the California Workers Compensation Insurance Rating Bureau (WCIRB).

Project Site Monthly Payroll Report

Project Site Monthly Payroll Reports must be submitted to the Program Administrator on a monthly basis, until the completion of the contract. This report must summarize the unburdened payroll by Workers' Compensation Class Code. Certified payroll is not a requirement of the OCIP and cannot be accepted. If the *Project Site Monthly Payroll Report* is not submitted to Program Administrator on a monthly basis, the Construction Manager and/or District can withhold payment until the report is received. Contractor agrees to keep and maintain accurate and classified records of their payroll for operations at the Project Site. This payroll information

is submitted to the OCIP Insurance Carrier. At the end of each contract, a carrier audit may be performed using the reported payroll.

2. Contractor's Completion Notice

Contractor's Completion Notice must be submitted to the Program Administrator upon completion of work at the Project Site, which includes punch list items, but not warranty work. This form evidences all enrolled Contractors'/Subcontractors' actual start and completion dates, per each contract. This information is used to confirm that each Workers' Compensation Policy was issued with correct policy term dates, covering the Contractors/Subcontractors for the duration of their Work at the Project Site. This information is subsequently submitted to the WCIRB.

1.3 DISTRICT-PROVIDED INSURANCE (OCIP)

- A. Workers' Compensation and Employer's Liability Insurance, will be provided by the Program Administrator, in accordance with applicable state laws, to all enrolled Contractors/Subcontractors reflecting the following Limits of Liability:
 - Workers' Compensation California Statutory Benefits
 - Employer's Liability
 - \$1,000,000 Bodily Injury each Accident
 - \$1,000,000 Bodily Injury by Disease Policy Limit
 - \$1,000,000 Bodily Injury by Disease Each Employee
 - Deductible: None
- B. General Liability Insurance, placed by the Program Administrator, will be provided on an "Occurrence" form under a master liability policy. Certificates of Insurance will be provided to all enrolled Contractors/Subcontractors reflecting the following Limits of Liability:
 - ▶ \$5,000,000 Bodily Injury and Property Damage Liability
 - ► \$10,000,000 General Aggregate
 - ▶ \$5,000,000 Products and Completed Operations
 - 10 Years Completed Operations
 - Limits are per Project
 - Deductible: None
- C. **Contractor's Pollution Liability**, placed by the Program Administrator, will be provided on a "Claims Made" form under a master liability policy. Certificates of Insurance will be provided to all enrolled Contractors/Subcontractors reflecting the following Limits of Liability:
 - ▶ \$25,000,000 Each Loss/Annual Aggregate
 - Claims expense, including defense cost, within limits
 - ▶ \$10,000 Deductible, Per Claim
 - The party legally responsible for any loss or damage shall, to the extent of such responsibility, pay the deductible
- D. **Builders Risk,** property insurance purchased and maintained by the District, during the course of construction, at the Project Site. The coverage is maintained until Final Completion has been achieved. Such property insurance shall be written on a repair or replacement cost basis, subject to standard exclusions, property limitations and conditions. Such insurance shall include the interests of the District and Contractors/Subcontractors during the Course of Construction and shall provide broad coverage.

A deductible of \$10,000-\$25,000 (\$50,000 on structural renovation work), which shall be determined by the type of construction, will apply to each occurrence. The deductible amount will be paid by the party or parties responsible for the loss or damage and will not be reimbursed by the OCIP Insurance Program.

1.4 OCIP CERTIFICATES AND POLICIES

The OCIP Program Administrator will provide each enrolled Contractor/Subcontractor their own Workers' Compensation policy. Certificates of Insurance will be furnished for the General Liability, any Excess Liability, Contractor's Pollution Liability, and Builders Risk coverage. These policies are available for review by the Contractor/Subcontractor, upon request to the District or the Program Administrator. Such policies or programs may be amended from time to time and the terms of such policies or programs are incorporated herein by reference. Contractors/Subcontractors hereby agree to be bound by the terms of coverage, as contained in such insurance policies and/or self-insurance programs.

1.5 REQUIRED CONTRACTOR-PROVIDED INSURANCE COVERAGE UNDER AN OCIP

For any work under this contract, and until completion and final acceptance of the work by the District, the Contractors/Subcontractors shall, at their own expense provide the following coverage for off-site locations, labor, and operations before commencing work on the Project Site. Automobile Liability Insurance must be maintained for both <u>on-site</u> and <u>off-site</u> operations. See Paragraph 1.6 for Certificate Holder specification. Furthermore, the policies shall provide not less than sixty (60) days prior written notice to the Program Administrator, of any material change in the insurance, cancellation, or non-renewal.

A. General Liability Insurance, minimum limits of liability are as follows:

		<u>Prime</u> Contractor	<u>Subcontractor</u>
•	Bodily Injury and Property Damage	\$2,000,000	\$1,000,000
•	Per Occurrence	\$2,000,000	\$1,000,000
•	General Aggregate	\$2,000,000	\$1,000,000
	Products/Completed Operations Aggregate	\$2,000,000	\$1,000,000
►	Personal/Advertising Injury Aggregate	\$2,000,000	\$1,000,000

The policy shall be endorsed to exclude the Project.

Note: If an enrolled participant in the OCIP chooses to have the policy endorsed to include the Project site during the construction period, coverage should be excess and/or difference in conditions (DIC) of the OCIP. This cost is not permitted to be passed back to Owner. Inclusion of the Project site on such insurance policies shall not replace the OCIP coverage or otherwise affect the cost identification requirement in Section 1.1.2.

B. Automobile Liability Insurance, must cover all vehicles owned by, hired by, or used on behalf of the Contractors/Subcontractors with the following limits of liability:

	Prime Contractor	Subcontractor
Bodily Injury and Property Damage	\$2,000,000	\$1,000,000

C. Workers' Compensation and Employer's Liability Insurance (off-site)

- Workers' Compensation Statutory Benefits All States
- Employer's Liability
 - \$1,000,000 Bodily Injury each Accident
 - \$1,000,000 Bodily Injury by Disease Policy Limit
 - \$1,000,000 Bodily Injury by Disease Each Employee

The policy shall be endorsed to exclude the Project.

- **D. Professional Liability Insurance**, if Contractor's work requires design and/or design-assist services, Contractor shall purchase and maintain, at its sole cost and expense Professional Liability (Errors and Omissions) insurance for all professional services provided. This Professional Liability insurance shall include full prior acts coverage sufficient to cover the services under this Agreement, the limits of which shall not be less than the following:
 - ▶ \$2,000,000, Per Claim/Aggregate
 - Deductible or self-insured retention amount must not be greater than \$100,000, including coverage of contractual liability.

Professional Liability Insurance is to be maintained during the term of the contract and for so long as the insurance is reasonably available as provided herein, for a period of ten (10) years after completion of the services.

- E. Environmental and Asbestos Abatement Coverages, if the Contractor's/Subcontractor's scope of work involves the removal of asbestos, the removal/replacement of underground tanks, or the removal of toxic chemicals and substances, the Contractor/Subcontractor shall be required to provide coverage, with limits not less than \$1,000,000 per claim basis, for such exposures subject to requirements and approval of the District.
- F. Aircraft or Watercraft Liability Insurance, if any Contractor/Subcontractor, requires the use of Aircraft, including helicopters, or Watercraft at the Project Site, the Contractor/Subcontractor shall purchase and maintain, or cause the operator of the Aircraft or Watercraft to purchase and maintain, Aircraft or Watercraft liability insurance. This must insure passengers and the General Public against personal injury, bodily injury or property damage arising out of the maintenance, use or entrustment to others. It includes Aircraft or Watercraft owned or operated by or rented or loaned to any insured. Use includes operation and "loading or unloading". Contractor/Subcontractor shall be required to provide coverage, with limits not less than \$1,000,000 per claim basis, for such exposures subject to requirements and approval of the District.
- **G. Personal Property:** All Contractors'/Subcontractors' shall be solely responsible for any loss or damage to their personal property including, without limitation, their tools and equipment, mobile construction equipment, scaffolding, and temporary structures, whether owned, borrowed, used, leased or rented by any Contractor/Subcontractor. Contractors/Subcontractors may at their sole discretion, purchase and maintain insurance or self-insure such equipment and property, and any deductible in relation thereto shall be their sole responsibility. Any insurance, including self-insurance, shall be the Contractors'/Subcontractors' sole source of recovery in the event of a loss.
- **H.** The OCIP is intended to provide broad coverages and high limits to all Enrolled Contractors/Subcontractors. The Owner does not warrant or represent that the OCIP coverages constitute an insurance program that adequately addresses the risks of the Contractors/Subcontractors.

Prior to the commencement of work under the contract, it is the responsibility of all Contractors/Subcontractors to ensure that the OCIP coverages provided sufficiently address their insurance needs. Any type of insurance or any increase of limits of liability not described in this Section, which the Contractors/Subcontractors require for their own protection or on account of any statute, will be their own responsibility and expense.

1.6 REQUIRED CONTRACTOR-PROVIDED CERTIFICATES OF INSURANCE

A. Required Endorsements:

- 1. Certificate shall name San Mateo County Community College District, its Board of Trustees, and their employees, representatives, consultants, agents and Architect/Engineer as additional insured, but only with respect to liability arising out of the activities of the Named Insured for Auto Liability.
- 2. Each such policy shall apply separately to each insured against which claim is made or suit is brought, except with respect to the limit of the insurance company's liability.

- 3. Insurance shall be primary and no other insurance or self-insured retention carried or held by District shall be called upon to contribute to a loss covered by insurance for the named insured, except when covered by the OCIP.
- 4. Insurance shall contain a provision requiring the insurance carriers to waive their rights of subrogation against District and all additional insured, as well as other insurance carriers for the Work
- 5. Insurance certificates shall be addressed to:

San Mateo County Community College District c/o Statewide Educational Wrap Up Program (SEWUP) 2355 Crenshaw Blvd., Suite 200 Torrance, CA 90501

B. Certificates of insurance and endorsements shall have clearly typed thereon District Bid Number and title of Contract Documents. Written notice of cancellation, non-renewal, or reduction in coverage of any policy shall be mailed to District (Attention: Contract Administration/Inspection) at the address listed in Section 00 52 00 (Agreement), sixty (60) Days in advance of the effective date of the cancellation, non-renewal, or reduction in coverage. Contractor shall maintain insurance in full force and effect during entire period of performance of Contract Documents. Contractor shall keep insurance in force during warranty and guarantee periods. At time of making application for extension of time, and during all periods exceeding the Contract Time resulting from any cause, Contractor shall submit evidence that insurance policies will be in effect during requested additional period of time. Upon District's request, Contractor shall submit to District, within thirty (30) Days, copies of the actual insurance policies or renewals or replacements.

1.7 ADDITIONAL REQUIREMENTS

A. Waiver of Subrogation and District Indemnification

With respect to their work on the Project Site:

- District waives all rights of subrogation and recovery against the Contractors/ Subcontractors to the extent of any loss or damage, which is insured under the OCIP.
- Contractors/Subcontractors waive all rights of subrogation and recovery against the District and other Contractors/Subcontractors to the extent of any loss or damage, which is insured under the OCIP.
- The Contractors/Subcontractors are obligated to indemnify the District for damages or claims not covered by the OCIP.
- B. No Release

The provision of the OCIP, by the District, will in no way be interpreted as relieving the Contractors/Subcontractors of any other responsibility or liability under this agreement or any applicable law, statute, regulation, or order.

C. Coverage to be Provided by Contractor/Subcontractor During Warranty Period

OCIP coverage terminates on the Project's Final Acceptance Date. Contractors/subcontractors who return to the Project Site after this date, for any reason, do so under their own insurance coverage.

D. Change Order Pricing

Change Order pricing shall exclude any costs relating to insurance coverage afforded under the OCIP.

E. Duties in the Event of a Loss

Contractors/Subcontractors are required to report any and all losses, which include potential losses, promptly to the Insurance Company, Program Administrator and District. A full description and details of the incurred loss are also required.

The Contractor/Subcontractor shall assist the District, its agents, and the Program Administrator, by providing the utmost cooperation in the adjustment of claims arising out of the operations conducted under, or in connection with, the Project and shall cooperate with the District's Insurers in claims and demands that arise out of the Work and that the Insurers are called upon to adjust.

F. Safety Program Requirements

Contractor/Subcontractors are required to adhere to the requirements outlined in Section 01 56 00 – Site Security and Safety.



Statewide Educational Wrap-Up Program CONTRACTOR ENROLLMENT FORM

TO BE EXECUTED BY AWARDED CONTRACTOR AND SUBMITTED WITH EXECUTED CONTRACT (Do not submit with Bid)

	S	TATEWIDE E	DUCATIO	NAL W	VRAP UP	PRO	GRAM
SEWUP) CONTRACTOR ENROLLMENT FORM							
District Na	ime:	San Mateo Cour	nty Communi	ty Colleg	e District		
Project Name:							
			Contracto	r Informa	ation		1
Contractor/Subcontractor (Le	gal Na	me):					
If you are a subsidiary and / or division of another company, please indicate the name on file with the bureau:							
Address:						1000 m	- P
City:				St	tate:	5	Zip:
Name & Title Of					45.4		A
Person(S) To Contact:				E	Mail Addres	is:	
Phone Number: (()			Fa	BOC	_	
Contractor License #:				Fe	ederal Id #:		
Entity: Sole Proprie	etorshi	p: 🗌 Partne	ership: 🔽	Co	Arp.	Other	
Payroll/Accounting Contact			A	A.	- M		A de
Phone: ()		Fax: (4		4	E-Mail Addr	ACC	and the
					- Mail Addi		A STATE
	- 1		Contra	ect Detail	s	P	
Your status on this Project:	0	(a) General/Prin	me Contractor			(b) Sut	bcontractor
	Ę	(c) Tier/Subcor	ntractor		The state of the s	(d) Oth	er
If you checked (b), (c) or (d) ab whom you are under contract v		ve name of the cont	ractor for		e for		
Bid package # (f applicable)	line.	and the second s	All and a second	Total Con	ntract Amoun	+	\$
Lito pauvage # (il appicable).	1	in.	A A A A A A A A A A A A A A A A A A A		amount for		s
Contract Award Date:	8	- Aller	Sec. 1	Self Perfe	ormed Work:		
Estimated Start Date*:	1		A CONTRACTOR		d Completion	Date:	
*This will be the effective date of		CIP coverage, unless	notified otherwi	se			
Description of work performed	The						
For this project, will you be do	oing off	site work?	Yes	No No			
If yes, please describe?							
6		All Wo	rkers' Comp	ensatio	n Section		
Workers' Compensation Section Each Contractor and Subcontractor of every tier is required to submit a list of job/WC classifications and their respective estimated payrolls and man-hours for all employees that will be working at the project site. This information must be submitted for each contract /bid package. If this applies to your firm, please contact the SEWUP Department for a Supplemental Contractor Enrollment Form. Payroll Records are subject to audit by the Owner's Workers' Compensation and General Liability insurance carrier							
Description of Work	June 1	WC Class Code	On-Site Man-				Site Straight Time Payroll
Example: Carpenter <\$22/hour		5403	160				\$3,040
		Totals					

Project Name:	Contractor Name:
Expected Subcontract	tors: If any work is to be subcontracted under this Contract, please complete the following information for each
	idditional pages, if necessary.
Company Name:	Contact Person:
ADDR	
City/State/Zip Code:	
Phone:	E Mail:
Scope of Work:	
Contractor License	Contract Value
Est. Start Date:	Est. Completion Date:
Company Name:	Contact Person:
Address:	
City/State/Zip Code:	
Phone:	E Mait.
Scope of Work:	
Contractor License	Contract Value:
Est. Start Date:	Est. Completion Date:
Company Name:	Contact Person:
Address:	
City/State/Zip Code:	
Phone:	E Mail:
Scope of Work:	
Contractor License	Contract Value:
Est. Start Date:	
	Est. Completion Date:
Company Name:	Contact Person:
Address:	
City/State/Zip Code:	
Phone:	E Mail:
Scope of Work:	K Aller.
Contractor License	Contract Value:
Est. Start Date:	Est. Completion Date:
THIS DOCUMENT IS ACCEPTANCE OF THIS	ENALTY OF PERJURY, UNDER THE LAWS OF THE STATE OF CALIFORNIA, THAT THE INFORMATION CONTAINED IN TRUE AND CORRECT. I HEREBY UNDERSTAND THAT ENROLLMENT IS CONTINGENT UPON RECEIPT AND S FORM. SHOULD I SUBMIT AN INCOMPLETE FORM, KEENAN'S SEWUP DEPARTMENT WILL CONTACT ME AND MY IROLLED UNTIL I PROVIDE ALL NECESSARY INFORMATION IN ITS ENTIRETY.
Print Name:	Title:
Signature:	Date:

Fax or Mail Completed Form To: Keenan & Associates, 2355 Crenshaw Blvd., Ste. #200, Torrance, CA 90501 Attn: SEWUP Department Phone (310) 212-3344, Fax (310) 787-8838

License No. 0451271



EWUP)						
		PROJECT SITE MONTH	ILY PAYROLL RE	PORT		
District Name:	San Ma	teo County Community Co	llege District	Bi	d Pkg. #:	
Project Name:				RE	PORT #	
				FO	ypur Firm's use)	
Reporting Month:			Example:	Fe	bruary 2006	
Company Name:			Dba Name:		And a	6
Under Contract Wi	th:		SEWUP Site Co	de*:	<i>y</i>	A.
			(Internal Use Only) To be a	issigned by the S	EWUP Administrato	
		atility	d to			S.C.
Workers' Comper Class Code		Work Description	Total Monthly Ma	in-hours	P	ayroli*
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PAYROLL INFORM	ATION C	MATION REPORTED ABOVE OULD AFFECT YOUR EXM INSURANCE RATING BUREA	OD - EXPERIENCE			
Signature:	A.	and the second s	Title:			
Print Name:	A	7	Date:			

Keenan & Associates, 2355 Crenshaw Blvd., Ste. #200, Torrance, CA 90501 Attr: SEWUP Department Phone (310) 212-3344, Fax (310) 787-8838

License No. 0451271



SEWUP	STATE	WIDE EDUCATIONA	L WRAP	UP PROGRAM		
	Contractor's Completion Notice					
District Name:	San Ma	San Mateo County Community College District				
Project Name:				A Company of the second		
IMPORTANT NOTIFICATION – PLEASE READ Contractor or Subcontractor agrees to complete this form and return to Keenan & Associates upon completion or termination of work activities under this contract. Please include, with this form, any supporting documents for final contact value (if different from initial contract value).						
Initial Contract	Value:					
Final Contract V	/alue:		<u>₹</u>			
Last Day on Site	e*:		Ø	and the second s		
		med on final closeout or punch-l	ist items and	should not include warranty work.		
Contractor/Subco	ontractor	Legal Name:	- Aller			
Contractor/Subcontractor dba Name:						
Contractor License Number:						
Address:						
Representative's Name (Print):	and a second	and the second s	Title:			
Signature:			Date:			

Fax or Mail Completed Form To: Keenan & Associates, 2355 Crenshaw Blvd., Ste. #200, Torrance, CA 90501 Attn: SEWUP Department Phone (310) 212-3344, Fax (310) 787-8838

License No. 0451271



Rev. 04/06

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION
SECTION 01 10 00

SUMMARY OF WORK

PART 1 GENERAL

1.1 SUMMARY

A. Section includes summary of Work including:

- 1. Work Covered By Contract Documents
- 2. Bid Items, Allowances, and Alternates
- 3. Work Under Other Contracts
- 4. Future Work (N/A)
- 5. Work Sequence
- 6. Business Days and Hours
- 7. Cooperation of Contractor and Coordination with Other Work
- 8. Maintenance, Product Handling, and Protection
- 9. Partial Occupancy/Utilization Requirements
- 10. Contractor Use of Premises
- 11. Lines and Grades
- 12. Protection of Existing Structures and Utilities
- 13. Damage to Existing Property
- 14. Dust Control
- 15. Parking
- 16. Laydown/Staging Area
- 17. Permits
- 18. Punch List Verification
- 19. Actual Damages for Violations
- 20. Unfavorable Construction Conditions
- 21. Construction Site Access
- 22. Specification Data Sheets and Schedules
- 23. Site Administration
- 24. Products Ordered In Advance
- 25. District-Furnished Products
- 26. CEQA Mitigations
- 27. Storm Water Pollution Program- See Section 01 35 00

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work comprises removal and replacement of the water proofing systems on the following structures and buildings:
 - 1. College of San Mateo, 1701 Hillsdale Blvd., San Mateo, CA 94402:
 - a. Building 14-16 Colonnade
 - b. Building 16-18 Colonnade
 - c. Fountain Colonnade North
 - d. Fountain Colonnade South.
 - 2. District Office, 3401 CSM Drive, San Mateo, CA 94402: a. 2nd floor and 3rd floor patio decks
- B. Furnish all labor, materials, equipment, services, permits, temporary controls and construction facilities, and all general conditions, seismic requirements, general requirements and incidentals required to complete the Work in its entirety as described in the Contract Documents and to have a water tight roofing system at the end of construction. The Work includes, but is not necessarily limited to the following:
 - 1. College of San Mateo:
 - a. Building 14-16 Colonnade
 - (a) Demolition of existing roof systems to base concrete, disposal, waterproofing, scoping/clearing drains, and all scope per plans.

- (b) Raise electrical conduit and J boxes to 8" minimum height per plans and specifications.
- (c) Provide concrete core in concrete deck and copper drain line as indicated in plans.(d) Roof access from exterior only.
- b. Colonnades: Building 16-18, Fountain Colonnade North, Fountain Colonnade South.
 - (a) Demolition of existing roof systems to base concrete, disposal, waterproofing, scoping/clearing drains, and scope per plans.
 - (b) Raise electrical conduit and J boxes to 8" minimum height per plans and specifications.
 - (c) Provide concrete core in concrete deck and copper drain line as indicated in plans.
 - (d) Roof access from exterior only.
 - (e) Asbestos abatement of the existing waterproofing membrane is included as part of this project.(i) Selected contractor will need to submit a work plan for approval prior to the commencement of work.
- c. Unit pricing and a Work Allowance are required to replace 5 roof drains at the CSM Colonnades. Refer to Section 01 22 00, Unit Prices, and 01 21 00, Allowance, for further details. The unit prices provided will be used to add to or deduct from the Contract Sum for the actual quantities replaced for the materials listed above. The Contractor shall consult with the project Construction Manager and Engineer of Record. The estimated quantity to be replaced will be field verified by the Contractor, Engineer of Record and Construction Manager for recommendation to and approval by the District. In order to establish a replacement cost for additional work, the District is asking the contractor to provide a unit cost based on an estimated quantity of 5.
- 2. District Office:
 - a. 2nd floor and 3rd floor patio decks
 - (a) Demolition of existing deck waterproofing systems to base concrete, disposal, waterproofing, and all scope per plans.
 - (b) Replace damaged clips as indicated in plans and specifications.
 - (c) Contractor to remove and replace items and furniture on deck to accomplish work.
 - (d) Selected contractor will need to submit a work plan and proposed schedule for approval prior to the commencement of work at the District Office.
- 3. Contractor will need to coordinate their work and schedule with the mechanical contractor working at Building 1 and the contractor awarded the CSM and SKY Roof Replacement Project.
- 4. Clean existing drain bowls after drain and roofing is complete. Clean all drains and overflow piping debris and clogs such that the system is free flowing, utilize "Roto-rooters" type equipment down from the roof to the storm sewer connections for each drain. Owner's representative must be present during cleaning.
- 5. Coordination with other contractors working at these campuses and their Subcontractors. Coordination with campus Facilities Departments and the District, obtaining necessary permits and complying with permit and environmental conditions, project startup and testing, site restoration and cleanup.
- 6. Provide pedestrian controls and fencing to limit access to work areas. Provide detour signage where directed. Refer to site logistics plan for all staging, storage, parking, access, fencing, signage, etc. and for additional information and requirements.
- 7. Provide complete set of as-built drawings at project closeout.
- C. The Work of this Contract comprises construction of all the Work indicated, described in the Specifications, or otherwise required by the Contract Documents.
- D. Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by Contract Documents shall rest with Contractor until Final Acceptance of the Work.
- E. Contractor's use of the premises for Work and storage is limited to the area indicated.
- F. Contractor shall be solely responsible for all utilities (including without limitation electricity, water, gas, etc.) at the Site.
- G. Contractor shall carefully remove, in a manner to prevent damage, all materials and equipment specified or indicated to be salvaged and reused or to remain the property of District. Contractor shall store and protect salvaged items specified or indicated to be reused in the Work.
 - a. Contractor may furnish and install new items instead of those specified or indicated to be salvaged and reused, in which case such removed items will become Contractor's property.
- H. Existing materials and equipment removed by Contractor shall not be reused in the Work, except where so specified or indicated.
- I. Salvaged items not to be reused in the Work, but to remain District's property, shall be delivered by Contractor in good condition to District at the Facilities Maintenance Center, 1700 West Hillsdale Blvd, San Mateo or 3300 College Drive, San Bruno.

a. Any items specified or indicated to be salvaged which are damaged in removal, storage, or handling through carelessness or improper procedures shall be replaced by Contractor in kind or with new items.

1.3 BID ITEMS, ALLOWANCES, AND ALTERNATES

- A. Any Bid Item may be deleted from the Work and Contract Sum, in total or in part, prior to or after award of Contract without compensation in any form or adjustment of other Bid Items or prices therefore.
- B. Payment of all items is subject to provisions of Contract Documents, including without limitation Section 01 29 00 (Measurement and Payment).
- C. For all Bid Items, furnish and install all work indicated and described in Specifications and all other Contract Documents, including connections to existing systems. Work and requirements applicable to each individual Bid Item, or unit of Work, shall be deemed incorporated into the description of each Bid Item.
- D. Descriptions of Lump Sum Items (listed by Bid Item Numbers). Bid items are not intended to be exclusive descriptions of work categories and Bidder shall determine and include in its pricing all materials, labor, and equipment necessary to complete each Bid Item as shown and specified:
 - 1. Bonds and Insurance. The lump sum price paid under this item shall be full payment for all Bonds and Insurance required by Document 00 71 00 (General Conditions).
 - 2. Safety Plan and Programs. The lump sum price paid under this item shall be full payment for providing the Safety Plan and programs as required by Section 01 56 00 (Site Security and Safety) and 00 71 00 (General Conditions).
 - 3. Mobilization/Demobilization. The lump sum price paid under this item shall be full payment for initial mobilization at Project commencement (50% to be paid then), and cleanup and demobilization at Final Completion of Work to be completed (50% to be paid then).
 - 4. N/A
 - 5. Installation, Operation, and Maintenance Manuals, Record Drawings-. The lump sum price paid under this item shall be full payment for preparation of installation, operation, and maintenance manuals.
 - 6. All Work of Contract Documents other than Work separately provided for under other Bid Items. The lump sum price paid under this item shall be full payment for all Work of Contract Documents other than Work separately provided for under other Bid Items, including cleaning, startup, and testing, submittals, and all other general conditions, general requirements, and seismic requirements.
- E. Allowances:
 - 1. Allowance work shall be done as Change Orders and as specified in Section 01 26 00 (Modification Procedures). Identify Allowance Items (See Document 00 41 00 [Bid Form]) work on the Progress Schedules and on Applications for Payment.
 - 2. The Amount given on Document 00 41 00 (Bid Form) under each Allowance Item is the sum of money set aside for each Allowance Item. These amounts shall be included in the Contract Sum on the Bid Form.
 - 3. If the cost of work done under any Allowance Item is less than the amount given on the Bid Form under that Allowance Item, the Contract Sum shall be reduced by the difference between the amount given in the Bid Form and the cost of work actually done.
 - 4. Scope of Allowances:
 - a. N/A
- F. Alternates:
 - 1. N/A
 - 2. N/A

1.4 WORK UNDER OTHER CONTRACTS

Work at the site performed by others includes the following:

- 1. College of San Mateo
 - a. College of San Mateo and Skyline College Roof Replacement Project
 - b. Districtwide Utility Measurement & Verification Project.

1.5 FUTURE WORK

N/A

1.6 WORK SEQUENCE

- A. Construct Work in stages and at times to accommodate District operation requirements during the construction period; coordinate construction schedule and operations with District.
 - 1. Contractor is notified that CSM buildings adjacent to the project sites will be occupied during construction. If the contractor's work will require any of these buildings to be vacant or the egress of these buildings to be blocked at any time during construction, the contractor will need to indicate this work on the schedule and submit for approval prior to the commencement of work.
 - 2. Contractor is notified that work that will generate disruptive noise will need to be completed during hours when there is less activity on campus, see paragraph 1.7.B (Business Days and Hours).
 - Contractor is notified the asbestos abatement work on Colonnade B16-18 and the demolition of waterproofing materials on Colonnade 14-46 need to be completed between June 2, 2015 and June 12, 2015.
- B. Contractor shall not have access to the **premises** before **June 2**, 2015 except as follows: between May 23, 2015 and June 1, 2015 Contractor may test roof drains and complete other "quiet" mobilization work **while final exams are in process.** (The warning beeping from work trucks is considered "noisy" work.) All other work would need to be approved by the District in advance.
- C. Contractor acknowledges that shoring may be required to maintain a safe excavation and protect facilities, including both existing and recently constructed under this Contract. All expenses for shoring of excavations shall be included in the appropriate bid items.

1.7 BUSINESS DAYS AND HOURS

- A. The District's Regular Business Days and hours for construction personnel, such as facilities managers, architects, inspectors, and maintenance personnel, are Monday-Friday inclusive, 7:30 a.m. 4:30 p.m. local time.
- B. Contractor is advised that during this Construction Window District students and faculty are on campuses Monday – Thursday, 8:00 a.m. - 10:00 p.m., with generally less activity between 3:00 p.m. and 6:00 p.m., all day on Fridays and Saturday 8:00 a.m. – 1:00 p.m. No Saturday classes are scheduled the first two weeks of June, June 2, 2015 and June14, 2015.
- C. Contractor may work at the Site on weekends or holidays if it notifies District in writing at least 48 hours in advance. In the case of Work by Contractor after normal working hours or on weekends or holidays, Contractor shall be responsible for any additional inspection costs incurred by the District. Such costs may be withheld from any succeeding monthly progress payment.
- D. See Section 00 73 00 Supplementary Conditions for College Activities and Events which may also result in Contractor's inability to work.
- E. Contractor shall protect facilities against deleterious substances and damage.
- F. Construction window: June 2, 2015 August 14, 2015

1.8 COOPERATION OF CONTRACTOR AND COORDINATION WITH OTHER WORK

- A. Coordinate with District and any District forces, or other contractors and forces, as required by Document 00 71 00 (General Conditions), paragraph 6.
- B. Contractor shall coordinate the construction schedule with the regular daily operations schedule of the District and Campus for minimal interruption during utility service installations/modifications. All shut-downs required to perform the work and temporary facilities/utilities to affected District constituencies or other projects shall be coordinated by the Contractor and included in the base scope/cost of the project for normal power service installation.
- C. Noise: Construction activities are to comply with applicable local noise ordinance and applicable Cal-OSHA regulations.
- D. Connections to Existing Facilities. Unless otherwise specified or indicated, Contractor shall make all necessary connections to existing facilities, including structures, drain lines, and utilities such as water, sewer, gas, telephone, and electric. In each case, Contractor shall receive permission from District or the owning utility prior to undertaking connections.

- E. Substantial completion: Fall semester begins August 17, 2015 therefore; substantial completion must be achieved by:
 - a. CSM Building 14 -16 Colonnade August 14, 2015
 - b. CSM Building 16 18 Colonnade August 14, 2015
 - c. CSM Building 2-4 Colonnade August 14, 2015
 - d. Fountain Colonnade North August 14, 2015
 - e. Fountain Colonnade South August 14, 2015
 - f. District Office 2nd floor and 3rd floor decks August 14, 2015
- F. Prior to commencement of any asbestos abatement work the selected contractor shall submit a detailed work plan per Specification Section 02080 (Asbestos Abatement) for approval by the District's contracted Industrial Hygienist.

1.9 MAINTENANCE, PRODUCT HANDLING, AND PROTECTION

- A. Transport, deliver, handle, and store materials and equipment at the Site in such a manner as to prevent the breakage, damage or intrusions of foreign matter or moisture, and otherwise to prevent damage.
- B. Hazardous substance compliance: Provide District with copies of the OSHA Material Safety Data Sheets (MSDS) for all products containing a hazardous substance, examples: Adhesives, paints, sealants, and the like.
- C. Packaging: Provide packaged material in manufacturer's original containers with seals unbroken and labels intact until incorporated into the Work.
- D. Remove all damaged or otherwise unsuitable material and equipment promptly from the Site.
- E. Protection: Protect all finished surfaces.
- F. Asbestos Removal: If, during the progress of the Work, suspected asbestos-containing products are identified, Contractor shall stop work in the affected area and immediately notify the Owner. Owner shall either directly engage an asbestos removal contractor to verify the materials and, if necessary, encapsulate, enclose, or remove and dispose of all asbestos in accordance with current regulations of the Environmental Protection Agency and the U. S. Department of Labor Occupational Safety and Health Administration, the state asbestos regulating agency, and any local government agency; or Owner shall direct Contractor to do the same as a Change Order to the contract. The Contractor shall take all measures to avoid and/or mitigate delays due to Hazardous Materials/Waste finds such as: avoiding the area of the find and proceeding with other work on the project; developing "work around" plans; and documenting his best efforts to avoid and/or mitigate delays.
 - 1. Asbestos Removal Subcontractor's Qualifications. The Subcontractor for asbestos removal shall be regularly engaged in this type of activity and shall be familiar with the regulations that govern this work. The Subcontractor shall demonstrate to the satisfaction of District that it has successfully completed at least three asbestos removal projects that it has the necessary staff and equipment to perform the work, and that it has an approved site for disposal of the asbestos. Liability insurance covering the asbestos abatement work shall be provided as specified in the Supplementary Conditions.
 - 2. Asbestos Removal Methods. The asbestos removal Subcontractor shall submit a work plan of its proposed removal procedure to District before beginning work and shall certify that the methods are in full compliance with the governing regulations. The work plan shall cover all aspects of the removal, including health and safety of employees and building occupants, hygiene facilities, employee certification, clearance criteria, transportation and disposal, enclosure techniques, and other techniques appropriate for the proposed work.
- G. Cost of maintenance of systems and equipment prior to either Substantial Completion or filing of a Notice of Completion will be considered as included in prices bid and no direct or additional payment will be made therefore.
- H. Contractor is to complete, and if necessary develop, maintenance logs for each piece of major equipment installed and/or stored until project close out. This equipment includes:
 - 1) N/A
 - 2) N/A
- I. Maintenance logs and all related contract close-out documentation will be submitted to the District's Representative no more than thirty (30) days after the date of Substantial Completion. A Notice of Completion will not be filed until all contract close-out documents are submitted and approved.

1.10 PARTIAL OCCUPANCY/UTILIZATION REQUIREMENTS

- A. Allow District to take possession of and use any completed or partially completed portion of the Work during the progress of the Work as soon as is possible without interference to the Work.
- B. Possession, use of Work, and placement and installation of equipment by District shall not in any way evidence the completion of the Work or any part of it.
- C. Contractor shall not be held responsible for damage to the occupied part of the Work resulting from District occupancy.
- D. Make available, in areas occupied, on a 24-hour per day and 7-day per week basis if required, any utility services, heating, and cooling in condition to be put in operation at the time of occupancy.
 - 1. Responsibility for operation and maintenance of said equipment shall remain with Contractor.
 - 2. Make, and District shall certify, an itemized list of each piece of equipment so operated with the date operation commences.
 - 3. Itemized list noted above shall be basis for commencement of warranty period for equipment.
 - 4. District shall pay for utility cost arising out of occupancy by District during construction.
- E. Use and occupancy by District prior to acceptance of Work does not relieve Contractor of its responsibility to maintain insurance and bonds required under the Contract until entire Work is completed and accepted by District.
- F. Prior to date of Final Acceptance of the Work by District, all necessary repairs or renewals in Work or part thereof so used, not due to ordinary wear and tear, but due to defective materials or workmanship or to operations of Contractor, shall be made at expense of Contractor, as required in Document 00 71 00 (General Conditions).
- G. Use by District of Work or part thereof as contemplated by this Section 01 10 00 shall in no case be construed as constituting acceptance of Work or any part thereof. Such use shall neither relieve Contractor of any responsibilities under Contract, nor act as waiver by District of any of the conditions thereof.
- H. District may specify in the Contract Documents that portions of the Work, including electrical and mechanical systems or separate structures, shall be substantially completed on dates described in paragraph 1.6 of this Section 01 10 00, if any, prior to substantial completion of all of the Work. Contractor shall notify District's Representative and Architect/Engineer in writing when Contractor considers any such part of the Work ready for its intended use and substantially complete and request District to issue a Certificate of Substantial Completion for that part of the Work.

1.11 CONTRACTOR USE OF PREMISES

- A. Confine operations at Site to areas permitted by Contract Documents, permits, ordinances, and laws.
- B. Do not unreasonably encumber Project Site with materials or equipment.
- C. Assume full responsibility for protection and safekeeping of products stored on premises.
- D. Move any stored products that interfere with operations of District or other contractor.
- E. Parking, storage, staging, and work areas shall be coordinated with the District, and comply with all other Contract documents requirements.
 - a. Parking:
 - 1) CSM Socrates, Lot 4
 - 2) SKY Lot L

1.12 LINES AND GRADES

- A. All Work shall be done to the lines, grades, and elevations indicated on the Drawings.
- B. District shall provide basic horizontal and vertical control points to be used as datums for the Work. All additional survey, layout, and measurement work shall be performed by Contractor as a part of the Work.
- C. Contractor shall provide at its cost an experienced instrument person, competent assistants, and such instruments, tools, stakes and other materials required to complete the survey, layout, and measurement work. In addition, Contractor shall furnish at its cost competent persons and such tools, stakes, and other materials as District (and/or any Architect/Engineer) may require in establishing or designating control points, or in checking survey, layout, and measurement work performed by Contractor.
- D. Contractor shall keep District informed, a reasonable time in advance, of the times and places at which it wishes to do survey/layout work, so that any checking deemed necessary by District may be done with minimum inconvenience to District and minimum delay to Contractor.
- E. Contractor shall remove and reconstruct Work which is improperly located.

1.13 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. The Drawings may indicate existing above- and below-grade structures, drainage lines, storm drains, sewers, water, gas, electrical, hot water, and other similar items and utilities that are known to District.
- B. Contractor shall locate these known existing installations before proceeding with trenching or other operations which may cause damage, shall maintain them in service where appropriate, and shall repair any damage to them caused by the Work, at no increase in Contract Sum.
- C. Additional utilities whose locations are unknown to District are suspected to exist. Contractor must be alert to their existence. If additional utilities are encountered, Contractor must immediately report to District for disposition.
- D. In addition to reporting, if a utility is damaged, Contractor must take appropriate action as provided in Document 00 71 00 (General Conditions).
- E. Additional compensation or extension of time on account of utilities not indicated or otherwise brought to Contractor's attention including reasonable action taken to protect or repair damage shall be determined as provided in Document 00 71 00 (General Conditions).

1.14 DAMAGE TO EXISTING PROPERTY

- A. Contractor will be responsible for any damage to existing structures, Work, materials, or equipment because of its operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to, District.
- B. Contractor shall protect all existing structures and property from damage and shall provide bracing, shoring, or other work necessary for such protection.
- C. Contractor shall be responsible for all damage to streets, roads, curbs, sidewalks, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property, which may be caused by transporting equipment, materials, or workers to or from the Work. Contractor shall make satisfactory and acceptable arrangements with the agency having jurisdiction over the damaged property concerning its repair or replacement.

1.15 DUST CONTROL

- A. Contractor shall take reasonable measures to prevent unnecessary dust. The following items shall be specifically implemented to control dust:
 - 1. All construction locations with active excavation shall be watered at least twice daily.
 - 2. Cover all trucks hauling soil, sand, and other loose materials; or require all trucks to maintain at least two feet of freeboard.
 - 3. Pave, apply water daily, or apply non-toxic soil stabilizers on all un-paved access roads, parking areas, and staging areas at construction site.
 - 4. Sweep daily with water sweepers all paved access roads, parking areas, and staging areas at construction sites during earthwork activities.
 - 5. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.)
 - 6. Limit the speed of all construction vehicles to 5 miles per hour while on un-paved roads at the Site.
- B. Buildings or operating facilities which may be affected adversely by dust shall be adequately protected from dust. Existing and new machinery, motors, instrument panels, or similar equipment shall be protected by suitable dust screens. Proper ventilation shall be included with dust screens.
- C. Building Interiors: provide dust barriers, walk-off pads, etc. to minimize dust infiltration in buildings. If required, the Contractor will clean interior common areas (e.g., corridors, lobbies) as needed during each work day.

1.16 PARKING

Parking will be provided in designated areas at no cost to the Contractor.

1.17 LAYDOWN/STAGING AREA

Contractor shall utilize the area indicated on the Drawings for storage of all construction materials. This area shall be fenced and locked by Contractor for security purposes.

a. Laydown area:

1) CSM – Socrates, Lot 4

2) District Office – Designated Facilities Maintenance parking space located to the rear of the building adjacent the stairwell.

1.18 PUNCH LIST VERIFICATION

A punch list examination will be performed upon Substantial Completion of Work. One follow-up review of punch list items for each discipline will be provided. If further Site visits are required to review punch list items due to incompleteness of the Work by Contractor, at District's discretion, Contractor shall reimburse District for these visits.

1.19 UNFAVORABLE CONSTRUCTION CONDITIONS

During unfavorable weather, wet ground, or other unsuitable construction conditions, Contractor shall confine its operations to Work which will not be affected adversely by such conditions. No portion of the Work shall be constructed under conditions which would affect adversely the quality or efficiency thereof, unless special means or precautions are taken by Contractor to perform the Work in a proper and satisfactory manner. The Contractor will employ BEST practices to manage the construction site during inclement weather.

1.20 CONSTRUCTION SITE ACCESS

Contractor shall at all times limit access to the Site to necessary personnel only. All personnel associated with construction of the Project shall enter the site through Contractor's access gate, at the location indicated on the Drawings. Access for construction personnel shall be limited to regular work hours, unless prior approval is obtained from the District. All mail and deliveries (Federal Express, equipment, etc.) shall be sent to a separate address (at Contractor's gate), specifically arranged by Contractor for the Project. Contractor is responsible for providing adequate signage (subject to District approval) to alert delivery persons to the project site. The District will not receive or forward Contractor mail or deliveries.

1.21 SPECIFICATION DATA SHEETS AND SCHEDULES

Specifications may have data sheets and schedules as part of specific specification sections. Locations for data entries on the data sheets and schedules may be left blank intentionally. Each line where data may be entered on the data sheet has a selection box in the column "Chk". When the box for a line is checked and no data is entered in the respective line, this indicates that no data is required for that line of the data sheet.

Other standard codes which apply to the Work are designated in the Specifications.

1.22 SITE ADMINISTRATION

Contractor shall be responsible for all areas of the Site used by it and by all Subcontractors in the performance of the Work. Contractor shall exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to District or others. Contractor shall have the right to exclude from the Site all persons who have no purpose related to the Work or its inspection, and may require all persons on the Site to observe the same regulations as Contractor requires of its employees.

1.23 EROSION CONTROL

A. SCOPE OF WORK

- 1. General: Provide all materials, equipment and labor necessary to furnish and install straw wattles, silt fence barriers, hydroseed, or other Best Management Practices (BMP's) at locations shown on the Contractors Storm Water Pollution Prevention Plan. See Section 01 35 00 for further detail.
- 2. Storm Water Pollution Prevention Plan: Prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) tailored to the Contractor's operations, methods and equipment. Comply with State Water Resources Control Board requirements. The SWPPP shall be reviewed and approved by the authority having jurisdiction prior to the start of work. The SWPPP shall be tailored to the contractor's approach to the work in this contract. The Contractor shall as a minimum address:
 - a. Cut and fill operations
 - b. Temporary stockpiles
 - c. Vehicle and equipment storage, maintenance and fueling operations

- d. Concrete, plaster, mortar and paint disposal
- e. Dust control
- f. Tracking of dirt and mud, on and off of site, and adjacent streets.
- g. Pipe flushing and protection of drainage facilities both new and existing, on and off site as required by State Water Resources Control Board.

1.01 QUALITY ASSURANCE

. General: Comply with governing codes and regulations of the State Water Resources Control Board.

1.03 SUBMITTALS

A. Notice Of Intent (NOI): The Contractor shall submit a NOI to the State Water Resources Control Board in the name of San Mateo County Community College District prior to beginning work on site if required.

PART 2 PRODUCTS

2.1 PRODUCTS ORDERED IN ADVANCE N/A

2.2 RESPONSIBILITIES FOR DISTRICT-FURNISHED PRODUCTS

- A. District's Responsibilities:
 - 1. Arrange for and deliver District-reviewed Shop Drawings, Product Data, and Samples, to Contractor.
 - 2. Arrange and pay for delivery to site.
 - 3. On delivery, inspect products jointly with Contractor.
 - 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
 - 5. Arrange for manufacturers' warranties, inspections, and service.
 - B. Contractor's Responsibilities:
 - 1. Review District-reviewed Shop Drawings, Product Data, and Samples.
 - 2. Receive and unload products at site; inspect for completeness or damage jointly with District.
 - 3. Handle, store, install, and finish products.
 - 4. Repair or replace items damaged after receipt.
 - 5. Install into Project per Contract Documents.

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 01 21 00

ALLOWANCE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Non-specified work to be performed only at the determination and direction of the Owner/District.

1.2 RELATED SECTIONS

- A. Section 01 29 00 Measurement and Payment.
- B. Section 01 32 19 Submittal Procedures.
- C. Section 01 22 00 Unit Prices
- D. Document 00 41 00 Bid Form

1.3 OWNER'S ALLOWANCE FOR NON-SPECIFIED WORK

- A. Include in the Contract, a stipulated sum/price of 10 % of the total of bid items #1 #6 for non-specified items.
- B. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding and equipment rental will be included in Change Orders authorizing expenditure of funds from this Allowance.
- Funds will be drawn from Allowance only by approval of the Owner and authorization of Change Orders by the Architect.
- D. At closeout of Contract, funds remaining in Allowance will be credited to Owner by Changer Order.

1.4 SPECIFIED WORK ALLOWANCE

- A. Include in the Contract, a stipulated sum/price for bid items #5 (Concrete Deck Roof Drains).
- B. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding and equipment rental will be included in Change Orders authorizing expenditure of funds from this Allowance.
- C. Funds will be drawn from Allowance only by approval of the Owner and authorization of Change Orders by the Construction Manager and Engineer of Record per Section 01 29 00 (Measurement and Payment), Section 01 22 00 (Unit Prices) and Section 00 41 00 (Bid Form).
- D. At closeout of Contract, funds remaining in Allowance will be credited to Owner by Changer Order.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01 22 00 UNIT PRICES

PART 1 – GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for unit prices.

B. Related Requirements:

- 1. Section 01 26 00 "Modification Procedures" for procedures for submitting and handling Change Orders.
- 2. Document 00 41 00 "Bid Form" for specific quantities included in each base bid.
- 3. Section 01 21 00 "Allowance" for procedures to follow in order to utilize Work Allowance funds.

1.2 DEFINITIONS

A. Unit price is a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices shall be included in the base bid. Refer to 'Schedule of Unit Prices' Article in Part 3 of this Section for quantities.
- B. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.
- E. Contract sum adjustments will be by Change Order on basis of net accumulative change for each unit price category.
 - 1. Unit prices shall apply to both deductive and additive variations of quantities, unless otherwise specified.
 - 2. Unit prices in the Contract shall remain in effect until date of final completion of the entire Work.
- F. The estimated quantities of materials to be replaced that are identified on the bid form, Document 00 41 00, will be field verified during construction by the Contractor, Engineer of Record and Construction Manager for documentation, recommendation to and approval by the District. These values will used per paragraph 1.2 of this Section and Section 01 21 00, Allowance, to account for and utilize funds for the replacement of the identified material.
 - 1. Example: 1000 SF of plywood substrate are estimated as needing to be replaced at Skyline Building 14. If only 500 SF are replaced, a Change Order for this reduced value of work will be approved.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

A. Unit Price No. 1 – Concrete Deck Roof Drains:

April 20, 2015	01 22 00 - Page 1 of 2	Bid No. 86709
V.1	College of San Mateo Colonnades and District Office De	ck Waterproofing Project

- Description: Provide Unit Price to demolish and provide single drain. Connection/transition to
 existing drain leader encased in concrete column to be included. Requires chipping out a
 recess in existing concrete substrate and setting replacement drain cowl in non-shrink grout.
 Demolition and provision of strainer, clamping ring, and associated components for all drains
 are in base bid.
- 2. Unit of Measurement: Per location.
- 3. Quantity: Refer to Document 00 41 00 "Bid Form" for quantity in base bid.

END OF SECTION

SECTION 02 41 22

SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Demolition and removal of selected portions of a building or structure.
- B. Demolition and removal of selected site elements.
- C. Repair procedures for selective demolition operations.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless otherwise indicated.
- B. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.3 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

1.4 SUBMITTALS

- A. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of Architects and owners, and other information specified.
- B. Proposed dust-control and noise-control Measures: Submit statement or drawing that indicates the measures proposed for use, proposed locations, and proposed time frame for their operation.
 - 1. Identify options if proposed measures are later determined to be inadequate.
- C. Schedule of Selective Demolition Activities:
 - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity.
 - 2. Interruption of utility services.
 - 3. Coordination for shutoff, capping, and continuation of utility services.
 - 4. Construction and use of temporary elevators.
 - 5. Locations of temporary partitions, if required, and means of egress.

- 6. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's occupancy of completed Work.
- D. Predemolition Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by selective demolition operations. Submit before Work begins.
- E. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

1.5 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Standards: Comply with ANSI A10.6 and NFPA 241.
- D. Predemolition Conference: Review methods and procedures related to selective demolition including, but not limited to, the following:
 - 1. Inspect and discuss condition of construction to be selectively demolished.
 - 2. Review structural load limitations of existing structure.
 - 3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.

1.6 REGULATORY REQUIREMENTS

- A. Comply with authorities having jurisdiction over selective demolition operations, including:
 - 1. California Occupational Safety and Health Administration (CalOSHA)
 - 2. Department of Transportation (DOT)
 - 3. Department of Health Services (DOHS)
 - 4. Environmental Protection Agency (EPA)
 - 5. California Contractors State License Board

1.7 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area.
 - 1. Conduct selective demolition so Owner's operations will not be disrupted.
 - 2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
 - 3. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- B. Owner assumes no responsibility for condition of areas to be selectively demolished.
- C. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

- D. Storage or sale of removed items or materials on-site will not be permitted.
- E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.
- F. Weather Limitations: Proceed with roofing removal preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.

1.8 SEQUENCING

- A. Coordinate the sequencing of roofing demolition work with roofing system applicator to ensure that the roofing replacement will promptly follow demolition work.
- B. Provide and install temporary protection during the period between demolition and replacement work.
- C. Take steps necessary to ensure that the building is watertight at the end of each days work and when inclement weather is forecast.
 - 1. Failure to adequately protect the building and its contents from weather will result in the Owner installing temporary protection at the Contractor's expense.

1.9 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 REPAIR MATERIALS

- A. Use repair materials identical to existing materials to repair damage caused during Construction.
 - 1. If identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 2. Use a material whose installed performance equals or surpasses that of existing materials.
- B. Comply with material and installation requirements specified in individual Specification Sections.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Visit the project to survey existing conditions and correlate with Contract Document requirements indicated to determine extent of selective demolition required.
 - 1. Perform visual survey accompanied by the Owner or the Owner's Representative.
 - 2. Mark interface surfaces as required to enable workmen to identify items scheduled for demolition and those scheduled to remain.

- B. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Engineer.
- C. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 ASBESTOS

A. Asbestos containing material (ACM) is present within roofing material and perimeter edge caulking. Refer to abatement protocol by Owner for remediation.

3.3 UTILITY SERVICES

- A. Existing Utilities: Maintain services and protect them against damage during selective demolition operations.
- B. Do not interrupt existing utilities serving occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction.
- C. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and to authorities having jurisdiction.
 - 1. Provide at least 72 hours' notice to Owner if shutdown of service is required during changeover.
- D. Utility Requirements: Do not start selective demolition work until utility disconnecting and sealing have been completed and verified in writing.

3.4 PREPARATION

- A. Coordinate with Owner to shut down air-intake equipment in the vicinity of the Work. Cover air-intake louvers before proceeding with roofing removal work that could affect indoor air quality or activate smoke detectors in the ductwork.
- B. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
- C. Verify that rooftop utilities and service piping have been shut off before beginning the Work.
- D. Dangerous Materials: Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with selective demolition operations.
- E. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.

- 2. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- 3. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
- 4. Protect existing site improvements, appurtenances, and landscaping to remain.
- F. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
 - 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
 - 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 - 4. Cover and protect furniture, furnishings, and equipment below selective demolition where applicable.
- G. Temporary Enclosures: Provide temporary enclosures for protection of existing building and construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities.
 - 1. Provide temporary weathertight enclosure for building exterior.
 - 2. Where heating or cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
- H. Protect building to have roofing removed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from roofing removal operations.

3.5 POLLUTION CONTROLS

- A. Dust Control: Comply with the Owner's and applicable governing environmental protection regulations.
- B. Disposal: Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 1. Remove debris from elevated portions of building by enclosed chute, hoist, or other pre-approved device that will convey debris to grade level in a controlled descent.

3.6 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated.
- B. Use methods required to complete the Work within limitations of governing regulations.
- C. Proceed with selective demolition systematically, from higher to lower level.
- D. Neatly cut openings and holes plumb, square, and true to dimensions required.

- E. Use cutting methods least likely to damage construction to remain or adjoining construction.
 - 1. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces.
 - 2. Temporarily cover openings to remain.
 - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
- F. Do not use cutting torches until work area is cleared of flammable materials.
 - 1. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations.
 - 2. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
 - 3. Maintain adequate ventilation when using cutting torches.
- G. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
- H. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- I. Dispose of demolished items and materials promptly.
- J. Return elements of construction and surfaces that are to remain to condition existing before selective demolition operations began.
- K. Existing Facilities: Comply with building manager's requirements for using and protecting elevators, stairs, walkways, loading docks, building entries, and other building facilities during selective demolition operations.
- L. Existing Items to Remain: Protect construction to remain against damage and soiling during selective demolition.
 - 1. When permitted by Engineer, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.
- M. Roofing: Remove no more existing roofing than can be covered in one day by new roofing.
- N. Deck: Remove existing deck membrane down to (e) deck.

3.7 ROOFING TEAR-OFF

- A. General: Notify Owner each day of extent of roofing tear-off proposed for that day.
- B. Remove loose aggregate from aggregate-surfaced built-up bituminous roofing using a power broom.
- C. Remove accessories from roofing membrane.
- D. Roofing Tear-Off: Remove existing roofing membrane and other membrane roofing system components down to the deck.

3.8 DECK PREPARATION

- A. Inspect deck after tear-off of roofing system.
- B. Verify that concrete substrate is visibly dry and free of moisture. Test for capillary moisture by plastic sheet method according to ASTM D 4263 at start of each day's work and at start of each roof area or plane. Do not proceed with roofing work if moisture condenses under the plastic sheet or if asphalt test sample foams or can be easily and cleanly stripped after cooling.
- C. If deck surface is not suitable for receiving new roofing or if structural integrity of deck is suspect, immediately notify Owner's Representative. Do not proceed with installation until directed by Owner's Representative.

3.9 EXISTING BASE FLASHINGS

A. Remove existing base flashings around parapets, curbs, walls, and penetrations.
1. Clean substrates of contaminants such as asphalt, sheet materials, dirt, and debris.

3.10 PATCHING AND REPAIRS

- A. General: Promptly repair damage to adjacent construction caused by selective demolition operations.
- B. Promptly replace items demolished that were not so scheduled to the satisfaction of the Owner.
- C. Repairs: Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.
 - 1. Completely fill holes and depressions in existing masonry walls that are to remain with an approved masonry patching material applied according to manufacturer's written recommendations.
- D. Finishes: Restore exposed finishes of patched areas and extend restoration into adjoining construction in a manner that eliminates evidence of patching and refinishing.
 - 1. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.
 - 2. Where patching occurs in a painted surface, apply primer and intermediate paint coats over patch and apply final paint coat over entire unbroken surface containing patch. Provide additional coats until patch blends with adjacent surfaces.

3.11 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials and dispose of at designated spoil areas on Owner's property.
- D. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.12 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations.
- B. Return adjacent areas to condition existing before selective demolition operations began.

3.13 SELECTIVE DEMOLITION SCHEDULE

- A. Existing Construction to Be Removed: Remove existing construction where indicated. Remove existing construction as required to install the Work.
 - 1. Existing construction as indicated and as needed to complete the Work.
 - 2. Other construction where shown or noted on the Drawings and where specified in the Project Manual.
- B. Existing Items to Be Removed and Reinstalled: Items and/or construction requiring temporary removal and/or disconnection, modification, etc. to remain a part of the Work.
 - 1. Existing construction as indicated and as needed to complete the Work.
 - 2. Other construction where shown or noted on the Drawings and where specified in the Project Manual

END OF SECTION

SECTION 06 10 00

ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Wood blocking and nailers.
 - 2. Fasteners.
 - 3. Other, as indicated.

1.2 SUBMITTALS

- A. Product Data: For each type of process and product.
- B. Shop Drawings: Provide shop drawings for temporary protective canopy indicating material and stating OSHA compliance.

1.3 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.
- B. Evaluation Reports: For the following, from ICC-ES:
 - 1. Power-driven fasteners.
 - 2. Powder-actuated fasteners.
 - 3. Metal framing anchors.

1.4 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Codes and standards: In addition to complying the pertinent codes and regulations of governmental agencies having jurisdiction, unless otherwise specifically directed or permitted by the Owner's Representative, comply with:
 - 1. "Product Use Manual" of the Western Wood Products Association for selection and use of products included in that manual.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver the materials to the job site and store, in a safe area out of the way of traffic, and stored off the ground surface.
- B. Identify framing lumber as to grades. Sort and store each grade separately from other grades.
- C. Use care in off-loading of lumber to prevent damage, splitting, and breaking of materials.

PART 2 - PRODUCTS

2.1 GRADE STAMPS

- A. Identify framing lumber by the grade stamp of the West Coast Lumber Inspection Bureau, or such other grade stamp as is approved in advance by the National Design Specification (N.D.S.).
- B. Identify plywood as to species, grade, and glue type by the stamp of the American Plywood Association (A.P.A.).
- C. Identify other materials of this Section by the appropriate stamp of the agency approved on advance by the N.D.S.

2.2 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. Provide dressed lumber, S4S, unless otherwise indicated.
 - 3. Minimum dimension for any individual piece shall be 24", unless otherwise indicated.
- B. Maximum Moisture Content of Lumber: 19 percent unless otherwise indicated.

2.3 WOOD BLOCKING, NAILERS AND WOOD FRAMING

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including blocking, nailers, and wood framing.
- B. For items of dimension lumber size, provide No. 2 grade or better lumber, douglas fir.
- C. Minimum dimension for any individual piece shall be 24 inches, unless otherwise indicated.

2.4 MISCELLANEOUS LUMBER

A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including blocking and nailers.

B. For items of dimension lumber size, provide Construction or No. 2 grade lumber, douglas fir, pressure treated where indicated.

2.5 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
 - 1. Provide hot-dip galvanized fasteners except where stainless steel fasteners are indicated or as required to prevent dissimilar metal from coming in contact.
 - 2. Nails shall be ring-shank.
 - 3. Where rough carpentry is exposed to weather, pressure-preservative treated, or in area of high relative humidity, provide fasteners of Type 304 stainless steel.
- B. Fastener for installing Plywood to Concrete: Subject to compliance with requirements, provide X-CR (ICC ESR-1663) by Hilti or approved equal.
 - 1. Material: Hot-dipped galvanized.
 - 2. Washers: Hot-dipped galvanized, premounted.
 - 3. Diameter: 0.145 inch diameter.
- C. Power-Driven Fasteners: ICC-ES ESR-1539.
- D. Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6); with ASTM A 563 (ASTM A 563M) hex nuts and, where indicated, flat washers.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Selection of lumber pieces:
 - 1. Carefully select the members.
 - 2. Select individual pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing, and will allow making of proper connections.
 - 3. Cut out and discard defects that render a piece unable to serve its intended function.
 - 4. The Owner or Engineer may reject lumber, whether or not it has been installed, for excessive warp, twist, bow, crook, mildew, fungus, or mold, as well as for improper cutting and fitting.
- B. General:
 - 1. In addition to framing operations normal to the fabrication and erection indicated on the Drawings, install wood blocking and backing required for the work of other trades.
 - 2. Set horizontal; and sloped members with crown up.
 - 3. Do not notch, cut, or bore members for pipes, ducts, or conduits, or for other reasons except as shown on the Drawings or as specifically approved in advance by the Owner's Representative.
 - 4. Pre-drill holes where indicated in the Contract Documents.
- C. Bearings:
 - 1. Make bearings full unless otherwise indicated on the Drawings.
 - 2. Finish bearing surfaces on which structural members are to rest so as to give sure and even support.
 - 3. When framing members slope, cut or notch the ends as required giving uniform bearing surface.

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- D. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate nailers, blocking and similar supports to comply with requirements for attaching other construction.
- E. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- F. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.
 - 2. ICC-ES ESR-1539 for power-driven fasteners.

3.2 FASTENING

- A. Nailing:
 - 1. Penetrate wood substrates 1-1/4 inch or 3/4 inch through, unless otherwise noted or required.
 - 2. Nail without splitting wood.
 - 3. Pre-bore as required or indicated on the Contract Drawings.
 - 4. Remove split members and replace with members complying with the specified requirements.
- B. Wood Screws: Pre-drill as needed to prevent splitting wood.
- C. Lag Screws: For lag screws, pre-bore holes same diameter as root of threads, enlarging holes to shank diameter for length of shank.
- D. Bolts: Pre-drill holes prior to installing bolts.

3.3 CLEANING

- A. Do not allow sawdust, dust, and debris to accumulate. Sweep surfaces clean on a daily basis.
- B. Remove excess materials from job site and clean surfaces, including roof.
- C. Survey site and building grounds for scattered fasteners and debris to prevent and damage.

END OF SECTION

SECTION 07 56 00

FLUID-APPLIED ROOFING AND WATERPROOFING

PART 1 - GENERAL

1.1 SYSTEM DESCRIPTION

A. The following specification outlines the requirements for a fully reinforced cold fluid-applied polyurethane liquid resin roofing membrane and flashing system, expansion joints, and all other ancillary waterproofing work as specified.

1.2 SECTION INCLUDES

- A. Adhered fully reinforced, cold fluid-applied, aggregate surfaced, polyurethane liquid resin roofing membrane system including membrane, penetration flashings, base flashings, and expansion joints.
- B. Substrate preparation, cleaning, leveling and patching.
- C. Priming.
- D. Roofing membrane installation.
- E. Flashing installation and expansion joint installation.
- F. Protective aggregate surfacing.

1.3 REFERENCES

- A. National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual
- B. ACI-308 Recommended Practice for Curing Concrete
- C. ASTM D638 Test Methods for Tensile Properties of Plastics
- D. ASTM D4258 Standard Practice for Surface Cleaning Concrete for Coatings
- E. ASTM D4259 Standard Practice for Abrading Concrete
- F. ASTM D4541 Method for Pull-Off Strength of Coatings using Portable Adhesion Tester
- G. ASTM E96(A) Test Methods of Moisture Transmission of Material

- H. ASTM E-108, ANSI/UL 790 for fire resistance
- I. International Concrete Repair Institute Guideline 03732 Concrete Surface Preparation

1.4 SUBMITTALS FOR REVIEW

- A. Membrane System Product Data: Provide current standard printed product literature indicating characteristics of membrane materials, flashing materials, components, and accessories product specification and installation.
- B. Product Samples: Submit product samples of membrane and flashing materials showing color, texture, thickness and surfacing representative of the proposed system for review and approval by the Owners Representative.
- C. Submit sample copies of both the Manufacturer and Applicator warranties for the periods stipulated. Each specimen must be a preprinted representative sample of the issuing company's standard warranty for the system specified.
- D. Submit copies of current Material Safety Data Sheets (MSDS) for all components of the work.

1.5 QUALITY ASSURANCE

- A. Membrane Manufacturer: Company specializing in manufacturing fully reinforced cold fluid applied liquid resin waterproofing membrane systems with a minimum of ten (10) years of documented applications in the United States. Membrane Manufacturer shall submit the following certifications for review:
 - 1. Substrates and conditions are acceptable for purpose of providing specified warranty.
 - 2. Materials supplied shall meet the specified requirements.
- B. Applicator: Company specializing in performing the work of this section with (3) years documented experience and approved by system manufacturer for warranted membrane installation. Applicator shall submit the following certification for review:
 - 1. Applicator shall submit documentation from the membrane manufacturer to verify Contractor's status as an approved applicator for warranted installations.
- C. Evaluate moisture content of substrate materials. Contractor shall determine substrate moisture content throughout the work and record with Daily Inspection Reports or other form of reporting acceptable to the Owner or designated Representative, and Membrane Manufacturer.
- D. Random tests to determine tensile bond strength of membrane to substrate shall be conducted by the Contractor at the job site using an Elcometer Adhesion Tester Model 106 or similar device, or by the performance of a manual pull test. Contractor shall perform tests at the beginning of the Work, and at intervals as required to assure specified adhesion with a minimum of three (3) tests per 5000 square feet. Smaller areas shall receive a minimum of three (3) tests. Test results shall be submitted to the Owner or his designated Representative and the Membrane Manufacturer. Contractor shall immediately notify the Owner or his designated Representative and Membrane Manufacturer in the event bond test results are below specified values.
 - 1. Adequate surface preparation will be indicated by tensile bond strength of membrane to substrate greater than or equal to 220 psi (1.5 N/mm²), as determined by use of an adhesion tester.

- 2. Adequate surface preparation will be indicated by 135° peel bond strength of membrane to substrate such that cohesive failure of substrate or membrane occurs before adhesive failure of membrane/substrate interface.
- 3. In the event the bond strengths are less than the minimum specified, additional substrate preparation is required. Repeat testing to verify suitability of substrate preparation.
- E. Monitor quantities of installed materials. Monitor application of resin mixture, reinforcing fleece and flashing. Perform Work in accordance with the Contract Documents and manufacturer's instructions, more stringent to apply.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable building and jurisdictional codes for roofing/waterproofing assembly and fire resistance requirements.
- B. Comply with requirements of OSHA, NIOSH or local governing authority for work place safety.
- C. Comply with authority or agency "Confined Space Policy" during and throughout all work to be performed, as necessary for site conditions.

1.7 PRE-INSTALLATION MEETING

A. Convene a pre-installation meeting at the job site (1) week before starting work of this section. Require attendance of parties directly affecting work of this section, including but not limited to, Roofing/Waterproofing Specifier, Owner's Representative, Roofing/Waterproofing Contractor, and Membrane Manufacturer's Representative. Review roofing/waterproofing preparation and installation procedures, coordination and scheduling required with related work, and condition and structural loading limitations of deck/substrate.

1.8 FIELD INSPECTION SERVICES

- A. Manufacturer's technical representative shall provide the following inspections of the membrane application:
 - 1. Jobstart inspection at the beginning of each phase of the project, to review special detailing conditions and substrate preparation.
 - 2. Periodic in-progress inspections throughout duration of the project to evaluate membrane and flashing application.
 - 3. Final punch-list inspection at the completion of each phase of the project prior to installation of any surfacing or overburden materials.
 - 4. Warranty inspection to confirm completion of all punch list items, surfacing, and overburden application.
 - 5. All necessary costs for inspection services shall be bore by the Contractor and included in the base bid.

1.9 DELIVERY, STORAGE, AND PROTECTION

- A. The Contractor together with the Owner or his designated Representative shall define a storage area for all components. The area shall be cool, dry, out of direct sunlight, and in accordance with manufacturer's recommendations and relevant regulatory agencies. Materials shall not be stored in quantities that will exceed design loads, damage substrate materials, hinder installation or drainage.
- B. Store solvent-bearing solutions, resins, additives, inhibitors or adhesives in accordance with the MSDS and/or local fire authority. After partial use of materials replace lids promptly and tightly to prevent contamination.
- C. Roll goods shall be stored horizontally on platforms sufficiently elevated to prevent contact with water and other contaminants. DO NOT use rolls that are wet, dirty or have damaged ends.
- D. Roofing/waterproofing materials must be kept dry at all times. If stored outside, raise materials above ground or roof level on pallets and cover with a canvas tarpaulin or other waterproof material. Plastic wrapping installed at the factory shall not be used as outside storage covers.
- E. Follow manufacturer's directions for protection of materials prior to and during installation. Do not use materials that have been damaged to the point that they will not perform as specified. Fleece reinforcing materials must be clean, dry and free of all contaminants.
- F. Copies of all current MSDS for all components shall be kept on site. Provide any and all crew members with appropriate safety data information and training as it relates to the specific chemical compound he or she may be expected to deal with. Each crew member shall be fully aware of first-aid measures to be undertaken in case of incidents. Comply with requirements of OSHA, NIOSH or local governing authority for work place safety.

1.10 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply roofing/waterproofing membrane during or with the threat of inclement weather.
- B. Application of cold fluid-applied reinforced polyurethane roofing/waterproofing membrane may proceed while air temperature is between 40°F (5°C) and 85°F (30°C) providing the substrate is a minimum of 5°F above the dew point.
- C. When ambient temperatures are at or expected to fall below 50°F (10°C), or reach 85°F (30°C) or higher, follow Membrane System Manufacturer's recommendations for weather related additives and application procedures.
- D. Ensure that substrate materials are dry and free of contaminants. DO NOT commence with the application unless substrate conditions are suitable. Contractor shall demonstrate that substrate conditions are suitable for the application of the materials.
- E. Odor control and elimination measures are not typically necessary, but if required by the Owner or his designated Representative, Contractor shall implement odor control and elimination measures prior to and during the application of the roofing/waterproofing materials.

F. When disposing of all refuse or unused materials, observe all EPA, OSHA or local disposal requirements.

1.11 COORDINATION & PROTECTION

- A. Coordinate the work with the installation of associated metal flashings, wood nailers, accessories, appurtenances, etc. as the work of this section proceeds.
- B. Building components shall be protected adequately (with tarp or other suitable material) from soil, stains, or spills at all hoisting points and areas of application. Contractor shall be responsible for preventing damage from any operation under its Contract. Any such damage shall be repaired at Contractor's expense to Owner's satisfaction or be restored to original condition.
- C. Provide barricades, retaining ropes, safety elements (active/passive) and any appropriate signage required by OSHA, NIOSH, and NSC and/or the Owner or designated Representative.
- D. Protect finished roofing/waterproofing membrane from damage by other trades by the use of a cushioning layer such as 1" thick expanded polystyrene insulation and an impact layer such as 1/2 inch thick exterior-grade plywood. Include this provision on preinstallation meeting agenda for discussion.
- E. Do not allow waste products containing petroleum, grease, acid, solvents, vegetable or mineral oil, animal oil, animal fat, etc. or direct steam venting to come into direct contact with the membrane unless approved by manufacturer's chemical resistance chart.
- F. Erection of a full containment/barrier will be required during demolition. Requirements will be discussed at pre-bid walk.

1.12 WARRANTY

- A. Manufacturer's Premier Warranty: Provide 20 year manufacturer's premier warranty under provisions of this section. This warranty provides for cost of labor and materials for loss of watertightness, limited to amounts necessary to effect repairs necessitated by either defective material or defects in related installation workmanship, with no dollar limitation ("NDL").
- B. Waterproofing Contractor's Warranty: Provide 5 year "Applicator Maintenance Warranty" covering workmanship for all work of this section including installation of membrane, flashings, metal work, and roofing/waterproofing accessories.
- C. Submit copy of both the manufacturer and applicator warranties for the periods stipulated, starting from the date of substantial completion. Each warranty must be signed by an authorized representative of the issuing company.

1.13 MATERIAL SUBSTITUTIONS

A. Materials proposed for use in the performance of the work that are not specified herein must be submitted to the Owner/Owner's Representative for evaluation no later than ten days prior to bid.

PART 2 - PRODUCTS

2.1 GENERAL

- A. The products herein specified are pre-engineered products of the listed manufacturer and establish criteria for the approval of substitutions. Products must be part of a virtually odorless, pre-engineered, low VOC fully reinforced cold liquid applied polymeric resin waterproofing membrane system, equivalent in function, quality, composition and method of application to be considered for approval as an "Approved Substitute". Substitute materials must meet or exceed the physical performance characteristics of the specified materials. Single component primers or resin systems will not be accepted. A minimum 165 g/m² fleece reinforcement is required in all locations.
- B. Accessory products shall be those indicated or an approved equal. Substitute accessory product shall be approved by the manufacturer for inclusion in the warranty and by the Engineer.

2.2 MEMBRANE

- A. Membrane: Two-component, cold fluid-applied reinforced polyurethane waterproofing membrane with a 360 degree needle punched non-woven 165 g/m² polyester reinforcing fleece, for a finished dry film membrane thickness of .070 inch nominal per ply. Provide products manufactured and supplied by the following:
 - 1. Kemper System America's Kemperol 2K-PUR resin for use in an adhered waterproofing system.

Property	Value	Test Method	
Color	Gray-Green	-	
Physical state	Cures to solid	-	
Nominal thickness (165 fleece)	70 mils	-	
Tensile strength @ break	120 lb/in	ASTM D-751	
Elongation	50%	ASTM D-751	
Tearing strength	5.0 lbs	ASTM D-751	
Puncture resistance	140 lbf	FTMS 101-2031	
Dimensional stability	0.1%	ASTM D-1204	
Water absorption	2.2%	ASTM D-471	
Surface hardness	Shore A 85	ASTM D-2240	
Water vapor transmission	0.04 perms	ASTM E-96	
Usage time*	30 minutes	-	
Rainproof after*	2 hours	-	
Solid to walk on after*	24 hours	-	
Solid to drive on with air rubber tires after*	48 hours	-	
Surfacing to be applied between*	16-48 hours		
Overburden may be applied after	2 days	-	
Completely hardened after	3 days	-	
Crack spanning	2mm/0.08 inch	-	
Resistance to temperatures up to (short term)	250°C/482°F	-	
*all times are approximate and depend upon air flow, humidity and temperature.			

B. Physical Properties:

C. Fleece: Kemperol 165 fleece.

2.3 FLASHINGS

A. Membrane Flashings: A composite of the same resin material as field membrane with 165 g/m² fleece reinforcement.

2.4 SUBSTRATE PRIMERS AND RESIN ADDITIVES

- A. Polyurethane Primer: Two-component, solvent-free polyurethane resin for use in improving adhesion of membrane to wood, metal and bituminous substrate surfaces, as provided by the following manufacturer:
 - 1. Kemper System America, Inc.'s Kempertec D primer.
- B. Epoxy Primer: Two-component, solvent-free epoxy resin for use in improving adhesion of membrane to wood and cementitious/masonry substrate surfaces, as provided by the following manufacturer:
 1. Kemper System America, Inc.'s Kempertec EP primer.
- C. Cold Weather Additive: Additive specifically designed to accelerate the resin reaction time at ambient temperatures below 50°F (10°C). Accelerator to be used with <u>cream</u> resin Component A prior to mixing of multi-component resin, as provided by the following manufacturer:
 - 1. Kemper System America Inc.'s Kemperol A 2K-PUR Accelerator.

2.5 SURFACINGS AND COATINGS

- A. Aggregate Finish Bonding Resin: Two-component polyurethane-based coating suitable for bonding aggregate, as provided by the following Manufacturer:
 - 1. Kemper System America, Inc.'s Kemperol 2K-PUR Resin
- B. Surface Coat: Single-component, water-borne acrylic-based coating suitable for use as a colored coating, as provided by the following Manufacturer:
 - 1. Kemper System America, Inc.'s Kemperdur BSF-R Finish
 - 2. Color: Grey.

2.6 TRAFFIC COATING AND DECK FINISH

- A. Traffic Coating: Kemper System America, Inc.'s Kemperdur TC Traffic Coating.
 1. Location: District Office Balcony Decks.
- B. Deck Finish: Kemper System America, Inc.'s Kermperdur Deko
 - 1. Location: District Office Balcony Decks.
 - 2. Color: As selected by Owner from manufacturer's full range of colors including custom colors.

2.7 ACCESSORIES

- A. Application Tools, Accessories, and Cleaners: Supplied and/or approved by membrane manufacturer for product installation.
- B. Solvent-Based Cleaner for Tools and Membrane Tie-Ins: Methyl Ethyl Ketone (MEK) or acetone.

- C. Water-Based Cleaner for Membrane: Simple Green HD.
- D. Topcoat Surfacing Aggregate: Silica sand, ceramic-coated quartz, or specialty aggregate shall be washed, kiln-dried, and dust-free with the following size specification:
 1. Aesthetic/Pedestrian Traffic: 0.4 1.0 mm
- E. Leveling and Patching Aggregate: Silica sand shall be washed, kiln-dried, and dust-free, suitable for troweling or pourable self-leveling, round grain or angular with the following size specification:
 - 1. For voids less than 1" in depth: #00 (0.3 0.6 mm)
 - 2. For voids 1" to 2" in depth: #0 (0.5 1.2 mm)
 - 3. Mixing Proportions shall be a ratio of resin to sand at 1:2 by volume for leveling, 1:4 by volume for patching, or as approved by membrane manufacturer.
- F. Backer Rod: Expanded, closed-cell polyethylene foam designed for use with cold-applied joint sealant.
- G. Sealant: Single component, non-sag elastomeric polyurethane sealant meeting ASTM C920, Type S, Grade NS, Class 50 for use in sealing cracks and joints, and making watertight seals where required.
 1. BASF The Chemical Company; Masterseal NP 150.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work.
- B. Verify deck/substrate openings, curbs, and protrusions through deck/substrate are in place and solidly set.
- C. Verify deck/substrate is structurally supported, secure and sound.

3.2 PREPARATION OF SUBSTRATE

- A. General: Surfaces to be prepared as a substrate for the new waterproofing system as follows:
 - 1. The Contractor shall determine the condition of the existing structural deck/substrate. All defects in the deck or substrate shall be corrected before new waterproofing work commences. Areas of deteriorated deck/substrate, porous or other affected materials must be removed and replaced with new to match existing.
 - 2. Prepare flashing substrates as required for application of new waterproofing membrane flashings.
 - 3. Inspect substrates, and correct defects before application of new waterproofing. Fill all surface voids greater than 1/8 inch wide with an acceptable fill material.
 - 4. Remove all ponded water, frost and/or ice from the work substrate prior to installing new waterproofing materials.
 - 5. The final substrate for waterproofing shall be clean, dry, free of loose, spalled or weak material including coatings, mineral aggregate, and flood coat/gravel surfacing, oil, grease, contaminants, abrupt changes in level, waterproofing agents, curing compounds, and free of projections which could damage membrane materials.
 - 6. Install wood nailers at perimeters of Colonnades.

- B. Existing Roofing and Waterproofing Materials:
 - 1. Existing roofing systems and flashings shall be removed down to the structural substrate/penetration at all areas.
- C. Structural Concrete:
 - 1. New or existing concrete shall be free of oil, grease, curing compounds, loose particles, moss, algae growth, laitance, friable matter, dirt, bituminous products and previous waterproofing materials.
 - 2. New or existing concrete shall be dry with a maximum moisture content of five (5) percent. Determinations of moisture content shall be performed by the Contractor. Contractor shall be responsible to perform periodic evaluations of moisture content during the work. Moisture evaluation results shall be submitted in writing to the Owner or his designated Representative and Waterproofing manufacturer for acceptance.
 - 3. Where required, concrete shall be abrasively cleaned in accordance with ASTM D4259 to provide a sound substrate free from laitance. Achieve an open concrete surface in accordance with ICRI surface profiles CSP 3-5. When using mechanical methods to remove existing waterproofing products or surface deterioration, the surface profile is not to exceed ¹/₄ inch (peak to valley).
 - 4. The substrate shall be sound and all spalls, voids and blow holes on vertical or horizontal surfaces must be repaired prior to placement of the primer coat. Spalls and other deterioration shall be repaired in accordance with the requirements of the Owner or his designated Representative and Membrane manufacturer.
 - 5. Areas of minor surface deterioration of 0.25" (6 mm) or greater in depth shall be repaired to prevent possible pooling of the liquid applied materials, leading to excessive usage of primer and resin.
 - 6. Hollow-core panels, T-panels, and Twin-T panels shall have grouted joints between panels and shall be provided with mechanical securement from panel to panel.
 - 7. For concrete materials with a compressive strength of less than 3,000 psi contact Waterproofing Manufacturer's Technical Department for substrate preparation requirements.
- D. Other Flashing Surfaces:
 - 1. Remove all contaminants as required by membrane manufacturer. Surface preparation shall be performed by means approved by Owner or his designated Representative.
- E. Finish Leveling, Patching and Crack Preparation:
 - 1. General: Epoxy primer/sand mix is the preferred material for all concrete and masonry substrate finish leveling, crack and wall/deck preparation and patching. Epoxy primer/sand patching mix provides a set time of approximately twelve (12) hours and does not require surface grinding. Kemperol primer/sand mix is typically applied in conjunction with general surface priming.
 - 2. Concrete and Masonry Substrate Leveling & Patching: Substrate conditions are to be evaluated by the Contractor, the Owner, or his designated Representative, and Membrane manufacturer. Perform leveling and patching operations as follows:
 - a. Level uneven surfaces with a leveling mixture of primer and approved kiln-dried silica sand in a 1:2 primer to sand ratio by volume. Spread and plane this compound with a squeegee and trowel to achieve a flat surface.
 - b. Fill cavities with a patching mixture of primer and approved kiln-dried sand in a 1:4 primer to sand ratio by volume.
 - c. Silica sand must be kept absolutely dry during storage and handling.
 - d. Any surface to be leveled or filled must first be primed with an appropriate primer.

- 3. Joint and Crack Preparation: Joints, cracks and fractures in the structural deck/substrate shall be prepared as defined below prior to installation of the waterproofing membrane. Note: Joints, cracks, and fractures may telegraph through the waterproofing membrane.
 - a. Non-Moving Cracks, Joints, and Voids: Determine that crack/joint is non-moving. Clean out crack/joint by brushing and oil-free compressed air. Fill crack/joint with polyurethane sealant. Voids require the installation of backer rod or other backing material prior to application of the polyurethane sealant. Allow for a minimum of twelve (12) hours cure or as required by sealant Manufacturer.
 - b. Moving Cracks: Determine that crack is moving. Clean out crack by brushing and oil-free compressed air. Fill crack with polyurethane sealant. Allow for a minimum of twelve (12) hours cure or as required by sealant Manufacturer. Following full curing of primer, apply waterproofing resin and 4 inch (10 cm) wide strip of membrane (resin and fleece) in strict accordance with Membrane manufacturer's written instructions.

3.3 PRIMER APPLICATION

- A. General:
 - 1. Mix and apply two-component primer in strict accordance with written instructions of Membrane Manufacturer. Use only proprietary materials, as supplied by the membrane manufacturer.
 - 2. The substrate surface must be dry, with any remaining dust or loose particles removed using clean, dry, oil-free compressed air, industrial vacuum, cloth wipe or a combination of methods.
 - 3. Do not install primer on any substrate containing newly applied and/or active asphalt, coal-tar pitch, creosote or penta-based materials unless approved in writing by Membrane Manufacturer. Some substrates may require additional preparation before applying primer.
- B. Mixing of Kempertec EP and Kempertec D Primers:
 - 1. Premix primer Component A thoroughly with a spiral agitator or stir stick. Pour primer Component B into Component A and mix the components for approximately 2 minutes with a clean spiral agitator on slow speed or stir stick without creating any bubbles or streaks. DO NOT AERATE. The Primer solution should be a uniform color, with no light or dark streaks present.
 - 2. Do not thin primer. Determine required primer coverage for each substrate material/condition and apply in strict accordance with written instructions of Membrane Manufacturer.
 - 3. Mix only that amount of primer components A & B that can be used in 30 minutes.
- C. Application of Primer:
 - 1. Roll or brush the primer evenly onto the surface to fully saturate the substrate in one application. Do not allow primer to pond or collect in low areas. Follow manufacturer's recommended application rates to ensure that a thin layer of cured primer remains on the substrate surface.
 - 2. Apply primer only up to the edge of the membrane flashing terminations. Primer application past the membrane terminations requires surfacing with an approved material.
 - 3. For EP primer applications over cementitious substrates where protection from substrate wetness is required, apply primer coat at a heavier application rate until pore saturation is achieved.
 - 4. For all EP primer applications, apply kiln-dried sand into the final coat of EP primer while still wet at the rate of 50 lbs. per 100 square feet.
 - 5. Allow standard primers to cure for a minimum of twelve (12) hours before membrane application. Membrane must be applied to primer only when completely dry and without tack.
 - 6. Exposure of the primer in excess of eight (8) days or premature exposure to moisture may require removal and application of new primer. DO NOT apply new primer over exposed primer older than eight (8) days, primer prematurely exposed to moisture, or primer used as temporary waterproofing, unless approved in writing by the Membrane Manufacturer.

- D. Disposal of Primer:
 - 1. Cured primer may be disposed of in standard landfills. This is accomplished by thoroughly mixing all components.
 - 2. Uncured primer is considered a hazardous material and must be handled as such, in accordance with local, state and federal regulation. Do not through uncured resin away.

3.4 MEMBRANE APPLICATION

A. General:

- 1. It is recommended to apply the waterproofing membrane immediately following full curing of the primer in order to obtain the best bond between primer and membrane.
- 2. Mix and apply cold fluid-applied reinforced polyurethane waterproofing membrane in strict accordance with written instructions of Membrane Manufacturer. Use only proprietary membrane resins and materials, as supplied by the membrane manufacturer.
- 3. The primed substrate surface shall be dry, with any remaining dust or loose particles removed using clean, dry, oil-free compressed air, industrial vacuum, cloth-wipe or a combination.
- 4. Protect all areas where membrane has been installed. Do not work off installed membrane during application of remaining work before forty-eight (48) hours of curing. Movement of materials and equipment across installed membrane is not acceptable. If movement is necessary, provide complete protection of affected areas.
- 5. Closely follow the Membrane Manufacturer's recommendation for hot and cold weather application. Monitor surface and ambient temperatures, including the effects of wind chill.
- B. Mixing of Kemperol 2K-PUR Resin:
 - 1. Mix resin Component A (cream formulation) with a spiral agitator until the liquid is a uniform cream color. If the ambient temperature is below 50°F (10°C), then a weather related additive should be combined and mixed into the Component A.
 - a. Accelerator should be added to resin Component A when the ambient temperature is 50°F (10°C) and below. The accelerator should be mixed with the spiral agitator for 2 minutes or until both liquids are thoroughly blended.
 - 2. Pour resin Component B into Component A at a 4:1 ratio (by weight) and thoroughly mix the components with a clean spiral agitator. The Resin solution should be a uniform color, with no light or dark streaks present.
 - 3. Mix only that amount of resin components A & B that can be used in 30 minutes.
- C. Application of Resin/Fleece:
 - 1. Apply mixed resin to the prepared surface at the manufacturer's recommended application rate. The resin should be rolled or brushed liberally and evenly onto the surface using a broad, even stroke. Cover one working area at a time, between 15 20 ft.² (1.4 1.9 m²).
 - 2. Roll out dry polyester fleece onto the liquid resin mix, making sure the SMOOTH SIDE IS FACING UP (natural unrolling procedure), avoiding any folds and wrinkles. The fleece will begin to rapidly saturate with the liquid resin mix. Use a medium nap roller or brush to work the resin into the fleece, saturating from the bottom up, and eliminating air bubbles, wrinkles, etc. The appearance of the saturated fleece should be light opaque amber with no white spots. White spots are indications of unsaturated fleece or lack of adhesion. It is important to correct these faults before the resin cures.

- 3. Apply additional liquid resin mix on top of fleece at the manufacturer's recommended application rate to finish the saturation of the fleece. Roll this final coating into the fleece, which will result in a glossy appearance. The fleece can only hold so much resin and all excess should be rolled forward to the unsaturated fleece, eliminating ponding or excessive build-up of the resin. The correct amount of resin will leave no whiteness in fleece and there will be a slightly fibrous surface texture. The final resin coating should be smooth and uniform.
- 4. Approximately 2/3 of the total resin should be applied to the substrate below the fleece reinforcement, and 1/3 of the total resin should be applied over the fleece reinforcement.
- 5. Prevent contact between mixed/unmixed resin and new/existing membrane. If any unmixed resin contacts membrane surface remove immediately and clean thoroughly with a cloth rag.
- 6. At all fleece seams, allow a 2" (5 cm) overlap for all side joints and a 4" (10 cm) overlap for all end joints.
- 7. At membrane tie-offs, clean in-place membrane with MEK (methyl ethyl ketone) solvent or acetone once resin has cured. Allow solvents to fully evaporate before application of new resin.

D. Disposal of Resin:

- 1. Cured resin may be disposed of in standard landfills. This is accomplished by thoroughly mixing all components.
- 2. Uncured resin is considered a hazardous material and must be handled as such, in accordance with local, state and federal regulation. Do not throw uncured resin away.

3.5 FLASHING APPLICATION

- A. General:
 - 1. Install flashing system in accordance with the requirements/recommendations of the Membrane manufacturer and as depicted on standard drawings and details. Provide system with base flashing, edge flashing, penetration flashing, and all other flashings required for a complete watertight system.
 - 2. Wherever possible, install the flashings before installing the field membrane to minimize foot traffic over newly installed field membrane.
 - 3. All membrane flashings shall be installed concurrently with the waterproofing membrane as the job progresses. Temporary flashings are not allowed without prior written approval from the Membrane manufacturer. Should any water penetrate the new waterproofing membrane because of incomplete flashings, the affected area shall be removed and replaced at the Contractor's expense.
 - 4. Provide a minimum vertical height of 8 inches for all flashing terminations. Flashing height shall be at least as high as the potential water level that could be reached as a result of a deluging rain and/or poor slope.
 - 5. All flashings shall be terminated as required by the Membrane Manufacturer.
- B. Metal Flashing General:
 - 1. Metal flashings shall be fabricated in accordance with the current recommendations of SMACNA and in accordance with Contract Documents; the more stringent shall apply.
 - 2. Metal flashing flanges to which membrane is to be bonded shall be a minimum of four (4) inches in width, and secured to the wood nailers three (3) inches on center staggered with fasteners appropriate to the substrate type. The flanges shall be provided with a roughened surface that has been cleaned of all oil and other residue.
 - 3. Metal edges that will be overlaid with membrane shall be provided with a 1/4" min. hemmed edge.
- 4. Apply primer, resin and fleece to metal flange, extending membrane to outside face of metal edging, and to vertical face of metal base/curb flashing.
- C. Membrane Flashing General:
 - 1. Membrane flashings shall be fabricated with primer appropriate for the substrate surface, resin of the same base chemical type as the field membrane, and fleece of the same weight as the field membrane unless specified otherwise.
 - 2. Primer, resin, and fleece mixing and application methods as specified for field membranes are also suitable for membrane flashing.
 - 3. Fleece shall overlap 2" (5 cm) minimum for all joints. Fleece shall be cut neatly to fit all flashing conditions without a buildup of multiple fleece layers. Work wet membrane with a brush or roller to eliminate blisters, openings, or lifting at corners, junctions, and transitions.
- D. Pipes, Conduits, and Unusually Shaped Penetrations:
 - 1. Flashing shall be constructed as a two part assembly consisting of a vertical wrap and a horizontal target patch. There must be a minimum of a two (2) inch (5 cm) overlap between vertical and horizontal flashing components.
 - 2. A generous cove of sealant is to be applied at junction between the substrate and penetration.
- E. Drains:
 - 1. Acceptable drain materials are cast iron, cast aluminum, and copper.
 - 2. Alternatively, replace all broken or damaged parts of existing drains.
 - 3. Flashing material shall extend four (4) inches minimum onto drain flange and into drain body.
 - 4. Install clamping ring if provided as part of the drain design. Install a strainer basket to prevent debris from clogging the drainage line.
 - 5. All serviceable drain parts are to be salvaged and presented to the Owner for future use.
- F. Walls, Curbs and Base Flashings:
 - 1. Wall, curb and base flashings shall be installed to solid substrate surfaces only. Adhering to gypsum-based panels, cementitious stucco, synthetic stucco, wood or metal siding, and other similar materials is not acceptable.
 - 2. Reinforce all transition locations and other potential wear areas with a four (4) inch wide membrane strip, using membrane flashing, evenly positioned over the transition prior to installing the exposed flashing layer.
 - 3. Reinforce all inside and outside corners with a four (4) inch diameter conical piece of membrane prior to installing the exposed flashing layer.
 - 4. All pins, dowels and other fixation elements shall be flashed separately with a vertical flashing component prior to installing the exposed flashing layer.
 - 5. Extend flashing a minimum of four (4) inches onto the field substrate surface.
- G. Drip Edges and Gravel Stops:
 - 1. Metal drip edges shall be installed to wood nailers only. Securement to gypsum-based panels, cementitious stucco, synthetic stucco, wood or metal siding or coping, and other similar materials is not acceptable.
 - Flash all drip edges by extending the field membrane all the way to the edge and down the exposed face prior to installing the metal edging. Strip in the metal flange with a separate eight (8) inch wide strip of membrane adhered to both the securement flange and to the field membrane.

- 3. For conditions where water infiltration behind the exposed drip edge or gravel stop face is possible, install a separate membrane layer positioned behind the face area and extending a minimum of four (4) inches past the securement flange onto the field substrate prior to installing the drip edge or gravel stop.
- H. Field Fabricated Control or Expansion Joint Flashing:
 - 1. Control or expansion joints in excess of two (2) inches in width require the use of a separate engineered joint system.
 - 2. Grind or otherwise bevel the inside edges of the joint opening to provide a smooth transition edge for the fleece.
 - 3. Flashing shall consist of a fully saturated membrane bottom layer looped into the joint as a cradle, a compressible foam backer rod insert at 25% compression fitted into the joint, and a membrane top layer applied over the joint. Extend both fleece layers four (4) inches minimum onto the field substrate on both sides of the joint.
 - 4. Apply the field membrane over the entire joint area.
- I. Electrical Conduit, Gas Lines and Lightning Protection
 - 1. Supports for electrical conduit and gas lines one (1) inch or less in diameter, and bases for lightning protection rods and cable, shall be set over specified support block assemblies.

3.6 MEMBRANE PREPARATION FOR SURFACINGS AND COATINGS

- A. Membrane must be clean and dry, and free of all contaminants that may interfere with the adhesion of the surfacing and coating to the membrane surface.
- B. Membrane exposed less than 48 hours prior to application of surfacing and coating materials does not require special surface preparation. It is highly recommended that all surfacing and coating materials be applied to the membrane surface within 48 hours.
- C. Membrane exposed longer than 48 hours will require sanding/scuffing of the surface to remove the hard gloss finish, followed by an MEK or acetone solvent wipe.

3.7 SURFACING AND FINISHES

- A. Aggregate Finish Surfacing
 - 1. Provide approved kiln-dried silica sand, or other approved mineral surfacing to achieve an aesthetic and/or non-skid surface.
 - 2. Pre-mix single-component and two-component coatings prior to application to achieve an even consistency.
 - 3. Broadcast specified and approved sand or aggregate in excess into a bonding coat application of Kemperol 2K-Pur Resin applied over clean, cured membrane at the manufacturer's recommended application rate. Aggregate shall be applied to excess to obtain uniform and full coverage.
 - 4. Following minimum 24 hour cure time remove loose/un-embedded mineral aggregate by blowing with oil-free compressed air or with a vacuum. Re-broadcast clean mineral aggregate as required to provide full embedment and coverage of membrane.
 - 5. Seal aggregate surface with a sealing coat application of Kemperdur BSF-R Finish, applied at the manufacturer's recommended application rate. After completion of surfacing, avoid any traffic for a minimum of three (3) days to allow for surfacing to cure.

3.8 TRAFFIC COATING AND DECK FINISH INSTALLATION

- A. Install in accordance with manufacturer's written instructions.
- B. Empty bucket of coating onto surface and spread with a 1/4-inch by 1/4-inch square, notched trowel to 100 mils per coat minimum and as necessary to hide lap lines.
- C. Allow the traffic coating to self-level and being to cure. Initial curing time is 10-20 minutes depending on temperature.
- D. After material begins to retain a peak after being touched by a finger, immediately broadcast aggregate until refusal. After initial aggregate sinks into surfacing, broadcast more aggregate until no wet spots remain. Typical aggregate application rate is 1 lb/square foot.
- E. Apply two layers of deck finish with a perlon roller or a brush at manufacturer's recommended application rate.

3.9 TEMPORARY CLOSURES & WATERSTOPS

A. Contractor shall be responsible to ensure that moisture does not damage any completed section of the new waterproofing system. Completion of flashings, terminations, and temporary closures shall be completed as required to provide a watertight condition. All temporary closures shall be made as recommended or required by the membrane manufacturer.

3.10 PROTECTION

A. Upon completion of waterproofing and flashings, institute appropriate procedures for surveillance and protection of roofing during remainder of construction period. Protect all areas where membrane has been installed.

3.11 FLOOD TEST

A. A flood test of the completed membrane and flashing system shall be conducted prior to the installation of any overburden/surfacing. The flood test shall be of a 48 hr. minimum duration, and shall apply a water head of 2 inches over the entire application area. Any incidents of water entry shall be evaluated and all necessary repairs conducted, followed by an additional flood test.

3.12 CLOSEOUT

- A. Correction of Work:
 - 1. Work that does not conform to specified requirements including tolerances, slopes, and finishes shall be corrected and/or replaced at Contractor's sole expense. Any deficiencies of membrane application, termination and/or protection as noted during the Membrane Manufacturer's inspections shall be corrected and/or replaced at Contractor's sole expense.

B. Clean-Up:

1. Site clean-up, including both interior and exterior building areas that have been affected by construction, shall be restored to preconstruction condition.

END OF SECTION

SECTION 07 62 00

SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Miscellaneous Flashing
- 2. High temperature self-adhering flashing.
- 3. Joint sealants associated with sheet metal flashing.
- 4. Painting
- 5. Other sheet metal as indicated.

1.2 RELATED REQUIREMENTS

A. Section 07 56 00 "Fluid-Applied Roofing and Waterproofing;" for preinstallation meeting requirement.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation layouts of sheet metal flashing and trim, including plans, elevations, expansion-joint locations, and keyed details. Distinguish between shop- and field-assembled work.
 - 1. Identification of material, thickness, weight, and finish for each item and location in Project.
 - 2. Details for forming sheet metal flashing and trim, including profiles, shapes, seams, and dimensions.
 - 3. Details for joining, supporting, and securing sheet metal flashing and trim, including layout of fasteners, cleats, clips, and other attachments. Include pattern of seams.
 - 4. Details of termination points and assemblies, including fixed points.
 - 5. Details of expansion joints and expansion-joint covers, including showing direction of expansion and contraction.
 - 6. Details of perimeter conditions.
 - 7. Details of specialized conditions including saddles, transitions and terminations in sheet metal flashing.
 - 8. Details of connections to adjoining work.
 - 9. Detail formed flashing and trim at a scale of not less than 3 inches per 12 inches.
- C. Samples: for Initial Selection: For each type of sheet metal flashing and accessory indicated with factory-applied color finishes involving color selection.
 - 1. 6" square samples of specified sheet metal materials to be exposed as finished surfaces.
 - 2. 12" long samples of factory-fabricated products exposed as finished Work. Provide complete with specified factory finish.
 - 3. One 11 oz. tube of each specified sealant.
 - 4. Two samples each of proposed fasteners and accessories to be used.

- D. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below:
 - 1. Sheet Metal Flashing: 12 inches long by actual width of unit, including finished seam and in required profile. Include fasteners, cleats, clips, closures, and other attachments.
 - 2. Expansion Joints, Joint Intersections, and Miscellaneous Fabrications: 12 inches long and in required profile. Include fasteners and other exposed accessories.
 - 3. Accessories and Miscellaneous Materials: Full-size Sample.
- E. Qualification Statements: For qualified fabricator.
- F. Warranty: Sample of special warranty.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance data.

1.5 QUALITY ASSURANCE

- A. Fabricator Qualifications: Shop that employs skilled workers who custom fabricate sheet metal flashing similar to that required for this Project and whose products have a record of successful in-service performance.
- B. Installer Qualifications: Engage an experience Installer who has completed sheet metal flashing and trim work similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
- C. Sheet Metal Flashing and Trim Standard: Comply with SMACNA's "Architectural Sheet Metal Manual" unless more stringent requirements are specified or shown on Drawings.
- D. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
 - 1. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Engineer specifically approves such deviations in writing.
 - 2. Build mockup of each fabrication, including, but not limited to, saddles, coping, reglet and counterflashing, approximately 10 feet long, including inside corners, outside corners, supporting construction cleats, seams, attachments, underlayment, and accessories.
 - 3. Locate mockups on-site in the location and of the size indicated or, if not indicated, as directed by Engineer.
 - 4. Notify the Owner and the Engineer one week in advance of the dates and times when mockups will be constructed.
 - 5. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 6. Obtain Engineer's approval of mockups before start of final unit of Work.
 - 7. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- E. Coordinate Work of this Section with interfacing and adjoining Work for proper sequencing of each installation.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Do not store sheet metal flashing materials in contact with other materials that might cause staining, denting, or other surface damage. Store sheet metal flashing materials away from uncured concrete and masonry.
- B. Protect strippable protective covering on sheet metal flashing from exposure to sunlight and high humidity, except to the extent necessary for the period of sheet metal flashing installation.

1.7 WARRANTY

- A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace sheet metal flashing and trim that does not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE CRITERIA

- A. General: Sheet metal flashing assemblies as indicated shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction.
 - 1. Completed sheet metal flashing shall not rattle, leak, or loosen, and shall remain watertight.
- B. Install systems to allow movement of components without causing buckling, failure of joint seals, undue stress on fasteners or other detrimental effects, when subjected to 100-year seasonal temperature ranges.
- C. Thermal Movements: Provide sheet metal flashing that allows for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change (Range): 120 degrees F, ambient; 180 degrees F, material surfaces.
- D. Install specialized, custom fabricated, sheet metal saddles for waterproof performance at terminations and transitions of sheet metal flashing and trim such as multi-plane intersects, and:
 - 1. Where indicated.
 - 2. Where constructed conditions will not provide watertight performance without saddles.
- E. Install specialized, custom fabricated, sheet metal saddles for waterproof performance at terminations and transitions of construction components such as multi-plane intersects, and:
 - 1. Where indicated.
 - 2. Where constructed conditions will not provide watertight performance without saddles.
- F. Contractor shall inspect transitions and terminations to make Project watertight. Contract Documents indicate design intent and may not indicate all instances where saddles apply. Field verify locations where saddles are required.

2.2 SHEET METALS

- A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying a strippable, temporary protective film before shipping.
- B. Metallic-Coated Steel Sheet: Restricted flatness steel sheet, metallic coated by the hot-dip process.
 - 1. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 coating designation; structural quality.
 - 2. Finish: Smooth, flat and bonderized for painting.
 - 3. Locations: For use with all sheet metal, unless otherwise indicated.
 - 4. Prime all surfaces of bonderized metal.
 - 5. Paint: Provide pretreatment, primer and two coats 100 percent acrylic paint by Kelly Moore or approved equal.
 - a. Pretreatment: Jasco Prep-n-Prime
 - b. Primer: #5725 DTM Acrylic Primer Finish
 - c. 100% Acrylic, Low Sheen: #1245 Acry-Plex Low Sheen, 2.0 mils
 - d. 100% Acrylic, Low Sheen: #1245 Acry-Plex Low Sheen, 2.0 mils
 - e. Color: As selected by Owner from manufacturer's full range of colors including custom colors.
- C. Lead sheet for use in flashing shall be minimum 4 lb. soft lead.

2.3 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.
- B. Solder:
 - 1. For Zinc-Coated (Galvanized) Steel: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead or Grade Sn60, 60 percent tin and 40 percent lead.
 - 2. For Stainless Steel: ASTM B 32, Grade Sn60, with an acid flux of type recommended by stainless-steel sheet manufacturer.
- C. Concealed Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch wide and 1/8 inch thick.
 - 1. Subject to compliance with requirements, provide ADCO GT-106; ADCO or approved equal.
 - 2. Provide pre-shimmed butyl sealant tape between sheet metal laps, at concealed locations, and where indicated.
- D. Exposed Sealants: Elastomeric Sealant ASTM C 920, elastomeric polymer sealant; low modulus; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
 - 1. Refer to Section 07 92 00 Joint Sealants.
- E. Concealed Sealant: ASTM C 1311, single-component, non-curing, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.
 - 1. Subject to compliance with requirements, provide ADCO BP-300; ADCO or approved equal.
 - 2. Provide butyl sealant between sheet metal laps, at concealed locations, and where indicated.

- F. Bituminous Coating: Cold-applied asphalt emulsion complying with ASTM D 1187.
- G. Sealing Washers: Stainless steel backed EPDM washers.

2.4 FASTENERS

- A. Annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item. Nails to be secured into wood shall be annular threaded.
- B. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
 - 1. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating.
 - 2. Blind Fasteners: High-strength stainless-steel rivets suitable for metal being fastened.
- C. Fasteners for Zinc-Coated (Galvanized) Steel Sheet: Hot-dip galvanized steel according to ASTM A 153/A 153M or ASTM F 2329 or Type 304 stainless steel.
 - 1. Provide Type 304 stainless steel fasteners where fastening through pressure treated wood.
- D. Fasteners for Zinc-Coated (Galvanized) Steel Sheet Metal to Zinc-Coated (Galvanized) Steel Sheet Metal Components: No.10, hot-dip galvanized sheet metal screws equipped with sealing washers.
- E. Fastener Length: Fasteners shall be sized to penetrate substrate not less than 1-1/4 inches or not less than 3/4 inch through wood substrates.

2.5 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, geometry, metal thickness, and other characteristics of item indicated. Fabricate items at the shop to greatest extent possible.
 - 1. Sheet metal components requiring fabrication must have shop drawings submitted and approved prior to fabrication and delivery to the project site. Materials delivered to the project site without the required Engineer's approval shall be immediately removed from the site and not incorporated into the completed Work.
 - 2. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
 - 3. Obtain field measurements for accurate fit before shop fabrication.
 - 4. Form sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.
 - 5. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces exposed to view.
 - 6. Field verify dimensions prior to fabrication.
 - 7. Solder sheet metal prior to application of finish.
 - 8. Flashings shall have minimum 4 inch vertical back leg and 2 inch overlap at exposed side.
- B. Materials delivered to the project site without the required Engineer's approval shall be immediately removed from the site and shall not be incorporated into the completed Work.

- C. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to specified tolerance.
- D. Sealed Joints: Form nonexpansion but movable joints in metal to accommodate elastomeric sealant.
- E. Expansion Provisions: Where lapped expansion provisions cannot be used, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with butyl sealant concealed within joints.
- F. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
- G. Seams: Solder all seams watertight with the exception seams of prefinished metals including those coilcoated, seams requiring movement and seams otherwise indicated in the Contract Documents.
 - 1. Fabricate nonmoving seams with flat-lock seams. Pop rivet pieces together at 1 inch on center prior to soldering. Tin edges to be seamed, form seams, and solder. Sweat solder the lap. Solder rivet holes watertight.
- H. Coil-Coated Seams: Fabricate nonmoving seams with flat-lock seams. Lap seams 4 inches and seal in a full bed of butyl sealant. Apply butyl sealant so it does not ooze out of seam. Rivet joints at 1 inch on center. Apply polyurethane sealant over rivets.
- I. Form pieces to a minimum length of 8 feet with the exception of pieces with a total length of less than 8 feet.
- J. Form pieces to maximum length of 10 feet.
- K. Corners: Sheet metal corner flashing shall be fully soldered to form one watertight piece.
- L. Hem exposed edges on underside 1/2 inch.
- M. Fabricate head flashing, sill flashing and similar with end closures and end dams soldered/welded watertight.
- N. Provide drip edges where indicated on the Contract Drawings.
- O. Provide 4 inch minimum wide horizontal flanges, where dimension is not indicated on Contract Drawings.

2.6 MISCELLANEOUS SHEET METAL FABRICATIONS

- A. Saddles, Transitions, and Terminations in Sheet Metal Flashing and Trim: Fabricate from the following materials:
- B. Provide specialized, custom fabricated, sheet metal saddles for waterproof performance at terminations and transitions of sheet metal flashing and trim and construction components such as multi-plane intersects, and:
 - 1. Where indicated.
 - 2. Where constructed conditions will not provide watertight performance without saddles.
 - 3. Contractor shall inspect transitions and terminations to make Project watertight. Contract Documents indicate design intent and may not indicate all instances where saddles apply. Field verify locations where saddles are required.

C. Fabricate saddles with diverters, minimum 1/2 inch high by 1 inch deep at multi-plane intersects and where indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions and other conditions affecting performance of the Work.
 - 1. Verify compliance with requirements for installation tolerances of substrates.
 - 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement so that completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight. Use fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
 - 1. Install sheet metal flashing and trim true to line and levels indicated. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
 - 2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
 - 3. Space cleats not more than 12 inches apart. Anchor each cleat with two fasteners. Bend tabs over fasteners.
 - 4. Install exposed sheet metal flashing and trim without excessive oil canning, buckling, and tool marks.
 - 5. Install sealant tape where indicated.
 - 6. Torch cutting of sheet metal flashing and trim is not permitted.
- B. Install all metal flashing and sheet metal in accordance with the recommendations of:
 - 1. SMACNA Architectural Sheet Metal Manual.
 - 2. NRCA Roofing and Waterproofing Manual.
- C. The requirements of this Section supersede the above noted references except where the requirements of the reference specification are more stringent.
- D. Saddles: Secure with fasteners and sealing washers and continuous cleat.
- E. Do not fabricate or install any sheet metal item without the Engineer's written approval.
- F. Lap joints in direction of water flow.
- G. Exercise care when cutting materials on site, to ensure cuttings do not remain on finished surfaces. Carefully clean and dispose of cuttings so not to damage adjacent materials. Repair or replace damaged materials at no additional cost to the Owner.

- H. Use concealed fasteners except where specifically approved by the Engineer. Provide expansion joints concealed within system.
- I. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by SMACNA.
 - 1. Where installing metal flashing directly on cementitious or wood substrates, install a course of high temperature self-adhering flashing.
- J. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently watertight, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with sealant concealed within joints.
- K. Solder or seal all seams and end joints as shown in the Drawings or required by field conditions. Measure all dimensions in the field necessary to properly fabricate the flashings. Fit flashings tight in place, however, allow for 3/4 inch minimum clearance to install components. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- L. Seal joints as shown and as required for watertight construction.
 - 1. Where sealant-filled joints are used, embed hooked flanges of joint members not less than 1 inch into sealant.
 - 2. Form joints to completely conceal sealant.
 - 3. When ambient temperature at time of installation is moderate, between 40 and 70 degrees F, set joint members for 50 percent movement each way.
 - 4. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 degrees F.
 - 5. Lap sheet metal flashing and trim 4 inches in a full bed of sealant. Sealant shall be fully concealed. Remove visible sealant.
 - 6. Rivet sealed laps at 1 inch on center.
 - 7. Apply sealant over rivets.
 - 8. Prepare joints and apply sealants to comply with requirements in Division 07 Section "Joint Sealants."
 - 9. Install compatible sealants where required to prevent direct weather penetration.
- M. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets to be soldered to a width of 1-1/2 inches, except reduce pre-tinning where pre-tinned surface would show in completed Work.
 - 1. Do not solder coil-coated or membrane-clad sheet metal.
 - 2. Neatly solder all sheet metal to be soldered.
 - 3. Do not use torches for soldering. Heat surfaces to receive solder and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.
 - 4. Stainless-Steel Soldering: Tin edges of uncoated sheets using solder recommended for stainless steel and acid flux. Promptly remove acid flux residue from metal after tinning and soldering. Comply with solder manufacturer's recommended methods for cleaning and neutralization.
 - 5. All flat lock seams and lap seams, where soldered, shall be at least 1/2 inch. Pop rivet pieces together 1 inch on center prior to soldering. Sweat solder under the lap. Do not bead solder. Solder rivet holes to be water tight.
 - 6. Thoroughly wash all flux off work after soldering. Failure to do this may result in back charges as a result of damages to finishes.

- N. Rivets: Rivet joints where indicated and where necessary for strength at 1 inch on center, unless otherwise indicated. Apply sealant over rivets.
- O. Paint metal where indicated in strict accordance with manufacturer's written instructions, including minimum dry mil thicknesses.

3.3 LOW-SLOPE ROOF FLASHING INSTALLATION

- A. General: Install sheet metal flashing and trim to comply with performance requirements, sheet metal manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, set units true to line, and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
- B. Edge Metal: Secure edge metal to substrate at 3 inches on center staggered unless otherwise noted.

3.4 MISCELLANEOUS FLASHING INSTALLATION

- A. Saddles, Transitions, and Terminations: Coordinate installation of saddles, transitions, and terminations with installation of siding, self-adhering sheet waterproofing, weather resistive barrier, and other components of the construction.
 - 1. Miscellaneous flashing not installed in accordance with the Contract Documents will require the removal and reinstallation of construction to properly install the required flashing at no additional cost to the Owner.

3.5 ERECTION TOLERANCES

A. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

3.6 PAINTING

- A. Prepare substrate in strict accordance with manufacturer's written instructions. If there is conflict between the manufacturer's instructions and the Contract Documents, the more stringent shall apply.
- B. Galvanized Steel: Clean galvanized surfaces with non-petroleum-based solvents so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods. Clean previously painted surfaces according to manufacturer's written instructions.
- C. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied. If there are discrepancies between the manufacturer's instructions and the Contract Documents, the more stringent shall govern.
 - 1. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 - 2. Provide finish coats that are compatible with primers used.

- 3. Paint surfaces behind movable equipment the same as similar exposed surfaces.
- 4. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces.
- D. Wind Conditions:
 - 1. Apply paint materials using a spray gun only when no wind conditions exist above 10 miles per hour.
 - 2. When wind conditions exceed 10 miles per hour, apply paint materials using rollers and brushes.
 - 3. Carefully monitor and avoid paint overspray in any kind of wind condition.
- E. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
- F. The number of coats and the film thickness required are the same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
- G. Apply at rates recommended on manufacturer's label. Do not exceed application rate recommended for the surface involved. Use materials without adulteration and only with thinning agents recommended by the manufacturer in the printed instructions.
- H. Apply materials with suitable brushes, rollers, or spraying equipment. Keep brushes, rollers and spraying equipment, clean, free from contaminants and suitable for the finish required.
- I. Vary slightly the color of successive coats under the finish coat.
- J. Allow sufficient time between successive coats to permit proper drying. Do not re-coat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.
 - 1. Comply with the recommendation of the manufacturer for drying time between succeeding coats.
- K. Sand and dust between each coat to remove defects visible from a distance of 5 feet.
- L. Apply paints smooth, free of brush marks, streaks, laps, pile-up of paint, runs, sags, holidays, air bubbles, and excessive roller stipple. Apply additional finish coats to entire surface if undercoats show through and to correct any defect.
- M. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
- N. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- O. Make edges of paint adjoining other materials or colors clean and sharp with no overlapping.
- P. Maintain a wet edge to avoid lap marks.

- Q. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
 - 1. Brushes: Use brushes best suited for the type of material applied. Use brush of appropriate size for the surface or item being painted. Back-brush bottom edge of siding to ensure full coverage of all areas.
 - 2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
 - 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
- R. Minimum Coating Thickness: Apply paint materials no thinner than manufacturers recommended spreading rate. (Prime and two finish coats.)
- S. Completed Work: Match approved mockups for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements

3.7 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder.
- C. Clean off excess sealants.
- D. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of installation, remove unused materials and clean finished surfaces. Maintain in a clean condition during construction.
- E. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION

SECTION 22 14 13

FACILITY STORM DRAINAGE PIPING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Replace existing roof and overflow drains and associated strainers/clamping rings/accessories, and tie into existing piping.
- B. Clean all plumbing drains and overflows from roof to storm sewer.

1.2 **REFERENCES**

- A. American National Standards Institute (ANSI) Publications
 1. A112.21.2M-83 Roof Drains
- B. American Society for Testing and Materials (ASTM) Publications
 - 1. ASTM C 564-70 Rubber Gaskets for Cast Iron Soil Pipe and Fittings.
 - 2. ASTM A 74-87 Cast-Iron Soil Pipe and Fittings
 - 3. ASTM C 552-86 Cellular Glass Thermal Insulation
- C. Cast-Iron Soil Pipe Institute (CISPI) Publications
 - 1. CISPI 301-85 Cast-Iron Soil Pipe and Fittings for Hubless Cast-Iron Sanitary Systems
 - 2. CISPI 310-85 Patented Joint for Use in Connection with Hubless Cast-Iron Sanitary Systems.
- D. International Code Council (ICC) Publication1. California Building Code, latest edition
- E. International Association of Plumbing and Mechanical Officials (IAPMO) Publication1. California Plumbing Code, latest edition

1.3 SUBMITTALS

- A. Manufacturer's Data and Product Samples:
 - 1. Strainers
 - 2. Drain Rings and Bolts
 - 3. Domes

1.4 QUALITY ASSURANCE

A. Drainage piping specialties shall bear label, stamp, or other markings of specified testing agency.

1.5 APPLICATOR QUALIFICATIONS

- A. Company specializing in plumbing installation.
- B. Minimum of five (5) years documented experience.
- C. Licensed to do business as a plumbing contractor in the state of California.

1.6 REGULATORY REQUIREMENTS

- A. Conform to all local, county, and state building requirements.
- B. The Contractor shall be responsible for obtaining all necessary permits for demolition of existing plumbing fixtures and installation of the Work.
- C. The Contractor shall be responsible for scheduling all tests and inspections with municipal building inspectors.

PART 2 - PRODUCTS

- 2.1 GENERAL
 - A. Only submitted and approved materials shall be utilized.
 - B. No products utilized within this project shall contain asbestos.

2.2 ROOF AND OVERFLOW DRAINS

- A. Clamping rings for use with roofing.
- B. Integral non-puncturing flashing clamp device.
- C. Removable cast-iron locking dome strainer.

PART 3 - EXECUTION

3.1 GENERAL

- A. Provide and install drain and overflow bowls, fittings and connections to obtain a fully functional roof drainage system.
- B. All work shall closely conform to the California Plumbing Code.
- C. The Contractor shall responsible for locating and avoiding all hidden construction while installing Work. The Contractor is solely responsible for making all investigations required to install the Work without damage to other building components. Any such damage shall be repaired at the Contractor's

expense and to the Owner's satisfaction. In the event that the Contractor's repairs are unacceptable to the Owner, the Owner will take corrective action and back-charge the Contractor for all restoration costs resulting from the failure to satisfactorily restore the building to original condition.

D. Closely coordinate all drain Work with that specified in Division 7.

3.2 EXAMINATION

- A. Prior to demolishing the existing roof system, the Contractor shall examine all roof drains to determine if the existing roof drains are serviceable.
- B. The Contractor shall provide the Owner with a written statement of the existing roof drain serviceability prior to demolition.
- C. The Contractor shall provide the Owner with a written letter stating the proposed modified roof drainage system can be installed without damage to the existing structure or appurtenances.
- D. The Contractor shall immediately report all unacceptable conditions to the Owner and not proceed until condition is resolved in writing.

3.3 FLASHING OF ROOF DRAIN

A. Closely coordinate drain Work with roofing installation.

3.4 CLEANING OF DRAINAGE SYSTEM

- A. After drain Work and roofing is complete, clean all drain and overflow piping of debris and clogs such that the system is free flowing.
- B. Utilize "Roto-Rooter" type equipment down from the roof to the storm sewer connections for each drain location.
- C. Clean each roof drain and overflow drain.
- D. Owner's Representative must be present during cleaning. Provide the Owner 48 hours notice prior to cleaning to arrange for observation of Work.

3.5 FIELD TESTING

- A. Before final acceptance of Work, test each system as in service to demonstrate satisfactory performance.
- B. Immediately correct repairs to unacceptable conditions and retest system to confirm repair performance.

3.6 SITE CLEAN UP

A. Clean-up shall be complete and to the satisfaction of the Owner.

- B. Restore all interior and exterior surfaces damaged or soiled by the Contractor's work to the Owner's satisfaction.
- C. Failure to restore surfacing in a satisfactorily manner will result in the Owner obtaining the service of a specialty contractor to effect satisfactory repairs. All costs incurred by the Owner for restoration Work shall be the sole responsibility of the Contractor.

END OF SECTION



4/14/15

Project Name

College of San Mateo Colonnades and District Office Waterproofing Project

Bid No. 86709

AUTHOR COMPANY	AUTHORED	<u>By:</u>	
Alliance Contracting Services	Omar Garrido		
29334 Pacific Street			
Hayward, CA			
SUBJECT	DISCIPLINE	CATEGORY	
Asbestos Survey for Colonnades 16-18	ARCHITECTURAL	ASBESTOS	
QUESTION			

- 1. a. Scope of work listed for abatement names colonnade roofs 14-16 as nonasbestos and also District Office 2nd and 3rd floor patio surfaces, along that line there is an asbestos survey for these areas
 - b. There is no survey for building 16-18 colonnades or for fountain colonnades east of buildings 2-4

Q. -----Can you please provide survey for these areas to allow assessment of percentage for profiling waste?

2. a. These areas have a "coating" not an asphaltic/felt membrane- so the removal of these coatings will need a more aggressive method that would render the material friable-

Q. ----- Can you provide methods required by consulting firm to allow for the removal of surface material in a manner that allows for speedy removal due to time restrictions of project?

Q.---- In the case that Contractors are to propose means and methods, then can the consulting firm address the clearance criteria for surface coatings, for visual clearance 3 dimensional surface is the protocol- in which case – Will the residual material be considered non-asbestos?

Paula and Pepper:

Here are my responses to the Alliance Contracting Services questions.

1. The specification provided laboratory sample results for Building 16-18 Colonnades and the fountain colonnades east of Buildings 2-4. Those lab results constitute the "survey results" Additionally, the Table 1 below and alsp on Page 6 of 41 in the my version of the Spec clearly indicates the percentage of asbestos present in the lab samples. The contractor can go with those numbers for waste profiling or do their own lab analysis prior to disposal.

TABLE I ASBESTOS-CONTAINING MATERIALS

Material	Location	Asbestos Content	
Buildings 2 - 4 Colonnades Roof Surfaces			
Roof surface materials including all layers - tan, black and light colors	Entire colonnad roof surface	de 3% chrysotile in black coating	
Buildings 16 18 Colonnades Roof Surfaces			
Roof surface materials, including all layers- gray, black & tan	Entire colonnad roof surface	de 20% chrysotile in tan bottom coat	
Free Standing Colonnades East of Buildings 2 - 4			
Roof surface materials, including all layers beige, black	Entire colonnad roof surface	de 5% chrysotile in beige layer	

For the two other questions regarding means and methods, that is the Contractor's responsibility in the specification to propose their methods to the District and Consultant. Our goal there is to make sure that (since there is not a requirement for a negative pressure containment and the work is outside on a roof top) that wet methods are used and that other steps are taken to prevent and mitigate fiber releases.

Regarding the last question of clearance inspection and visual clearance criteria are located on page 38 Sections 3.8 and 3.9 of the specification. We will use a visual clearance looking for 3 dimensional surfaces. Based on the experience with the previous abatement of coatings on the

other colonnades, there was some residual staining of the concrete surface where materials had penetrated the concrete pores. We understand that and concrete staining is anticipated likely will not be an issue since any residual material in the concrete pores from staining will be locked in and considered to be non-asbestos for clearance purposes.

I hope that this response is helpful.

Sincerely,

Bob Kuykendall

Bob Kuykendall Principal The Denali Group 2255 Morello Avenue, Suite 208 Pleasant Hill, California 94523 Office: 925-602-2333 Mobile: 925-570-9957

Visit Denali's website at : http://www.thedenaligroup.com

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From: Reyes, Paula [mailto:reyesp@smccd.edu] Sent: Wednesday, April 15, 2015 6:06 PM To: Bob Kuykendall Cc: Powell, Patricia "Pepper" Subject: Fwd: Bid 86709 Bid Clarifications

Bob,

The following request for information has been received. We can discuss this in the morning.

Paula

Sent from my Verizon Wireless 4G LTE smartphone

------ Original message ------From: Claudia Chavez Date:04/15/2015 4:06 PM (GMT-08:00) To: "Reyes, Paula" Subject: Bid 86709 Bid Clarifications

Paula,

Please take a look at the Request for Information from our Asbestos Sub. Thank you.

Claudia Chavez Stronger Building Services 580 Harlan St. San Leandro, Ca 94577

Powell, Patricia "Pepper"

From: Sent: To: Cc: Subject: Bob Kuykendall <denaligp@ix.netcom.com> Thursday, April 16, 2015 2:19 PM Reyes, Paula Powell, Patricia "Pepper" RE: Bid 86709 Bid Clarifications

Paula and Pepper:

I spoke with Jay Randall and Joe Figueroa (sp?) with PAS this afternoon regarding potential methods to address removal of residual materials on the colonnade roof surfaces.

They said that they would consider three methods: 1) use of a negative pressure containment (as Jay Randall employed on the B1-B5 colonnades in 2005) 2) use of a high pressure water jet machine on larger surface areas 3) use of small grinders with HEPA vacuum attachments on the small odd shaped areas of the roof surface. They said these options gave them enough information to proceed to develop cost.

I told them that each of the methods may be suitable for a specific roof area. I also said that we cannot have any dust coming off the roof surfaces. At the time the selected contractor is selected we will review their proposed methods with you so be sure that all practical steps are taken to prevent and mitigate the generation of dust being generated by their operations.

Let me know if you have any questions.

Sincerely, **Bob Kuykendall**

Bob Kuykendall Principal The Denali Group 2255 Morello Avenue, Suite 208 Pleasant Hill, California 94523 Office: 925-602-2333 Mobile: 925-570-9957

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From: Reyes, Paula [mailto:reyesp@smccd.edu] Sent: Thursday, April 16, 2015 11:32 AM To: Bob Kuykendall Cc: Powell, Patricia "Pepper" Subject: RE: Bid 86709 Bid Clarifications

Bob,

PAS just called to discuss the question they submitted yesterday. He is specifically interested in finding out if the material adhered to the colonnade substrate is hot. If it is, removal will require negative pressure. He estimates the cost could be an additional \$100k. Can you confirm that you have sample results for the layer attached to the substrate?

Paula

Sent from my Verizon Wireless 4G LTE smartphone

------ Original message ------From: Bob Kuykendall Date:04/16/2015 8:10 AM (GMT-08:00) To: "Reyes, Paula" Cc: "Powell, Patricia Pepper" Subject: RE: Bid 86709 Bid Clarifications

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