# City of San Diego

CONTRACTOR'S NAME:		
ADDRESS:		
TELEPHONE NO	.: FAX NO.:	
CITY CONTACT:	Ron McMinn, Contract Specialist, Email: RMcMinn@sandiego.gov	
_	Phone No. (619) 533-4618	
_	N. Afagh / R. W. Bustamante / M. L. Wenceslao	

## **BIDDING DOCUMENTS**





## **FOR**

## BALBOA PARK FEDERAL BUILDING IMPROVEMENT

BID NO.:	K-22-2035-DBB-3	
SAP NO. (WBS/IO/CC):	B-20066	
CLIENT DEPARTMENT:		
COUNCIL DISTRICT:		
PROJECT TYPE:	GA, BH	

#### THIS CONTRACT WILL BE SUBJECT TO THE FOLLOWING:

- > THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM
- ➤ PREVAILING WAGE RATES: STATE ☐ FEDERAL ☐
- ➤ APPRENTICESHIP

#### **BID DUE DATE:**

2:00 PM OCTOBER 5, 2021

CITY OF SAN DIEGO'S ELECTRONIC BIDDING SITE, PLANETBIDS

http://www.sandiego.gov/cip/bidopps/index.shtml

#### **ENGINEER OF WORK**

The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Engineer:

Schroth-Nichols	8/17/21	Seal:	SOUND BOSON OF THE PROPERTY OF
For City Engineer	Date	Seal.	No. 80228 9 *
			OF CALIFORNIA

### **TABLE OF CONTENTS**

SECTION PAGE

1.	REG	QUIRED DOCUMENTS SCHEDULE4	
2.	NOTICE INVITING BIDS5		
3.	INS	STRUCTIONS TO BIDDERS8	
4.	PEF	RFORMANCE AND PAYMENT BONDS18	
5.	AT	TACHMENTS:	
	A.	SCOPE OF WORK21	
	В.	RESERVED23	
	C.	RESERVED24	
	D.	PREVAILING WAGE25	
	E.	SUPPLEMENTARY SPECIAL PROVISIONS	
	TECHNICALS56		
		Exhibit A - Roof Work Area	
		Exhibit B - Detail Drawings	
		1. Appendix A - Notice of Exemption	
		2. Appendix B - Materials Typically Accepted by Certificate of Compliance	
		3. Appendix C - Sample City Invoice with Cash Flow Forecast	
		4. Appendix D - Location Map	
		5. Appendix E - Contractor's Notes	
		6. Appendix F - Pre-Approved Staging Area	
	F.	RESERVED	
	G.	CONTRACT AGREEMENT	
<u>.</u>	CFI	RTIFICATIONS AND FORMS	

## REQUIRED DOCUMENTS SCHEDULE DURING BIDDING AND AWARDING

The Bidder's attention is directed to the City's Municipal Code §22.0807(e), (3)-(5) for important information regarding grounds for debarment for failure to submit required documentation.

The specified Equal Opportunity Contracting Program (EOCP) forms are available for download from the City's web site at:

#### http://www.sandiego.gov/eoc/forms/index.shtml

ITEM	DOCUMENT TO BE SUBMITTED	WHEN DUE	FROM
1.	Bid Bond (PDF via PlanetBids)	At Time of Bid	ALL BIDDERS
2.	Contractors Certification of Pending Actions	At Time of Bid	ALL BIDDERS
3.	Mandatory Disclosure of Business Interests	At Time of Bid	ALL BIDDERS
4.	Debarment and Suspension Certification for Prime Contractors	At Time of Bid	ALL BIDDERS
5.	Debarment and Suspension Certification for Subcontractors, Suppliers & Mfgrs	At Time of Bid	ALL BIDDERS
6.	Bid Bond (Original)	By 5PM 3 working days after bid opening	ALL BIDDERS
7.	SLBE Good Faith Effort Documentation	By 5 PM 3 working days after bid opening	ALL BIDDERS
8.	Form AA60 – List of Work Made Available	By 5 PM 3 working days after bid opening with Good Faith Effort (GFE) documentation	ALL BIDDERS
9.	If the Contractor is a Joint Venture:  • Joint Venture Agreement • Joint Venture License	Within 10 working days of receipt by bidder of contract forms	AWARDED BIDDER
10.	Payment & Performance Bond; Certificates of Insurance & Endorsements; and Signed Contract Agreement Page	Within 10 working days of receipt by bidder of contract forms and NOI	AWARDED BIDDER
11.	Listing of "Other Than First Tier" Subcontractors	Within 10 working days of receipt by bidder of contract forms	AWARDED BIDDER

#### NOTICE INVITING BIDS

- 1. **SUMMARY OF WORK:** This is the City of San Diego's (City) solicitation process to acquire Construction services for **Balboa Park Federal Building Improvement.** For additional information refer to Attachment A.
- **2. FULL AND OPEN COMPETITION:** This solicitation is subject to full and open competition and may be bid by Contractors on the City's approved Prequalified Contractors List. For information regarding the Contractors Prequalified list visit the City's web site: <a href="http://www.sandiego.gov">http://www.sandiego.gov</a>
- **3. ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is \$1,140,000.00.
- 4. BID DUE DATE AND TIME ARE: OCTOBER 5, 2021 at 2:00 PM.
- **5. PREVAILING WAGE RATES APPLY TO THIS CONTRACT:** Refer to Attachment D.
- **6. LICENSE REQUIREMENT**: To be eligible for award of this contract, Prime contractor must possess the following licensing classification: **B**
- **7. SUBCONTRACTING PARTICIPATION PERCENTAGES**: Subcontracting participation percentages apply to this contract.
  - **7.1.** The City has incorporated **mandatory** SLBE-ELBE subcontractor participation percentages to enhance competition and maximize subcontracting opportunities. For the purpose of achieving the mandatory subcontractor participation percentages, a recommended breakdown of the SLBE and ELBE subcontractor participation percentages based upon certified SLBE and ELBE firms has also been provided to achieve the mandatory subcontractor participation percentages:

SLBE participation 0.9%
 ELBE participation 2.8%
 Total mandatory participation 3.7%

- **7.2.** The Bid may be declared non-responsive if the Bidder fails to meet the following requirements:
  - **7.2.1.** Attend the Pre-Bid Site Visit as described herein.
  - **7.2.2.** Include SLBE-ELBE certified subcontractors at the overall mandatory participation percentage identified in this document; OR
  - **7.2.3.** Submit Good Faith Effort (GFE) documentation, saved in searchable Portable Document Format (PDF), demonstrating the Bidder made a good faith effort to conduct outreach to and include SLBE-ELBE Subcontractors as required in this solicitation by 5 PM 3 Working Days after the Bid opening if the overall mandatory participation percentage is not met.

All submittals in searchable PDF shall be submitted electronically within the prescribed time identified in the contract documents via PlanetBids by invitation to the point of contact named in the bid provided by the Contract Specialist to all bidders.

**8. PRE-BID SITE VISIT:** All those wishing to submit a bid **MUST** visit the Work Site with the Engineer. The purpose of the Site visit is to acquaint Bidders with the Site conditions. To request a sign language or oral interpreter for this visit, call the Purchasing & Contracting Department, Public Works Division at (619) 533-3450 at least 5 Working Days prior to the meeting to ensure availability. Failure to attend the **Mandatory Pre-Bid Site Visit** may result in the Design-Builder's Bid being deemed non-responsive. The Pre-Bid Site Visit is scheduled as follows:

Time: 11:00 AM

Date: September 8, 2021

Location: Balboa Park Federal Building, 2131 Pan American Plaza

San Diego, CA 92101

Attendance at the Pre Bid Site Visit will be evidenced by the Bidder's representative's signature on the attendance roster. It is the responsibility of the Bidder's representative to complete and sign the attendance roster.

Bidders may not be admitted after the specified start time of the mandatory Pre-Bid Site Visit.

#### 9. AWARD PROCESS:

- **9.1.** The Award of this contract is contingent upon the Contractor's compliance with all conditions of Award as stated within these documents and within the Notice of Intent to Award.
- **9.2.** Upon acceptance of bids and determination of the apparent low bidder, the City will prepare the contract documents for execution within approximately 21 days of the date of the bid opening. The City will then award the contract upon receipt of properly signed Contract, bonds, and insurance documents.
- **9.3.** This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form by the City Attorney's Office.
- **9.4.** The low Bid will be determined by the Base Bid.
- **9.5.** Once the low bid has been determined, the City may, at its sole discretion, award the contract for the Base bid alone.

#### 10. SUBMISSION OF QUESTIONS:

**10.1.** The Director (or Designee) of the Purchasing & Contracting Department is the officer responsible for opening, examining, and evaluating the competitive Bids submitted to

the City for the acquisition, construction, and completion of any public improvement except when otherwise set forth in these documents. Any questions related to this solicitation shall be submitted to:

#### RMcMinn@sandiego.gov

- **10.2.** Questions received less than 14 days prior to the date for opening of Bids may not be considered.
- **10.3.** Questions or clarifications deemed by the City to be material shall be answered via issuance of an addendum and posted to the City's online bidding service.
- **10.4.** Only questions answered by formal written addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect. It is the Bidder's responsibility to be informed of any addenda that have been issued and to include all such information in its Bid.

#### INSTRUCTIONS TO BIDDERS

#### 1. PREQUALIFICATION OF CONTRACTORS:

- 1.1. Contractors submitting a Bid must be pre-qualified for the total amount proposed, including all alternate items, prior to the date of submittal. Bids from contractors who have not been pre-qualified as applicable and Bids that exceed the maximum dollar amount at which contractors are pre-qualified may be deemed non-responsive and ineligible for award.
- **1.2.** The completed application must be submitted online no later than 2 weeks prior to the bid opening.
- **1.3. Joint Venture Bidders Cumulative Maximum Bidding Capacity:** For projects with an engineer's estimate of \$30,000,000 or greater, Joint Ventures submitting bids may be deemed responsive and eligible for award if the cumulative maximum bidding capacity of the individual Joint Venture entities is equal to or greater than the total amount proposed.
  - **1.3.1.** Each of the entities of the Joint Venture must have been previously prequalified at a minimum of \$15,000,000.
  - **1.3.2.** Bids submitted with a total amount proposed of less than \$30,000,000 are not eligible for Cumulative Maximum Bidding Capacity prequalification. To be eligible for award in this scenario, the Joint Venture itself or at least one of the Joint Venture entities must have been prequalified for the total amount proposed.
  - **1.3.3.** Bids submitted by Joint Ventures with a total amount proposed of \$30,000,000 or greater on a project with an engineer's estimate of less than \$30,000,000 are not eligible for Cumulative Maximum Bidding Capacity prequalification.
  - **1.3.4.** The Joint Venture designated as the Apparent Low Bidder shall provide evidence of its corporate existence and furnish good and approved bonds in the name of the Joint Venture within 14 Calendar Days of receipt by the Bidder of a form of contract for execution.
- **1.4.** Complete information and links to the on-line prequalification application are available at:
  - http://www.sandiego.gov/cip/bidopps/prequalification
- **1.5.** Due to the City's responsibility to protect the confidentiality of the contractors' information, City staff will not be able to provide information regarding contractors' prequalification status over the telephone. Contractors may access real-time information about their prequalification status via their vendor profile on PlanetBids™.

- **2. ELECTRONIC FORMAT RECEIPT AND OPENING OF BIDS:** Bids will be received in electronic format (eBids) EXCLUSIVELY at the City of San Diego's electronic bidding (eBidding) site, at: <a href="http://www.sandiego.gov/cip/bidopps/index.shtml">http://www.sandiego.gov/cip/bidopps/index.shtml</a> and are due by the date, and time shown on the cover of this solicitation.
  - **2.1. BIDDERS MUST BE PRE-REGISTERED** with the City's bidding system and possess a system-assigned Digital ID in order to submit and electronic bid.
  - 2.2. The City's bidding system will automatically track information submitted to the site including IP addresses, browsers being used and the URLs from which information was submitted. In addition, the City's bidding system will keep a history of every login instance including the time of login, and other information about the user's computer configuration such as the operating system, browser type, version, and more. Because of these security features, Contractors who disable their browsers' cookies will not be able to log in and use the City's bidding system.
  - **2.3.** The City's electronic bidding system is responsible for bid tabulations. Upon the bidder's or proposer's entry of their bid, the system will ensure that all required fields are entered. **The system will not accept a bid for which any required information is missing.** This includes all necessary pricing, subcontractor listing(s) and any other essential documentation and supporting materials and forms requested or contained in these solicitation documents.
  - **2.4. BIDS REMAIN SEALED UNTIL BID DEADLINE.** eBids are transmitted into the City's bidding system via hypertext transfer protocol secure (https) mechanism using SSL 128-256 bit security certificates issued from Verisign/Thawte which encrypts data being transferred from client to server. Bids submitted prior to the "Bid Due Date and Time" are not available for review by anyone other than the submitter who has until the "Bid Due Date and Time" to change, rescind or retrieve its proposal should it desire to do so.
  - **2.5. BIDS MUST BE SUBMITTED BY BID DUE DATE AND TIME**. Once the bid deadline is reached, no further submissions are accepted into the system. Once the Bid Due Date and Time has lapsed, bidders, proposers, the general public, and City staff are able to immediately see the results on line. City staff may then begin reviewing the submissions for responsiveness, EOCP compliance and other issues. The City may require any Bidder to furnish statement of experience, financial responsibility, technical ability, equipment, and references.
  - **2.6. RECAPITULATION OF THE WORK**. Bids shall not contain any recapitulation of the Work. Conditional Bids may be rejected as being non-responsive. Alternative proposals will not be considered unless called for.
  - **2.7. BIDS MAY BE WITHDRAWN** by the Bidder only up to the bid due date and time.
    - **2.7.1.** <u>Important Note</u>: Submission of the electronic bid into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the bidder's submission to upload and be received by the City's

eBidding system. It is the bidder's sole responsibility to ensure their bids are received on time by the City's eBidding system. The City of San Diego is not responsible for bids that do not arrive by the required date and time.

**2.8. ACCESSIBILITY AND AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE:** To request a copy of this solicitation in an alternative format, contact the Purchasing & Contracting Department Contract Specialist listed on the cover of this solicitation at least five (5) working days prior to the Bid/Proposal due date to ensure availability.

#### 3. ELECTRONIC BID SUBMISSIONS CARRY FULL FORCE AND EFFECT:

- **3.1.** The bidder, by submitting its electronic bid, acknowledges that doing so carries the same force and full legal effect as a paper submission with a longhand (wet) signature.
- **3.2.** By submitting an electronic bid, the bidder certifies that the bidder has thoroughly examined and understands the entire Contract Documents (which consist of the plans and specifications, drawings, forms, affidavits and the solicitation documents), and that by submitting the eBid as its bid proposal, the bidder acknowledges, agrees to and is bound by the entire Contract Documents, including any addenda issued thereto, and incorporated by reference in the Contract Documents.
- **3.3.** The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this bid are true and correct.
- 3.4. The Bidder agrees to the construction of the project as described in Attachment "A-Scope of Work" for the City of San Diego, in accordance with the requirements set forth herein for the electronically submitted prices. The Bidder guarantees the Contract Price for a period of 120 days from the date of Bid opening. The duration of the Contract Price guarantee shall be extended by the number of days required for the City to obtain all items necessary to fulfill all conditions precedent.
- 4. BIDS ARE PUBLIC RECORDS: Upon receipt by the City, Bids shall become public records subject to public disclosure. It is the responsibility of the respondent to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the Bid. General references to sections of the California Public Records Act (PRA) will not suffice. If the Contractor does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Contractor will hold the City harmless for release of this information.

#### 5. CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM:

**5.1. Prior** to the Award of the Contract or Task Order, you and your Subcontractors and Suppliers must register with the City's web-based vendor registration and bid management system. For additional information go to:

http://www.sandiego.gov/purchasing/bids-contracts/vendorreg

- **5.2.** The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer.
- **G. JOINT VENTURE CONTRACTORS:** Provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 14 Calendar Days after receiving the Contract forms.

#### 7. INSURANCE REQUIREMENTS:

- **7.1.** All certificates of insurance and endorsements required by the contract are to be provided upon issuance of the City's Notice of Intent to Award letter.
- **7.2.** Refer to sections 5-4, "INSURANCE" of the Supplementary Special Provisions (SSP) for the insurance requirements which must be met.
- **8. REFERENCE STANDARDS:** Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards:

Title	Edition	Document Number
Standard Specifications for Public Works Construction ("The GREENBOOK") <a href="http://www.greenbookspecs.org/">http://www.greenbookspecs.org/</a>	2018	PWPI010119-01
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")* https://www.sandiego.gov/ecp/edocref/greenbook		PWPI010119-02
City of San Diego Standard Drawings* <a href="https://www.sandiego.gov/ecp/edocref/standarddraw">https://www.sandiego.gov/ecp/edocref/standarddraw</a>	2018	PWPI010119-03
Citywide Computer Aided Design and Drafting (CADD) Standards <a href="https://www.sandiego.gov/ecp/edocref/drawings">https://www.sandiego.gov/ecp/edocref/drawings</a>	2018	PWPI010119-04
California Department of Transportation (CALTRANS) Standard Specifications <a href="https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications">https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications</a>	2018	PWPI030119-05
CALTRANS Standard Plans https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard- specifications	2018	PWPI030119-06
California Manual on Uniform Traffic Control Devices Revision 6 (CA MUTCD Rev 6)  https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files		
NOTE: *Available online under Engineering Documents and References at: <a href="https://www.sandiego.gov/ecp/edocref/">https://www.sandiego.gov/ecp/edocref/</a> *Electronic updates to the Standard Drawings may also be found in the link above		

- 9. CITY'S RESPONSES AND ADDENDA: The City, at its discretion, may respond to any or all questions submitted in writing via the City's eBidding web site in the <u>form of an addendum</u>. No other responses to questions, oral or written shall be of any force or effect with respect to this solicitation. The changes to the Contract Documents through addenda are made effective as though originally issued with the Bid. The Bidders shall acknowledge the receipt of Addenda at the time of bid submission.
- 10. CITY'S RIGHTS RESERVED: The City reserves the right to cancel the Notice Inviting Bids at any time, and further reserves the right to reject submitted Bids, without giving any reason for such action, at its sole discretion and without liability. Costs incurred by the Bidder(s) as a result of preparing Bids under the Notice Inviting Bids shall be the sole responsibility of each bidder. The Notice Inviting Bids creates or imposes no obligation upon the City to enter a contract.
- 11. **CONTRACT PRICING:** This solicitation is for a Lump Sum contract with Unit Price provisions as set forth herein. The Bidder agrees to perform construction services for the City of San Diego in accordance with these contract documents for the prices listed below. The Bidder further agrees to guarantee the Contract Price for a period of 120 days from the date of Bid opening. The duration of the Contract Price guarantee may be extended, by mutual consent of the parties, by the number of days required for the City to obtain all items necessary to fulfill all contractual conditions.

#### 12. SUBCONTRACTOR INFORMATION:

**LISTING OF SUBCONTRACTORS.** In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act" of the California Public Contract Code, the Bidder shall provide the NAME and ADDRESS of each Subcontractor who will perform work, labor, render services or who specially fabricates and installs a portion [type] of the work or improvement, in an amount in excess of 0.5% of the Contractor's total Bid. The Bidder shall also state within the description, whether the subcontractor is a CONSTRUCTOR, CONSULTANT or SUPPLIER. The Bidder shall state the **DIR REGISTRATION NUMBER** for all subcontractors and shall further state within the description, the PORTION of the work which will be performed by each subcontractor under this Contract. The Contractor shall list only one Subcontractor for each portion of the Work. The DOLLAR VALUE of the total Bid to be performed shall be stated for all subcontractors listed. Failure to comply with this requirement may result in the Bid being rejected as **non-responsive** and ineligible for award. The Bidder's attention is directed to the Special Provisions - General; Paragraph 2-3 "Subcontracts", which stipulates the percent of the Work to be performed with the Bidders' own forces. The Bidder shall list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which Bidders are seeking recognition towards achieving any mandatory, voluntary (or both) subcontracting participation goals.

Additionally, pursuant to California Senate Bill 96 and in accordance with the requirements of Labor Code sections 1771.1 and 1725.5, by submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the California

- Department of Industrial Relations (DIR). The Bidder shall provide the name, address, license number, DIR registration number of any Subcontractor regardless of tier who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement pursuant to the contract.
- 12.2. LISTING OF SUPPLIERS. Any Bidder seeking the recognition of Suppliers of equipment, materials, or supplies obtained from third party Suppliers towards achieving any mandatory or voluntary (or both) subcontracting participation goals shall provide, at a minimum, the NAME, LOCATION (CITY), DIR REGISTRATION NUMBER and the DOLLAR VALUE of each supplier. The Bidder will be credited up to 60% of the amount to be paid to the Suppliers for materials and supplies unless vendor manufactures or substantially alters materials and supplies, in which case, 100% will be credited. The Bidder is to indicate within the description whether the listed firm is a supplier or manufacturer. If no indication is provided, the listed firm will be credited at 60% of the listed dollar value for purposes of calculating the Subcontractor Participation Percentage.
- **12.3. LISTING OF SUBCONTRACTORS OR SUPPLIERS FOR ALTERNATES.** For subcontractors or suppliers to be used on additive or deductive alternate items, in addition to the above requirements, bidder shall further note "ALTERNATE" and alternate item number within the description.
- **13. SUBMITTAL OF "OR EQUAL" ITEMS:** See Section 4-6, "Trade Names" in The WHITEBOOK and as amended in the SSP.

#### 14. AWARD:

- **14.1.** The Award of this contract is contingent upon the Contractor's compliance with all conditions precedent to Award.
- **14.2.** Upon acceptance of a Bid, the City will prepare contract documents for execution within approximately 21 days of the date of the Bid opening and award the Contract approximately within 7 days of receipt of properly executed Contract, bonds, and insurance documents.
- **14.3.** This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form the City Attorney's Office.
- **15. SUBCONTRACT LIMITATIONS**: The Bidder's attention is directed to Standard Specifications for Public Works Construction, Section 3-2, "SELF-PERFORMANCE" in The GREENBOOK and as amended in the SSP which requires the Contractor to self-perform not less than the specified amount. Failure to comply with this requirement shall render the bid **non-responsive** and ineligible for award.
- **16. AVAILABILITY OF PLANS AND SPECIFICATIONS:** Contract Documents may be obtained by visiting the City's website: <a href="http://www.sandiego.gov/cip/">http://www.sandiego.gov/cip/</a>. Plans and Specifications for this contract are also available for review in the office of the City Clerk or Purchasing & Contracting Department, Public Works Division.

- 17. ONLY ONE BID PER CONTRACTOR SHALL BE ACCCEPTED: No person, firm, or corporation shall be allowed to make, file, or be interested in more than one (1) Bid for the same work unless alternate Bids are called for. A person, firm or corporation who has submitted a subproposal to a Bidder, or who has quoted prices on materials to a Bidder, is not hereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or from submitting a Bid in its own behalf. Any Bidder who submits more than one bid will result in the rejection of all bids submitted.
- 18. SAN DIEGO BUSINESS TAX CERTIFICATE: The Contractor and Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, First floor and submit to the Contract Specialist upon request or as specified in the Contract Documents. Tax Identification numbers for both the Bidder and the listed Subcontractors must be submitted on the City provided forms within these documents.

## 19. BIDDER'S GUARANTEE OF GOOD FAITH (BID SECURITY) FOR DESIGN-BID-BUILD CONTRACTS:

- **19.1.** For bids \$250,000 and above, bidders shall submit Bid Security at bid time. Bid Security shall be in one of the following forms: a cashier's check, or a properly certified check upon some responsible bank; or an approved corporate surety bond payable to the City of San Diego for an amount of not less than 10% of the total bid amount.
- **19.2.** This check or bond, and the monies represented thereby, will be held by the City as a guarantee that the Bidder, if awarded the contract, will in good faith enter into the contract and furnish the required final performance and payment bonds.
- **19.3.** The Bidder agrees that in the event of the Bidder's failure to execute this contract and provide the required final bonds, the money represented by the cashier's or certified check will remain the property of the City; and the Surety agrees that it will pay to the City the damages, not exceeding the sum of 10% of the amount of the Bid, that the City may suffer as a result of such failure.
- **19.4.** At the time of bid submission, bidders must upload and submit an electronic PDF copy of the aforementioned bid security. Whether in the form of a cashier's check, a properly certified check or an approved corporate surety bond payable to the City of San Diego, the bid security must be uploaded to the City's eBidding system. By 5PM, 3 working days after the bid opening date, all bidders must provide the City with the original bid security.
- **19.5.** Failure to submit the electronic version of the bid security at the time of bid submission AND failure to provide the original by 5PM, 3 working days after the bid opening date shall cause the bid to be rejected and deemed **non-responsive**.
  - Due to circumstances related to Covid-19, until further notice, all original bid bond submittals must be received by 5 PM, 3 working days after bid opening.

Upon circumstances returning to normal business as usual, the original bid bond shall once again be due by 5 PM the day after bid opening.

Original Bid Bond shall be submitted to:
Purchasing & Contracting Department, Public Works Division
525 B Street, Suite 750 (7<sup>th</sup> Floor)
San Diego, California, 92101
To the Attention of the Contract Specialist on the Front Page of this solicitation.

#### 20. AWARD OF CONTRACT OR REJECTION OF BIDS:

- **20.1.** This contract may be awarded to the lowest responsible and reliable Bidder.
- **20.2.** Bidders shall complete ALL eBid forms as required by this solicitation. Incomplete eBids will not be accepted.
- **20.3.** The City reserves the right to reject any or all Bids, to waive any informality or technicality in Bids received, and to waive any requirements of these specifications as to bidding procedure.
- **20.4.** Bidders will not be released on account of their errors of judgment. Bidders may be released only upon receipt by the City within 3 Working Days of the bid opening, written notice from the Bidder which shows proof of honest, credible, clerical error of a material nature, free from fraud or fraudulent intent; and of evidence that reasonable care was observed in the preparation of the Bid.
- **20.5.** A bidder who is not selected for contract award may protest the award of a contract to another bidder by submitting a written protest in accordance with the San Diego Municipal Code.
- **20.6.** The City of San Diego will not discriminate in the award of contracts with regard to race, religion creed, color, national origin, ancestry, physical handicap, marital status, sex or age.
- **20.7.** Each Bid package properly signed as required by these specifications shall constitute a firm offer which may be accepted by the City within the time specified herein.
- **20.8.** The City reserves the right to evaluate all Bids and determine the lowest Bidder on the basis of the base bid and any proposed alternates or options as detailed herein.

#### 21. BID RESULTS:

**21.1.** The availability of the bids on the City's eBidding system shall constitute the public announcement of the apparent low bidder. In the event that the apparent low bidder is subsequently deemed non-responsive or non-responsible, a notation of such will be

- made on the eBidding system. The new ranking and apparent low bidder will be adjusted accordingly.
- **21.2.** To obtain the bid results, view the results on the City's web site, or request the results by U.S. mail and provide a self-addressed, stamped envelope. If requesting by mail, be sure to reference the bid name and number. The bid tabulations will be mailed to you upon their completion. The results will not be given over the telephone.

#### 22. THE CONTRACT:

- **22.1.** The Bidder to whom award is made shall execute a written contract with the City of San Diego and furnish good and approved bonds and insurance certificates specified by the City within 14 days after receipt by Bidder of a form of contract for execution unless an extension of time is granted to the Bidder in writing.
- **22.2.** If the Bidder takes longer than 14 days to fulfill these requirements, then the additional time taken shall be added to the Bid guarantee. The Contract shall be made in the form adopted by the City, which includes the provision that no claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
- **22.3.** If the Bidder to whom the award is made fails to enter into the contract as herein provided, the award may be annulled and the Bidder's Guarantee of Good Faith will be subject to forfeiture. An award may be made to the next lowest responsible and reliable Bidder who shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made.
- **22.4.** Pursuant to the San Diego City Charter section 94, the City may only award a public works contract to the lowest responsible and reliable Bidder. The City will require the Apparent Low Bidder to (i) submit information to determine the Bidder's responsibility and reliability, (ii) execute the Contract in form provided by the City, and (iii) furnish good and approved bonds and insurance certificates specified by the City within 14 Days, unless otherwise approved by the City, in writing after the Bidder receives notification from the City, designating the Bidder as the Apparent Low Bidder and formally requesting the above mentioned items.
- 22.5. The award of the Contract is contingent upon the satisfactory completion of the above-mentioned items and becomes effective upon the signing of the Contract by the Mayor or designee and approval as to form by the City Attorney's Office. If the Apparent Low Bidder does not execute the Contract or submit required documents and information, the City may award the Contract to the next lowest responsible and reliable Bidder who shall fulfill every condition precedent to award. A corporation designated as the Apparent Low Bidder shall furnish evidence of its corporate existence and evidence

that the officer signing the Contract and bond for the corporation is duly authorized to do so.

- 23. **EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK:** The Bidder shall examine carefully the Project Site, the Plans and Specifications, other materials as described in the Special Provisions, Section 3-9, "TECHNICAL STUDIES AND SUBSURFACE DATA", and the proposal forms (e.g., Bidding Documents). The submission of a Bid shall be conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of work, the quantities of materials to be furnished, and as to the requirements of the Bidding Documents Proposal, Plans, and Specifications.
- **24. CITY STANDARD PROVISIONS:** This contract is subject to the following standard provisions. See The WHITEBOOK for details.
  - **24.1.** The City of San Diego Resolution No. R-277952 adopted on May 20, 1991 for a Drug-Free Workplace.
  - **24.2.** The City of San Diego Resolution No. R-282153 adopted on June 14, 1993 related to the Americans with Disabilities Act.
  - **24.3.** The City of San Diego Municipal Code §22.3004 for Contractor Standards.
  - **24.4.** The City of San Diego's Labor Compliance Program and the State of California Labor Code §§1771.5(b) and 1776.
  - **24.5.** Sections 1777.5, 1777.6, and 1777.7 of the State of California Labor Code concerning the employment of apprentices by contractors and subcontractors performing public works contracts.
  - **24.6.** The City's Equal Benefits Ordinance (EBO), Chapter 2, Article 2, Division 43 of The San Diego Municipal Code (SDMC).
  - **24.7.** The City's Information Security Policy (ISP) as defined in the City's Administrative Regulation 90.63.

#### 25. PRE-AWARD ACTIVITIES:

- **25.1.** The contractor selected by the City to execute a contract for this Work shall submit the required documentation as specified herein and in the Notice of Intent to Award. Failure to provide the information as specified may result in the Bid being rejected as **non-responsive.**
- **25.2.** The decision that bid is non-responsive for failure to provide the information required within the time specified shall be at the sole discretion of the City.

#### PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND

#### FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

	, a	corporation	, as	principal,	and
	, a	corporation	aut	horized to	o do
business in the State of California, as Surety, hereby obligate t	hems	selves, their su	iccess	sors and as	signs,
jointly and severally, to The City of San Diego a municipal cor	porat	ion in the sur	n of _		
	_ for	the faithful	perfo	ormance o	f the
annexed contract, and in the sum of				for the b	enefit
of laborers and materialmen designated below.					

#### **Conditions:**

If the Principal shall faithfully perform the annexed contract with the City of San Diego, California, then the obligation herein with respect to a faithful performance shall be void; otherwise it shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials for or performing labor in the execution of this contract, and shall pay all amounts due under the California Unemployment Insurance Act then the obligation herein with respect to laborers and materialmen shall be void; otherwise it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit of all persons, firms and corporations entitled to file claims under the provisions of Article 2. Claimants, (iii) public works of improvement commencing with Civil Code Section 9100 of the Civil Code of the State of California.

Changes in the terms of the annexed contract or specifications accompanying same or referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby waives notice of same.

The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of this bond.

The Surety expressly agrees that the City of San Diego may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal.

The Surety shall not utilize the Principal in completing the improvements and work specified in the Agreement in the event the City terminates the Principal for default.

## PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND (continued)

Dated	
Approved as to Form	Principal
	Ву
	Printed Name of Person Signing for Principal
Mara W. Elliott, City Attorney	
By Deputy City Attorney	Surety
- cp asy easy macrossy	
	By Attorney-in-fact
	, acomey in race
Approved:	
	Local Address of Surety
By	
Mayor or Designee	Local Address (City, State) of Surety
	Local Telephone No. of Surety
	Premium \$
	Bond No
	DONU NO

## **ATTACHMENTS**

## **ATTACHMENT A**

## **SCOPE OF WORK**

#### SCOPE OF WORK

- 1. **SCOPE OF WORK:** This project provides for the replacement of the Federal Building roof. (Federal Building aka Comicon-Building). The Federal Building was built in 1936 and is in Balboa Park. The roof has leaked in the past, mainly in the upstairs offices in the front of the building. Some patching has occurred and currently has some minor leaks. Per the Condition Assessment the Roof coverings have reached the end of their life cycle. This project will tear-off all existing roofing and insulation to the wooden deck, replace any or all rotted wood, install new covering and base flashing at walls, curb, and penetrations.
  - **1.1.** The Work shall be performed in accordance with:
    - **1.1.1.** The Notice Inviting Bids and Technical Specifications, inclusive
- **2. LOCATION OF WORK:** The location of the Work is as follows:

See Appendix D - Location Map

3. **CONTRACT TIME:** The Contract Time for completion of the Work shall be **150 Working Days.** 

## **ATTACHMENT B**

#### **RESERVED**

## **ATTACHMENT C**

#### **RESERVED**

## **ATTACHMENT D**

## **PREVAILING WAGE**

#### PREVAILING WAGE

- 1. PREVAILING WAGE RATES: Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair, and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair, and maintenance work performed under this Contract cumulatively exceeding \$15,000, the Contractor and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.
  - 1.1. Compliance with Prevailing Wage Requirements. Pursuant to sections 1720 through 1861 of the California Labor Code, the Contractor and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.
    - **1.1.1.** Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm. Contractor and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.
    - 1.1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.
  - **1.2. Penalties for Violations.** Contractor and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed. This shall be in addition to any other applicable penalties allowed under Labor Code sections 1720 1861.

- 1.3. Payroll Records. Contractor and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require its subcontractors to also comply with section 1776. Contractor and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Contractor is responsible for ensuring its subcontractors submit certified payroll records to the City.
  - **1.3.1.** Contractor and their subcontractors shall also furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.
- **1.4. Apprentices.** Contractor and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Contractor is held responsible for the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.
- 1.5. Working Hours. Contractor and their subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on contractors and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections1810 through 1815.
- **1.6. Required Provisions for Subcontracts.** Contractor shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.
- 1.7. Labor Code Section 1861 Certification. Contractor in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Contractor certifies that "I am aware of the provisions of Section 3700 of the California 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 I will comply with such provisions before commencing the performance of the work of this Contract."
- **1.8. Labor Compliance Program**. The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Prevailing Wage Unit at 858-627-3200.

- 1.9. Contractor and Subcontractor Registration Requirements. This project is subject to compliance monitoring and enforcement by the DIR. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid or proposal, subject to the requirements of section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5 It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.
  - **1.9.1.** A Contractor's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.
  - **1.9.2.** By submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Contractor shall provide proof of registration for themselves and all listed subcontractors to the City at the time of bid or proposal due date or upon request.
- **1.10. Stop Order.** For Contractor or its subcontractors engaging in the performance of any public work contract without having been registered in violation of Labor Code sections 1725.5 or 1771.1, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractors or unregistered subcontractor(s) on ALL public works until the unregistered contractor or unregistered subcontractor(s) is registered. Failure to observe a stop order is a misdemeanor.
- 1.11. List of all Subcontractors. The Contractor shall provide the list of subcontractors (regardless of tier), along with their DIR registration numbers, utilized on this Contract prior to any work being performed; and the Contractor shall provide a complete list of all subcontractors with each invoice. Additionally, Contractor shall provide the City with a complete list of all subcontractors (regardless of tier) utilized on this contract within ten working days of the completion of the contract, along with their DIR registration numbers. The City shall withhold final payment to Construction Management Professional until at least thirty (30) days after this information is provided to the City.

- **1.12. Exemptions for Small Projects.** There are limited exemptions for installation, alteration, demolition, or repair work done on projects of \$25,000 or less. The Contractor shall still comply with Labor Code sections 1720 et. seq. The only recognized exemptions are listed below:
  - **1.12.1.** Registration. The Contractor will not be required to register with the DIR for small projects. (Labor Code section 1771.1).
  - **1.12.2.** Certified Payroll Records. The records required in Labor Code section 1776 shall be required to be kept and submitted to the City of San Diego, but will not be required to be submitted online with the DIR directly. The Contractor will need to keep those records for at least three years following the completion of the Contract. (Labor Code section 1771.4).
  - **1.12.3.** List of all Subcontractors. The Contractor shall not be required to hire only registered subcontractors and is exempt from submitting the list of all subcontractors that is required in section 1.11 above. (Labor code section 1773.3).

## **ATTACHMENT E**

## **SUPPLEMENTARY SPECIAL PROVISIONS**

### SUPPLEMENTARY SPECIAL PROVISIONS

The following Supplementary Special Provisions (SSP) modifies the following documents:

- 1. The **2018 Edition** of the Standard Specifications for Public Works Construction (The "GREENBOOK").
- 2. The **2018 Edition** of the City of San Diego Standard Specifications for Public Works Construction (The "WHITEBOOK"), including the following:
  - a) General Provisions (A) for all Construction Contracts.

#### PART 0 - EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

#### **SECTION A - GENERAL REQUIREMENTS**

- **0-12 CONTRACT RECORDS AND REPORTS.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. You shall maintain records of all subcontracts and invoices from your Subcontractors and Suppliers for work on this project. Records shall show name, telephone number including area code, and business address of each Subcontractor, Supplier, and joint venture partner, and the total amount actually paid to each firm. Project relevant records, regardless of tier, may be periodically reviewed by the City.
  - 2. You shall retain all records, books, papers, and documents pertinent to the Contract for a period of not less than 5 years after Notice of Completion and allow access to said records by the City's authorized representatives.
  - 3. You shall submit the following reports using the City's web-based contract compliance (Prism® portal):
    - a) **Monthly Payment.** You shall submit Monthly Payment Reporting by the 10<sup>th</sup> day of the subsequent month. Incomplete and/or delinquent reporting may cause payment delays, non-payment of invoices, or both.
  - 4. The records maintained under item 1, described above, shall be consolidated into a Final Summary Report, certified as correct by an authorized representative of the Contractor. The Final Summary Report shall include all subcontracting activities and be sent to the EOCP Program Manager prior to Acceptance. Failure to comply may result in assessment of liquidated damages or withholding of retention. The City will review and verify 100% of subcontract participation reported in the Final Summary Report prior to approval and release of final retention to you. In the event your Subcontractors are owed money for completed Work, the City may authorize payment to subcontractor via a joint check from the withheld retention.

## SECTION 1 – GENERAL, TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

- **1-2 TERMS AND DEFINITIONS.** To the "WHITEBOOK", items 43, 56, 69, and 102, DELETE in their entirety and SUBSTITUTE with the following:
  - 43. **Field Order** A Field Order is a written agreement by the Engineer to compensate you for Work items in accordance with 2-8, "EXTRA WORK" or 2-9, "CHANGED CONDITIONS". A Field Order does not change the Contract Price, Contract Time, or the scope intent of the Contract. The unused portion of the Field Order shall revert to the City upon Acceptance.
  - 56. **Notice of Completion (NOC)** A document recorded with the County of San Diego to signify that the Contract Work has been completed and accepted by the City.
  - 69. **Punchlist** A list of items of Work or corrections generated after a Walk-through that is conducted when you consider that the Work and Services are complete, and as verified by the Owner. The Punchlist may be completed in phases if defined in the Contract.
  - 102. **Walk-through** An inspection the City uses to verify the completion of the Project or phase of the Project and to generate a Punchlist prior to Acceptance.

To the "WHITEBOOK", item 54, "Normal Working Hours", ADD the following:

#### The Normal Working Hours are 7:00 AM to 5:00 PM

To the "WHITEBOOK", ADD the following:

- 108. **Acceptance** When all of the Contract Work, including all Punchlist items, is deemed officially complete by the City Asset Owning Department or Deputy City Engineer.
- 109. **Occupancy** When the Owner deems a building is ready for use, the Owner will issue a certificate of Occupancy in writing.
- 110. **Substantial Completion** When all Contract Work is deemed complete by the Contractor in writing, and as verified by the Owner. Substantial Completion may be completed in phases if defined in the Contract.
- **1-7.1.3 Requests for Information (RFI).** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - Should You discover a conflict, omission, errors in the Contract Documents, differences with existing field conditions, or have any questions concerning interpretation or clarification of Contract Documents, or when you propose deviations to the standards or design, you shall submit a Request for Information (RFI) to the City regarding your question or clarification within 1 Working Day.

- 2. Your RFI shall meet the following requirements:
  - a) All RFIs, whether by You or your Subcontractor or supplier at any tier, shall be submitted by You to the City.
  - b) RFIs shall be numbered sequentially.
  - c) You shall clearly and concisely set forth the single issue for which interpretation or clarification is sought, indicate Specification Section numbers, Contract Drawing numbers, and details, or other items involved, and state why a response is required from the City.
  - d) RFIs shall be submitted within **1 Working Day** in order that they may be adequately researched and answered before the response affects any critical activity of the Work.
  - e) Should You believe that a response to an RFI causes a change to the requirements of the Contract, You shall, before proceeding, give written notice to the City, indicating that You believe that City response to the RFI to be a Change Order. Failure to give such written notice within **5 Working Days** of receipt of the City's response to the RFI shall waive Your right to seek additional time or cost.
- 3. The City will respond to RFIs within **5 Working Days** unless the City notifies You in writing that a response will take longer. The **5 Working Days** shall begin when the RFI is received and dated by the City. Responses from the City will not change any requirement of the Contract unless so noted by the City in the response to the RFI. The City will not issue a Change Order for Extra Work or additional time when the issue raised in the RFI was due to your fault, neglect, or any unauthorized deviations from the project design or specifications.
- 4. If You proceed in resolving a conflict, omission, or any error in the Contract Documents without sending the City an RFI in accordance with the requirements stated above, the City may require You to remove such work at Your cost or back charge You the cost to remove this work.
- **1-7.2 Contract Bonds.** To the "WHITEBOOK", item 1, DELETE in its entirety and SUBSTITUTE with the following:
  - 1. Before execution of the Contract, file payment and performance bonds with the City to be approved by the Board in the amounts and for the purposes noted. Bonds shall be executed by a responsible surety as follows:
    - a) If the Work is being funded with state or local money, consistent with California Code of Civil Procedure §995.670, the Surety shall be an "admitted surety" authorized by the State of California Department of Insurance to transact surety insurance in the State.
    - b) If the Work is being funded with federal money, the Surety shall be listed in the U.S. Treasury Department Circular 570 and shall be in conformance with the specified Underwriting Limitations.

To the "WHITEBOOK", item 2, subsection "a", subsection "i", DELETE in its entirety and SUBSTITUTE with the following:

i. A "Payment Bond" (Materials and Labor Bond) is optional. If no bond is submitted, no payment shall be made until 35 Calendar Days after Acceptance and any lien requirements have been fulfilled. If a bond is submitted, progress payments shall be made in accordance with these Specifications.

To the "WHITEBOOK", item 2, subsection "d", DELETE in its entirety and SUBSTITUTE with the following:

- d) For Contracts over \$100,000:
  - i. A "Payment Bond" (Materials and Labor Bond) for 100% of the Contract Price to satisfy claims of material Suppliers and of mechanics and laborers employed on the Work. You shall maintain the bond in full force and effect until Acceptance and until all claims for materials and labor are paid and shall otherwise comply with the Government Code.
  - ii. A "Faithful Performance Bond" for 100% of the Contract Price to guarantee faithful performance of Work, within the time prescribed and in a manner satisfactory to the City, that materials and workmanship shall be free from original or developed defects.

To the "WHITEBOOK", item 7, DELETE in its entirety and SUBSTITUTE with the following:

7. You shall require the Surety to mail its standard "Bond Status" form to the Engineer at the following address:

Deputy Director Construction Management and Field Engineering Division 9573 Chesapeake Drive San Diego, CA 92123

#### **SECTION 3 - CONTROL OF THE WORK**

- **SELF-PERFORMANCE.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. The self performance percentage requirement will be waived for Prime Contractors meeting the Class B License requirement of this Contract.
- **3-3 SUBCONTRACTORS.** To the "WHITEBOOK", ADD the following:
  - 6. When a Subcontractor fails to prosecute a portion of the Work in a manner satisfactory to the City, you shall remove such Subcontractor immediately upon written request of the City, and shall request approval of a replacement Subcontractor to perform the Work in accordance with California Public Contract Code (PCC), Subletting and Subcontracting, Section 4107, at no added cost to the City.

- **3-13.1 Completion.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. You shall submit a written assertion that the Work has been completed and is ready for Owner Acceptance. If, in the Engineer's judgment, the Work has been completed in accordance with the Contract Documents, the Engineer will set forth in writing the date the Work was completed. This will be the date that you are relieved from responsibility to protect and maintain the Work and to which liquidated damages will be computed.
- **3-13.1.1 Requirements Before Requesting a Walk-through.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

#### 3-13.1.1 Requirements Before Requesting Substantial Completion.

- 1. The following items are required prior to requesting a Substantial Completion:
  - a) Remove temporary facilities from the Site.
  - b) Thoroughly cleaning the Site and removing all mark outs and construction staking.
  - c) Provide completed and signed Red-lines in accordance with 3-7.3 "Redlines and Record Documents".
  - d) Provide all material and equipment maintenance and operation instructions and/or manuals.
  - e) Provide all tools which are permanent parts of the equipment installed in the Project.
  - f) Provide and properly identify all keys for construction and all keys for permanent Work.
  - g) Provide all final Special Inspection reports required by the applicable building Code.
  - h) Provide all items specified to be supplied as extra stock. Wrap, seal, or place in a container all items as necessary to allow for storage by the City for future use. Verify the specified quantities.
  - i) Ensure that all specified EOCP and certified wage rate documentations covering the Contract Time have been submitted.
  - j) If the Work includes installing an irrigation system, provide the spare parts for the proposed irrigation system as specified in the Special Provisions.

- k) If the Work includes sewer and storm drain installations, the inspection shall include televising in accordance with 306-18, "VIDEO INSPECTION".
- I) If the Work includes a Plant Establishment Period, Work in accordance with 801-6, "MAINTENANCE AND PLANT ESTABLISHMENT" shall be completed prior to requesting Substantial Completion, unless approved otherwise by the Owner.
- m) Notify the Engineer to arrange a final inspection of any permanent BMPs installed.

## **3-13.1.2 Walk-through and Punchlist Procedure.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

- 1. You shall notify the Engineer 15 Working Days in advance of date of anticipated Substantial Completion to allow time for Engineer to schedule a Walk-through.
- 2. After you complete the requirements in 3-13.1.1, "Requirements Before Requesting Substantial Completion" and when you consider that the Work is Substantially Complete, you will notify the Engineer in writing that the Project is Substantially Complete and request a Walk-through. The Engineer will review your request and determine if the Project is ready for a Walk-through, by verifying whether you have completed all items as required by 3-13.1.1, "Requirements Before Requesting Substantial Completion". Within 7 Working Days, the City will either reject your request for a Walk-through in writing or schedule and conduct a Walk-through inspection. The Engineer shall facilitate the Walk-through.
- 3. The following documents shall be provided at the time of your Walk-through request: As-Built markup, Plans, specifications, technical data such as submittals and equipment manuals, draft final payment, warranties, material certifications, bonds, guarantees, maintenance service agreements, and maintenance and operating manuals.
- 4. Written warranties, except manufacturer's standard printed warranties, shall be on a letterhead addressed to you. Warranties shall be submitted in the format described in this section, modified as approved by the City, to suit the conditions pertaining to the warranty. Lack of submitting these items will delay start of Walk-through.
- 5. The Engineer will provide you with the Punchlist within 15 Working Days after the date of the Walk-through. The City shall not provide a preliminary Punchlist.
- 6. If the Engineer finds that the Project is not Substantially Complete as defined herein, the Engineer will terminate the Walk-through and notify you in writing.

- 7. If, at any time during the Engineer's evaluation of the corrective Work required by the Punchlist, the Engineer discovers that additional corrective Work is required, the Engineer may include that corrective Work in the Punchlist.
- 8. You shall remain solely responsible for the Project Site until the Project is completely operational, all Punchlist items have been corrected, all operation and maintenance manuals have been approved, all necessary warranty letters have been received, and the work is formally accepted by the City.
- 9. The Engineer shall meet with you within 5 Working Days of notification that all Punchlist items are corrected. You shall complete the Punchlist within 30 Working Days, and Working Days will continue to be counted until Acceptance of the Project.
- **Acceptance.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. You shall provide the completed, signed, and stamped DS-563 to the Engineer prior to Acceptance.
  - 2. You shall deliver the final As-builts and final billing prior to Acceptance.
  - 3. You shall assemble and deliver to the Engineer a Final Summary Report and Affidavit of Disposal prior to Acceptance.
  - 4. Acceptance shall occur after all of the requirements contained in the Contract Documents have been fulfilled. If, in the Engineer's judgment, you have fully performed the Contract, the Engineer will recommend to the City Engineer that your performance of the Contract be accepted. You shall receive notification of Acceptance in writing from the Owner and counting of working days shall cease and Warranty begins.
  - 5. Retention can be released 35 Calendar Days after NOC. Submit your request for retention to the Resident Engineer and they will mail to you a "Release of Claims" form which shall be completed and returned before the retention will be released.
- **3-13.3 Warranty.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. You shall warranty and repair all defective materials and workmanship for a period of 1 year. This call back warranty period shall start on the date the Work was accepted by the City unless the City has Beneficial Use or takes Occupancy of the project earlier (excluding water, sewer, and storm drain projects).
  - 2. You shall warranty the Work free from all latent defects for 10 years and patent defects for a period of 4 years.

- 3. The warranty period for specific items covered under manufacturers' or suppliers' warranties shall commence on the date they are placed into service at the direction of the Engineer in writing.
- 4. All express warranties from Subcontractors, manufacturers', or Suppliers', of any tier, for the materials furnished and Work performed shall be assigned, in writing, to the City, and shall be delivered to the Engineer prior to the Acceptance of your performance of the Contract.
- 5. Replace or repair defective materials and workmanship in a manner satisfactory to the Engineer after notice to do so from the Engineer and within the time specified in the notice. If you fail to make such replacements or repairs within the time specified in the notice, the City may perform the replacement or repairs at your expense. If you fail to reimburse the City for the actual costs, your Surety shall be liable for the cost
- 6. Items that shall be warrantied free from defective workmanship and materials for a period longer than 1 year are as follows:

Specified Item	Minimum Warranty Period
Detectable Warning Tile Construction	3 Years of Manufacturer's Warranty
All Work Under SECTION 500 – PIPELINE REHABILITATION	3 Years
Fiber Optic Interconnect Cables	2 Years
Luminaires*	10 Years of Manufacturer's Warranty
LED Signal Modules	3 Years of Manufacturer's Warranty
Field Devices Associated with 700-6.3, "Adaptive Control Note"	See 700-6.3.9, "Warranty"

- \* Provide documentation verifying that the induction luminaire models being offered for the Project are covered by the 10 year warranty.
- 7. If installed, you shall provide the City and property owner a copy of the manufacturer's warranty for private sewer pumps, including the alarm panel and all other accessories.
  - a) You shall involve the manufacturer in the installation and startup as needed to secure any extended warranty required.
  - b) Nothing in here is intended to limit any manufacturer's warranty which provides the City with greater warranty rights than set forth in this section or the Contract Documents.

- c) The warranty shall include all components. The form of the warranty shall be approved by the Engineer in accordance with 3-13.3.2, "Warranty Format Requirements".
- 8. If, during the warranty period, any item of the Work is found to be Defective Work, you shall correct it promptly after receipt of written notice from the City to do so. The warranty period shall be extended with respect to portions of the Work corrected as part of the warranty requirements.

## **3-15.3 Coordination.** To the "WHITEBOOK," ADD the following:

- 2. Contractor shall coordinate with Owner to ensure continuing occupancy of portions of existing building. Owner's operations shall not be disrupted, and contractor shall provide at least 48 hours notices of activities that may affect the Owner's operation or work being done over structurally impaired areas of deck for them to execute occupants from below the affected areas.
- 3. Contractor shall coordinate with Owner, Balboa Park, and City's Resident Engineer to ensure Owner's operation during the building's normal operational hours, Museum's normal business hours, and during Balboa Park event hours are not interrupted. The Balboa Park Federal Building and Museum shall remain operational and open to the public during construction activities.
- 4. Contractor shall ensure that artifacts in the building are protected and secured during construction activities.
- 5. Contractor shall coordinate with the City and submit exhibit of proposed stage area to Resident Engineer for City's approval prior start of re-roofing activities.
- 6. Daily Protection: Coordinate installation of roofing so insulation and other components of roofing system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.

## **3-15.4 Use of Site**. To the "WHITEBOOK," ADD the following:

- 3. Contractor shall provide exhibit of proposed stage area to the Resident Engineer for City's approval prior to the start of re-roofing activities.
- 4. Protect building to be reroofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations. Any damage outside the limits of scope (reroofing) will be repaired or replaced to match existing. Provide fencing as needed to protect general public from tear off debris and roofing activities for the duration of the project.
- 5. Contractor shall maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.

- 6. The building's HVAC units shall not be removed, nor lifted. Any utility shutdown, including HVAC shutdown, shall be coordinated with the City's Resident Engineer and Owner. Contractor shall provide 48 hours' notice of activities that may affect Owner's operation.
- 7. The building's server room shall have air conditioning on at all times, including during construction activities.
- 8. Contractor shall access the roof by contractor furnished stair tower and safe scaffold system to facilitate the work.
- 9. Limit construction loads on roof to rooftop equipment wheel loads and uniformly distributed loads not exceeding recommendations of Contractor's professional engineer based upon site inspection and analysis. Before commencement of work, the Contractor must ensure that any roof to be worked on has the strength and structural integrity to safely support workers (29 CFR 1926.501 (a)(2). If necessary, the Contractor must inspect the roof from the inside of the structure to identify integrity issues.
- 10. Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.
- 11. Hazardous Materials: It is not expected that hazardous materials such as asbestos-containing materials will be encountered in the Work.
  - i. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Resident Engineer and City
  - ii. Hazardous materials will be removed by Owner under a separate contract.

#### 12. Fall Protection:

- i. Identify fall hazard protection plan for workers that are 6 ft or more above the ground or a lower roof level, unprotected roof edges, exposed roof holes / openings, or off ladders.
- ii. Contractor shall provide City with safety plan for review and approval to comply with Cal-OSHA and City safety requirements. Contactor shall provide building diagrams indicating accessible ladders, safety anchorage or tie downs for roofs with and without parapet, fall protection barriers, their access path to the roof, and etc as part of their safety plan. Contractor shall provide safe scaffold system to facilitate the work.

#### **SECTION 4 - CONTROL OF MATERIALS**

## **4-3.6 Preapproved Materials.** To the "WHITEBOOK", ADD the following:

3. You shall submit in writing a list of all products to be incorporated in the Work that are on the AML.

## **4-6 TRADE NAMES.** To the "WHITEBOOK", ADD the following:

11. You shall submit your list of proposed substitutions for an "equal" item **no**later than 5 Working Days after the determination of the Apparent Low

Bidder and on the City's Product Submittal Form available at:

https://www.sandiego.gov/ecp/edocref/

#### **SECTION 5 - LEGAL RELATIONS AND RESPONSIBILITIES**

**5-4 INSURANCE.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

#### 5-4 INSURANCE.

1. The insurance provisions herein shall not be construed to limit your indemnity obligations contained in the Contract.

## 5-4.1 Policies and Procedures.

- You shall procure the insurance described below, at its sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or Subcontractors.
- 2. Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.
- 3. You shall maintain this insurance for the duration of this Contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this Contract. Your liabilities under the Contract, e.g., your indemnity obligations, is not deemed limited to the insurance coverage required by this Contract.
- 4. The payment for insurance shall be included in the Contract Price as bid by you. Except as specifically agreed to by the City in writing, you are not entitled to any additional payment. Do not begin any Work under this Contract until you have provided and the City has approved all required insurance.
- 5. Policies of insurance shall provide that the City is entitled to 30 Days (10 Days for cancellation due to non-payment of premium) prior written notice of cancellation or non-renewal of the policy. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

## 5-4.2 Types of Insurance.

## 5-4.2.1 Commercial General Liability Insurance.

- Commercial General Liability Insurance shall be written on the current version of the ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad.
- 2. The policy shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse), independent contractors, products/completed operations, personal injury and advertising injury, bodily injury, property damage, and liability assumed under an insured's contract (including the tort liability of another assumed in a business contract).
- 3. There shall be no endorsement or modification limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. You shall maintain the same or equivalent insurance for at least 10 years following completion of the Work.
- 4. All costs of defense shall be outside the policy limits. Policy coverage shall be in liability limits of not less than the following:

General Annual Aggregate Limit	Limits of Liability
Other than Products/Completed Operations	\$2,000,000
Products/Completed Operations Aggregate Limit	\$2,000,000
Personal Injury Limit	\$1,000,000
Each Occurrence	\$1,000,000

### 5-4.2.2 Commercial Automobile Liability Insurance.

- 1. You shall provide a policy or policies of Commercial Automobile Liability Insurance written on the current version of the ISO form CA 00 01 12 90 or later version or equivalent form providing coverage at least as broad in the amount of \$1,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned, and hired automobiles ("Any Auto").
- 2. All costs of defense shall be outside the limits of the policy.
- **Facting Requirements.** Except for the State Compensation Insurance Fund, all insurance required by this Contract as described herein shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State, and that have been approved by the City.
- **5-4.3.1 Non-Admitted Carriers.** The City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State and is included on the List of Approved Surplus Lines Insurers (LASLI list).

All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

- **5-4.4 Evidence of Insurance.** Furnish to the City documents e.g., certificates of insurance and endorsements evidencing the insurance required herein, and furnish renewal documentation prior to expiration of this insurance. Each required document shall be signed by the insurer or a person authorized by the insurer to bind coverage on its behalf. We reserve the right to require complete, certified copies of all insurance policies required herein.
- 5-4.5 Policy Endorsements.
- 5-4.5.1 Commercial General Liability Insurance.
- 5-4.5.1.1 Additional Insured.
  - 1. You shall provide at your expense policy endorsement written on the current version of the ISO Occurrence form CG 20 10 11 85 or an equivalent form providing coverage at least as broad.
  - 2. To the fullest extent allowed by law e.g., California Insurance Code §11580.04, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured.
  - 3. The additional insured coverage for projects for which the Engineer's Estimate is \$1,000,000 or more shall include liability arising out of:
    - a) Ongoing operations performed by you or on your behalf,
    - b) your products,
    - c) your Work, e.g., your completed operations performed by you or on your behalf, or
    - d) premises owned, leased, controlled, or used by you.
  - 4. The additional insured coverage for projects for which the Engineer's Estimate is less than \$1,000,000 shall include liability arising out of:
    - a) Ongoing operations performed by you or on your behalf,
    - b) your products, or
    - c) premises owned, leased, controlled, or used by you.
- 5-4.5.1.2 **Primary and Non-Contributory Coverage.** The policy shall be endorsed to provide that the coverage with respect to operations, including the completed operations, if appropriate, of the Named Insured is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives. Further, it shall provide that any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

**5-4.5.1.3 Project General Aggregate Limit.** The policy or policies shall be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work. Only claims payments which arise from the Work shall reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit shall be in addition to the aggregate limit provided for the products-completed operations hazard.

## 5-4.5.2 Commercial Automobile Liability Insurance.

- **Additional Insured.** Unless the policy or policies of Commercial Auto Liability Insurance are written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured, with respect to liability arising out of automobiles owned, leased, hired or borrowed by you or on your behalf. This endorsement is limited to the obligations permitted by California Insurance Code §11580.04.
- **5-4.6 Deductibles and Self-Insured Retentions.** You shall pay for all deductibles and self-insured retentions. You shall disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided.
- **S-4.7 Reservation of Rights.** The City reserves the right, from time to time, to review your insurance coverage, limits, deductibles and self-insured retentions to determine if they are acceptable to the City. The City will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer but not required by this Contract.
- **Notice of Changes to Insurance.** You shall notify the City 30 Days prior to any material change to the policies of insurance provided under this Contract.
- **5-4.9 Excess Insurance.** Policies providing excess coverage shall follow the form of the primary policy or policies e.g., all endorsements.

## 5-4.11 Workers' Compensation Insurance and Employers Liability Insurance.

- 1. In accordance with the provisions of §3700 of the California Labor Code, you shall provide at your expense Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by your failure to comply with the requirements of this section.
- 2. Limits for this insurance shall be not less than the following:

Workers' Compensation	Statutory Employers Liability
Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	\$1,000,000 policy limit

- 3. By signing and returning the Contract you certify that you are aware of the provisions of §3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code and you shall comply with such provisions before commencing the Work as required by §1861 of the California Labor Code.
- **5-4.11.1 Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.
- **5-10.2.1 Public Notice by Contractor.** To the "WHITEBOOK", items 2 and 3, DELETE in their entirety and SUBSTITUTE with the following:
  - 2. No less than 5 Working Days in advance of Project construction activities and utility service interruptions, you shall notify all critical facilities, businesses, institutions, property owners, residents, or any other impacted stakeholders within a minimum 300-foot (90 m) radius of the Project. Verbal and written notifications shall be sent to critical facilities (including but not limited to police stations, fire stations, hospitals, and schools). A copy of written notifications sent to any critical facility shall also be sent to the Resident Engineer. You shall keep records of the people contacted, along with the dates of notification, and shall provide the record to the Engineer upon request. You shall identify all other critical facilities that need to be notified.
  - 3. Furnish and distribute public notices in the form of door hangers using the City's format to all occupants and/or property owners along streets:
    - a) Where Work is to be performed at least Working 5 Working Days before starting construction or survey activities or impacting the community as approved by the Resident Engineer.
    - b) Within 5 Working Days of the completion of your construction activities where Work was performed, you shall distribute public notices in the form of door hangers, which outlines the anticipated dates of Asphalt Resurfacing or Slurry Seal.
    - c) 72 hours in advance of the scheduled resurfacing.
- **5-13 ELECTRONIC COMMUNICATION.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. Virtual Project Manager shall be used on this Contract.
  - 2. You shall post all communications addressed to the Engineer concerning construction including RFIs, submittals, daily logs including the Weekly Statement of Working Days (WSWD), Storm Water, and transmittals to the Virtual Project Manager (VPM) website established for the Projects. This shall not supersede any Federal requirements.

- 3. Maintain a list of scheduled activities including planned and actual execution dates for all major construction activities and milestones defined in the approved Schedule.
- 4. Review and act on all communications addressed to you in the VPM project website.
- 5. A user's guide to the VPM system is available on the City's website and shall be provided to you at the Pre-construction Meeting. Refer to the VPM training videos and forms at the location below:

https://www.sandiego.gov/ecp/edocref/

- 6. Submit the Sensitive Information Authorization Acknowledgement Form and VPM User Agreement located in the VPM user's guide at the Pre-construction Meeting.
- **5-15.1 General.** To the "WHITEBOOK", item 10, DELETE in its entirety and SUBSTITUTE with the following:
  - 10. If your construction activities have encountered flammable liquids or other hazardous substances, you shall ensure that construction staff have the required Hazardous Waste Operations and Emergency Response (HAZWOPER) certification. Construction staff shall include: City Engineers, City Laboratory Technicians, and City staff that perform onsite inspections.
    - a) If your Work encounters flammable liquids or other hazardous substances, you shall be responsible for scheduling training for all construction staff to attend and for submitting verification to the Engineer that construction staff have the required HAZWOPER certification prior to continuing that Work in that area. You shall maintain the HAZWOPER certifications annually until the construction activities triggering the requirement is complete, as approved by the Resident Engineer.

#### SECTION 6 - PROSECUTION AND PROGRESS OF THE WORK

**6-1.1 Construction Schedule.** To the "GREENBOOK", paragraph (1), sentence (1), DELETE in its entirety and SUBSTITUTE with the following:

After notification of award of the Contract and prior to the start of any Work, you shall submit your proposed Cost Loaded Construction Schedule to the Engineer at the pre-construction meeting.

To the "WHITEBOOK", item 1, subsection "e", "h", and "s", DELETE in their entirety and SUBSTITUTE with the following:

e) Monthly progress payments are contingent upon the submittal of an updated Schedule to the Engineer. The Engineer may refuse to process the whole or

- part of any monthly payment if you refuse or fail to provide an acceptable schedule.
- h) Your Schedule shall include 7 Working Days for the Engineer to schedule and conduct a Walk-through inspection and 15 Working Days for the generation of the Punchlist. You shall Work diligently to complete all Punchlist items within 30 Working Days after the Engineer provides the Punchlist.
- s) Submit an updated cash flow forecast with every pay request (for each Project ID or WBS number provided in the Contract) showing periodic and cumulative construction billing amounts for the duration of the Contract Time. If there has been any Extra Work since the last update, include only the approved amounts.
  - Refer to the Sample City Invoice materials in Appendix C Sample City Invoice with Cash Flow Forecast and use the format shown.
  - ii. See also the "Cash Flow Forecast Example" at the location below:
    <a href="https://www.sandiego.gov/ecp/edocref/">https://www.sandiego.gov/ecp/edocref/</a>
- **6-1.1.2 Contracts More Than \$500,000 In Value.** To the "WHITEBOOK", item 1, DELETE in its entirety and SUBSTITUTE with the following:
  - 1. Provide the Schedule to the Engineer in accordance with 6-1.1, "Construction Schedule" and 6-1.2, "Commencement of the Work".

To the "WHITEBOOK", item 2, DELETE in its entirety.

## **6-1.2 Commencement of the Work.** To the "WHITEBOOK", ADD the following:

- 5. You shall submit a Cost Loaded Construction Schedule in accordance with 6-1.1, "Construction Schedule" at the scheduled pre-construction meeting.
- 6. If a Cost Loaded Construction Schedule is not provided, the pre-construction meeting will still be held. The Contract Time shall commence at issuance of the NTP, but you shall be limited to the following activities until the Cost Loaded Construction Schedule has been submitted to the Resident Engineer with no exceptions taken:
  - a) Mobilization of your trailers, associated utility setup, and grading for trailer area
  - b) Permit Procurement
  - c) Fencing and temporary utilities for your storage areas
  - d) Submittal of anticipated critical path submittals

**6-1.5.2 Excusable Non-Compensable Delays.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

## 6-1.5.2 Excusable Non-Compensable and Concurrent Delays.

- 1. The City shall only issue an extension of time for Excusable Delays that meet the requirements of 6-4.2, "Extensions of Time" for the following circumstances:
  - a) Delays resulting from Force Majeure.
  - b) Delays caused by weather.
  - c) Delays caused by changes to County, State, or Federal law.
- 2. When a non-excusable delay is concurrent with an Excusable Delay, you shall not be entitled to an extension of Contract Time for the period the non-excusable delay is concurrent with the Excusable Delay.
- 3. When an Excusable Non-Compensable Delay is concurrent with an Excusable Compensable Delay, you shall be entitled to an extension of Contract Time, but shall not be entitled to compensation for the period the Excusable Non-Compensable Delay is concurrent with the Excusable Compensable Delay.
- **6-4.2 Extensions of Time.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. The Contract Time shall not be modified except by Change Order.
  - 2. You shall notify the City in writing within **1 Working Day** after the occurrence and discovery of an event that impacts the Project Schedule.
    - a) If you believe this event requires a Change Order, you shall submit a written Change Order request with a report to the City that explains the request for Change Order within **5 Working Days**. The Change Order request must include supporting data, a general description of the discovery, the basis for extension, and the estimated length of extension. The City may grant an extension of time, in writing, for the Change Order request if you require more time to gather and analyze data.
  - 3. The Engineer shall not grant an extension of Contract Time in accordance with 6-1.5, "Excusable Delays" unless you demonstrate, through an analysis of the critical path, the following:
    - a) The event causing the delay impacted the activities along the Project's critical path.
    - b) The increases in the time to perform all or part of the Project beyond the Contract Time arose from unforeseeable causes beyond your

control and without your fault or negligence and that all project float has been used.

- 4. Any modifications to the Contract Time will be incorporated into the weekly document that the Engineer issues that stipulates the Contract Time. If you do not agree with this document, submit to the Engineer for review a written protest supporting your objections to the document within 30 Calendar Days after receipt of the statement. Your failure to file a timely protest shall constitute your acceptance of the Engineer's weekly document.
  - a) Your protest will be considered a claim for time extension and shall be subject to 2-10.1, "Claims".
- **6-4.4 Written Notice and Report.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - Your failure to notify the Resident Engineer within 1 Working Day OR provide a Change Order request within 5 Working Days after the event, in accordance with 6-4.2, "Extensions of Time", will be considered grounds for refusal by the City to consider such request if your failure to notify prejudices the City in responding to the event.

#### ADD:

#### 6-6.1.1 Environmental Document.

- The City of San Diego has prepared a Notice of Exemption for Balboa Park Federal Building Improvements, Project No. B-20066-02.06, as referenced in the Contract Appendix. You shall comply with all requirements of the Notice of Exemption as set forth in Appendix A.
- 2. Compliance with the City's environmental document shall be included in the Contract Price, unless separate bid items have been provided.

#### **SECTION 7 - MEASUREMENT AND PAYMENT**

**7-3.1 General.** To the "GREENBOOK" and "WHITEBOOK", paragraph (8), DELETE in its entirety and SUBSTITUTE with the following:

If, within the time fixed by law, a properly executed notice to stop payment is filed with the City, due to your failure to pay for labor or materials used in the Work, all money due for such labor or materials will be withheld from payment in accordance with applicable laws.

To the "WHITEBOOK", ADD the following:

- 1. Unless specified otherwise, the Contract Price includes use, consumer, and other taxes mandated by applicable legal requirements.
- 2. As provided in §7105 of the California Public Contract Code, if the Contract is not financed by revenue bonds, you are not responsible for the cost of

repairing or restoring damage to the Project when damage was proximately caused by an act of God, in excess of 5% of the Contract Price, if the following occur:

- a) The Project damaged was built in accordance with the Contract requirements.
- b) There are no insurance requirements in the Contract for the damages.
- 3. The Lump Sum Bid item for "**Roof Replacement**" shall include all work specified in the Technical Specifications.
- **7-3.2 Partial and Final Payment.** To the "WHITEBOOK", item 1, DELETE in its entirety and SUBSTITUTE with the following:
  - 1. The Final Payment, which is the release of Retention, shall be paid to you after you have successfully submitted the following required documents:
    - a) An affidavit that payrolls and bills for materials, equipment, and other indebtedness connected with the Work for which the City or the City's property might be responsible for or encumbered by.
    - b) A certificate evidencing that insurances required by the Contract Documents shall remain in force after Final Payment is currently in effect and shall not be canceled or allowed to expire until at least a 30 Calendar Days prior written notice has been given to the Engineer.
    - c) Consent of Surety to Final Payment.
    - d) If required by the Engineer, other data establishing payment or satisfaction of obligations such as receipts, releases and waivers of liens, claims, and security interests or encumbrances arising out of the Contract Documents. If a Subcontractor refuses to furnish a release or waiver required by the City, you may furnish a bond satisfactory to the Engineer to indemnify the City against such lien.
    - e) If required in the Contract Documents, the successful completion and submittal of the required reports such as construction demolition, waste recycling, and hydrostatic discharge reports.
    - f) Required EOCP Final Summary Report in accordance with Section 0-12, "Contract Records and Reports", record drawings, operations manuals, test reports, warranty documentation, and UL labels shall be submitted before requesting the release of retention.
    - g) Acceptance of the completed Project by the asset owning Department.

To the "WHITEBOOK", ADD the following:

2. Submit an invoice for payment after you successfully complete the required documents and the City will pay the invoice within 30 Calendar Days. The City will pay 6% annually for late retention payments.

- **7-3.2.1 Application for Progress Payment.** To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:
  - 3. The City shall not pay progress or partial payments until you submit to the Engineer an acceptable updated Schedule. It is solely your responsibility to prepare and submit the Schedule updates.
- **7-3.2.2 Amount of Progress Payments.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. The City will pay 6% annually for late progress payments.
  - 2. Progress payments will be considered "late" if the following occur:
    - a) The City does not pay the contractor within 30 Calendar Days from receipt of an undisputed and properly submitted invoice. A properly submitted payment invoice means that the City has approved for payment the entire invoice amount or if the Resident Engineer has not disputed any portion of the application within 7 Calendar Days of the date of submission.
    - b) The application for payment does not require signing of a Contract Change Order.
  - 3. The Engineer may withhold payment for any of the following reasons:
    - a) Defective or incomplete Work.
    - b) Not providing an updated and accurate Cost Loaded Construction Schedule in accordance with 6-1.1, "Construction Schedule".
    - c) Stop notices, wage orders, or other withholdings required by Applicable Law. Your failure to comply with 5-3.3, "Payroll Records" and the Contractor Registration and Electronic Reporting System requirements of the Contract Documents.
  - 4. The Engineer may back charge the contract for any of the following reasons:
    - a) Defective or incorrect Work not remedied.
    - b) Damage to City property or a third party's property that was caused by you.
    - c) Liquidated Damages.
- **7-3.2.3 Waiver of Claims at Final Payment.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. Your acceptance of Final Payment constitutes a waiver of affirmative Claims by you, except those previously made in writing and identified as unsettled at the time of Final Payment.

- **7-3.2.4 Withholding of Payment and Back Charge.** To the "WHITEBOOK", DELETE in its entirety.
- **7-3.5.1 General.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. Unit Bid prices shall not be subject to adjustment regardless of quantity used, or if none is used, for the following Bid items:
    - a) imported backfill
    - b) shoring
    - c) water services
    - d) house connection sewers
    - e) water pollution control items
  - 2. Upon discovery and prior to the Work, you shall notify the Resident Engineer if there is a change in Bid item quantity that increases the total Contract Price by 5% or \$100,000 or more, whichever is less.
- **7-3.9 Field Orders.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. If the cumulative total of Field Order items of Work does not exceed the "Field Orders" Bid Item, the City shall pay those Field Orders as shown below:

TABLE 7-3.9
FIELD ORDER LIMITS

Contract Price	Maximum Field Order Work Amount
Less than \$250,000	\$7,500
\$250,001 to \$2,000,000	\$25,000
\$2,000,001 to \$5,000,000	\$75,000
\$5,000,001 to \$10,000,000	\$125,000
Greater than \$10,000,000	\$250,000

- 2. Field Order items of Work for contracts greater than \$15,000,000 will require additional approvals from the City prior to its approval by the Resident Engineer.
- 3. The City will issue a Field Order only after the City's acceptance of the cost of the field order amount.
- 4. Field Orders shall not be used to add scope or to include extensions of time related to changes in work.

- 5. If in the event there is a change related to the critical path on the project which necessitates an extension of time and the change amount is within the Field Order limits shown on Table 7-3.9, then a Field Order can be issued to compensate you for the approved costs. Any extensions of time associated with the change shall be included in a subsequent Change Order and no additional compensation shall be granted as part of the change order for the extension of time.
- 6. The unused portions of Field Orders Bid item shall revert to the City upon Acceptance.
- **7-3.11 Compensation Adjustments for Price Index Fluctuations.** To the "WHITEBOOK", ADD the following:
  - 5. This Contract is not subject to the provisions of The "WHITEBOOK" for Compensation Adjustments for Price Index Fluctuations for paving asphalt.
- **7-4.3 Markup.** To the "WHITEBOOK", item 4, DELETE in its entirety and SUBSTITUTE with the following:
  - 4. When a Subcontractor is performing Extra Work, the allowance for overhead and profit shall be applied to the labor, materials, and equipment costs of the Subcontractor as follows:
    - a) Regardless of the number of a Subcontractor's tasks for Extra Work, you may only apply 10% for the first \$50,000 of the Subcontractor's portion of accumulated total cost then 5% for any remaining costs. You shall not apply 10% to any costs after the first \$50,000 of accumulated total costs from performing Extra Work.
    - b) If the accumulated costs of single or subsequent tasks exceed the \$50,000 threshold, you shall instead only apply 5% to any amounts in excess of the \$50,000.
    - c) Regardless of the number of hierarchical tiers of Subcontractors, you may only markup a Subcontractor's Work once.

#### **SECTION 302 - ROADWAY SURFACING**

- **302-4.5 Scheduling, Public Convenience and Traffic Control.** To the "GREENBOOK", paragraphs (1) and (2), DELETE in their entirety and SUBSTITUTE with the following:
  - 1. In addition to the requirements of Part 6, you shall comply with the following:
    - a) At least 5 Working Days prior to commencing the Work, you shall submit your proposed Schedule to the Engineer for approval.

- b) Based upon the approved schedule, you shall notify residents and businesses of the Work and post temporary "No Parking" signs 72 hours in advance.
- c) Requests for changes in the approved Schedule shall be submitted to the Engineer for approval at least 3 Working Days before the street is scheduled to be sealed.

## **SECTION 303 - CONCRETE AND MASONRY CONSTRUCTION**

## **303-5.1.1 General.** To the "WHITEBOOK", ADD the following:

7. For the purposes of this section, the terms "walk" and "access ramp" shall be synonymous with "sidewalk" and "curb ramp and pedestrian ramp", respectively.

#### **SECTION 400 - UTILITIES**

### **400-1 GENERAL.** To the "WHITEBOOK", item 2, ADD the following:

- a) Existing utilities shall not be affected during building operational hours nor affected due to construction activities.
- b) The existing HVAC units shall not be removed, nor lifted.
- c) The building's server room shall have air conditioning on at all times, including during construction activities.
- d) Any utility shutdown, including HVAC shutdown, shall be coordinated with the City's Resident Engineer and Owner. Contractor shall provide 48 hours' notice of activities that may affect Owner's operation.

#### **SECTION 600 - ACCESS**

- **GENERAL.** To the "WHITEBOOK", item 5, DELETE in its entirety and SUBSTITUTE with the following:
  - 5. You shall notify Environmental Services Department via email (trash@sandiego.gov) of street closures affecting the regular scheduled solid waste collection at least 3 Working Days prior to the street closure. Include your business name and phone number, days of closure, time of scheduled closure, and date of anticipated street reopening in the notification.
    - a) You shall verify waste collection schedules via the Environmental Services website at:

http://www.sandiego.gov/environmental-services/collection/index.shtml

- b) You shall comply with the following requirements for trash, recycling, and yard waste collection:
  - i. Provide advance written notice to every property affected by blocked public right of way.

- ii. Coordinate the relocation of trash, recycling, and yard waste containers to an accessible public street for the City's waste collection crews on collection day.
- iii. When necessary, relocate the containers from the blocked streets to the accessible public right of way before the City's collection vehicles arrive to assist with collection on existing schedules. Return the containers to their point of origin to ensure the accuracy of inventory assignment by address.
- c) If the City's crews are unable to provide the citizens with the mandated services due to your failure to comply with these specifications, you shall collect trash, recyclables, and yard waste on the City's schedule and deliver to the City's designated locations. If you fail to perform this Work, you shall incur additional costs for the City to reschedule pick up of an area.

## **SECTION 1001 - CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs)**

## **1001-1 GENERAL.** To the "WHITEBOOK", ADD the following:

Based on a preliminary assessment by the City, this Contract is subject to **Minor WPCP Development and Implementation.** 

# **TECHNICALS**

## Technical Specification for Balboa Federal Park Building Improvement

## DIVISION 01 - SECTION 000101 - PROJECT TITLE PAGE

# PART 1 - PROJECT MANUAL

- 1.1 PROJECT INFORMATION
  - A. Project Name: Balboa Park Federal Building Improvements
  - B. Building: Comic Con Museum
  - C. Address: 2131 Pan American Plaza, San Diego, CA 92101
  - D. Owner: City of San Diego.

END OF SECTION 000101

## DIVISION 07 - SECTION 070150 - PREPARATION FOR RE-ROOFING

#### PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section Includes:

- 1. Roof tear-off.
- 2. Removal of roof membrane, insulation and flashings to substrate.
- 3. Roof replacement preparation.
- 4. Removal and reinstallation of indicated components, accessories, and equipment.

## B. Related Information:

1. Division 07 Section "Sheet Metal Flashing and Trim" for formed metal roof flashings and counterflashings.

#### 1.2 DESCRIPTION OF WORK

- A. Re-roofing preparation Work consists of the following:
  - 1. Preparation for: Balboa Park Federal Building Improvements
    - a. Preparation for: Roof replacement.
    - b. Existing Roof Type: Granular surfaced BUR with Mineral Surfaced Cap sheet.
    - c. Existing Deck Type: Wood deck.
    - d. Roof tear-off.
    - e. Removal and reinstallation of indicated components, accessories, and equipment.
    - f. Removal of base flashings, roof membrane and insulation to wood deck.
- B. Roofing exhibit of work area, see Exhibit A.

## 1.3 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, 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 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.
- B. Existing Membrane Roofing System: Roofing system identified above, including roofing membrane, roof insulation, surfacing, and components and accessories between deck and roofing membrane.
- C. Roof Tear-Off: Properly remove and dispose of existing roofing, flashings and insulation to wood deck.
- D. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- E. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- F. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.

## 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer for refrigerant recovery technician.
- B. Digital Images or Videos: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces, which might be misconstrued as having been damaged by reroofing operations. Submit before Work begins.
- C. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property for dust control. Indicate proposed locations and construction of barriers. Submit fall protection plan and exhibits indicating protection of walkways around the exterior of the building, location of caged and uncaged ladders, safety clips, anchorage, tie-downs for roof edges with and without parapets in accordance with OSHA and City requirements. Provide protection of pathways and building access location from fallen debris and construction related activities.
- D. Schedule of Re-Roofing Preparation Activities: Indicate the following:
  - 1. Detailed sequence of re-roofing preparation work, with starting and ending dates for each activity. Ensure occupants' on-site operations are uninterrupted.
  - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - 4. Contractor shall provide and maintain stair tower to access roof for the duration of the project at City approved location. Contractor shall provide safe scaffold system to

DIVISION 07 - SECTION 070150 - Page 2 of 43 PREPARATION FOR RE-ROOFING

- facilitate the work. Stair tower shall be locked during nonworking hours and shall be inspected by a competent person on a daily basis.
- 5. Contractor shall provide exhibit of proposed stage area to the Resident Engineer for City's approval prior to the start of re-roofing activities.
- 6. Coordination of Owner's continuing occupancy of portions of existing building. Owner's operations shall not be disrupted, and contractor shall provide at least 48 hours notices of activities that may affect the Owner's operation or work being done over structurally impaired areas of deck for them to evacuate occupants from below the affected areas.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Installer of new membrane roofing system.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning membrane roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Reroofing Conference: Conduct conference at Project site.
  - 1. Meet with Owner; Resident Engineer; roofing system manufacturer's representative; roofing Installer including project manager, superintendent, and foreman; and installers whose work interfaces with or affects reroofing including installers of roof accessories and roof-mounted equipment.
  - 2. Review methods and procedures related to roofing system tear-off and replacement including, but not limited to, the following:
    - a. Reroofing preparation, including membrane roofing system manufacturer's written instructions.
    - b. Procedures for salvaging and recycling of demolition and construction waste
    - c. Temporary protection requirements for existing roofing system that is to remain during and after installation.
    - d. Existing roof drains and roof drainage during each stage of reroofing, and roof drain plugging and plug removal requirements.
    - e. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
    - f. Existing deck removal procedures and Owner notifications.
    - g. Condition and acceptance of existing roof deck and base flashing substrate for reuse.
    - h. Structural loading limitations of deck during reroofing.

DIVISION 07 - SECTION 070150 - Page 3 of 43 PREPARATION FOR RE-ROOFING

- i. Base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect reroofing.
- j. HVAC shutdown and sealing of air intakes.
- k. Asbestos removal and discovery of asbestos-containing materials.
- l. Governing regulations and requirements for insurance and certificates if applicable.
- m. Existing conditions that may require notification of Resident Engineer before proceeding.

#### 1.7 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately below reroofing area. Conduct reroofing so Owner's operations will not be disrupted. Provide Owner with not less than 48 hours' notice of activities that may affect Owner's operations.
  - 1. Before working over structurally impaired areas of deck, provide Owner with not less than 48 hours notice to evacuate occupants from below the affected area. Verify that occupants below the work area have been evacuated before proceeding with work over the impaired deck area.
- B. The building's server room shall have air conditioning on at all times, including during roof repair activities.
- C. Any utility shutdown, including HVAC shutdown, shall be coordinated with the City's Resident Engineer and Owner. Contractor shall provide 48 hours' notice of activities that may affect Owner's operation.
- D. Protect building to be reroofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations. Any damage outside the limits of scope (reroofing) will be repaired or replaced to match existing. Provide fencing as needed to protect general public from tear off debris and roofing activities for the duration of the project.
- E. Contractor shall coordinate with the City and submit exhibit of proposed stage area to Resident Engineer for City's approval prior start of re-roofing activities.
- F. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- G. Contractor shall access the roof by contractor furnished stair tower and safe scaffold system to facilitate the work.
- H. HVAC Units shall not be removed, nor lifted. Remove all existing flashing to install new Kee flashing. All HVAC seams and joints shall be cleaned and sealed with an elastomeric duct sealer with polyester reinforcement. Tremply Kee flashing shall be non-liftable and installed per Exhibit B Tremco's detail drawing No. 3 labeled Non-Liftable Tremply Kee Typical

DIVISION 07 - SECTION 070150 - Page 4 of 43 PREPARATION FOR RE-ROOFING

Wood or Skylight Curb Flashing (Blocking Alternate) T-Bar Restrain or of similar detail drawing for an approved equal product.

- I. Limit construction loads on roof to rooftop equipment wheel loads and uniformly distributed loads not exceeding recommendations of Contractor's professional engineer based upon site inspection and analysis. Before commencement of work, the Contractor must ensure that any roof to be worked on has the strength and structural integrity to safely support workers (29 CFR 1926.501 (a)(2). If necessary, the Contractor must inspect the roof from the inside of the structure to identify integrity issues.
- J. Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.
- K. Daily Protection: Coordinate installation of roofing so insulation and other components of roofing system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.
- L. Hazardous Materials: It is not expected that hazardous materials such as asbestos-containing materials will be encountered in the Work.
  - 1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Resident Engineer and City.
    - a. Hazardous materials will be removed by Owner under a separate contract.

#### M. Fall Protection:

- 1. Identify fall hazard protection plan for workers that are 6 ft or more above the ground or a lower roof level, unprotected roof edges, exposed roof holes / openings, or off ladders.
- 2. Contractor shall provide City with safety plan for review and approval to comply with Cal-OSHA and City safety requirements. Contactor shall provide building diagrams indicating accessible ladders, safety anchorage or tie downs for roofs with and without parapet, fall protection barriers, their access path to the roof, and etc as part of their safety plan. Contractor shall provide safe scaffold system to facilitate the work.

#### PART 2 - PRODUCTS

### 2.1 DECK REPAIR/REPLACEMENT MATERIALS

### A. Wood Components:

1. Wood Deck Material: Tongue and Groove Wood Sheeting. Match Existing.

DIVISION 07 - SECTION 070150 - Page 5 of 43 PREPARATION FOR RE-ROOFING 2. Reuse existing wood components that exhibit no signs of deterioration or other conditions detrimental to securement of new roofing system in conformance with specified requirements.

#### **PART 3 - EXECUTION**

#### 3.1 PREPARATION, GENERAL

- A. Pollution Control: Comply with environmental regulations of authorities having jurisdiction. Limit spread of dust and debris.
  - 1. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 2. Remove debris from building roof by chute, hoist, or other device that will convey debris to grade level.
- B. Electrical: Employers must protect workers from electrical hazards by de-energizing the circuits, grounding, or by guarding it effectively by insulation (29 CFR 1926.416(a)(1). See additional requirements related to electrical safety under 29 CFR 1926, Subpart K.
- C. Temporary Weather Protection: During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
- D. Roof Drain Protection: 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.
  - 1. If roof drains are temporarily blocked or unserviceable due to roofing system removal or partial installation of new membrane roofing system, provide alternative drainage method to remove water and eliminate ponding. Do not permit water to enter into or under existing membrane roofing system components that are to remain.
- E. Verify that rooftop utilities and service piping have been shut off before beginning the Work.

## 3.2 ROOF TEAR-OFF

- A. General: Notify Resident Engineer each day of extent of roof tear-off proposed for that day and obtain authorization to proceed.
- B. Roof Tear-Off: Remove existing roofing membrane, insulation, and other membrane roofing system components down to wood deck.

## 3.3 ROOF PREPARATION

A. Inspect roof deck after removal of insulation.

DIVISION 07 - SECTION 070150 - Page 6 of 43 PREPARATION FOR RE-ROOFING

- B. If broken or loose fasteners that secure deck panels to one another or to structure are observed or if deck appears or feels inadequately attached, immediately notify City. Do not proceed with installation until directed by City.
- C. Unsuitable Deck: If deck surface is not suitable for receiving new roofing or if structural integrity of deck is suspect, immediately notify City. Do not proceed with installation until directed by City.

## 3.4 DECK REPAIR/REPLACEMENT

- A. Repair existing deck to provide smooth working surface for installation of roof system.
  - 1. Replace deck that cannot be repaired to sound condition.

## 3.5 RECYCLING OF DEMOLITION AND CONSTRUCTION WASTE

- A. Recycling of Roof Membrane and Insulation: Cut membrane and other components into manageable size, and package for pickup and handling in accordance with recycling vendor's requirements.
- B. Prevent other materials or debris from intermixing with recycled material.
- C. Submit final summary of progress reports, including percentage of recycled waste to quantity of total waste, by weight.

## 3.6 DISPOSAL

- A. Collect demolished materials and place in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
  - 1. Storage or sale of demolished items or materials on-site is not permitted.
- B. Transport and legally dispose of demolished materials off Owner's property.

## 3.7 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by preparation for re-roofing operations. Return adjacent areas to condition existing before operations began.

END OF SECTION 070150

## DIVISION 07 - SECTION 075416 - KETONE ETHYLENE ESTER (KEE) ROOFING

#### PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section Includes:

- 1. Adhered thermoplastic KEE roofing system on wood deck, including:
- 2. Roof insulation (Base layer 2.5" Polyisocyanurate)
- 3. Tapered Polyisocyanurate Crickets in designated areas.
- 4. Roof insulation cover boards (2 layers 1st layer mechanically fastened over Base layers of Isocyanurate, 2nd layer adhered in specified insulation adhesive).
- 5. Walkway material.

#### B. Related Sections:

- 1. Division 07 Section "Preparation for Re-Roofing"
- 2. Division 07 Section "Sheet Metal Flashing and Trim" for shop-formed sheet metal items including roof drainage system items, roof penetration flashings, base and counterflashings and reglets, and formed copings and roof edge metal items.

## 1.2 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D 1079 "Standard Terminology Relating to Roofing and Waterproofing" and glossary in applicable edition of NRCA's "The NRCA Roofing Manual: Membrane Roof Systems" for definition of terms related to roofing work in this Section.

## 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Roofing Conference: Conduct conference at Project site.
  - 1. Meet with Owner, Resident Engineer, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
  - 2. Review drawings and specifications.
  - 3. Review methods and procedures related to roofing installation, including manufacturer's written instructions.

DIVISION 07 SECTION 075416 - Page 1 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- 4. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
- 5. Examine substrate conditions and finishes for compliance with requirements, including flatness and fastening.
- 6. Review structural loading limitations of roof deck during and after roofing.
- 7. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
- 8. Review governing regulations and requirements for insurance and certificates if applicable.
- 9. Review temporary protection requirements for roofing system during and after installation.
- 10. Review roof observation and repair procedures after roofing installation.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Sustainable Design Submittals:
  - 1. Product Test Reports for Solar Reflectance: For roof materials, indicating that roof materials comply with Solar Reflectance Index requirement.
- C. Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other work.
  - 1. Base flashings and membrane terminations.
    - a. Indicate details meet requirements of NRCA required by this Section.
  - 2. Tapered insulation, including slopes and crickets.
  - 3. Roof plan showing types and orientation of roof deck and orientation of membrane roofing and fastening spacing and patterns for mechanically fastened membrane roofing if applicable.
  - 4. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.
- D. Samples for Verification: For the following products:
  - 1. Sheet roofing, of color specified, including T-shaped side and end lap seam.
  - 2. Walkway pads or rolls.

DIVISION 07 SECTION 075416 - Page 2 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- 3. Metal termination bars.
- 4. Thermoplastic Ketone Ethylene Ester (KEE) coated polyester fabric-reinforced fleece-backed sheet color samples.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Contractor's Product Certificate: Submit certificate, indicating products intended for Work of this Section, including product names and numbers and manufacturers' names, with statement indicating that products to be provided meet the requirements of the Contract Documents.
- B. Qualification Data: For Installer, Manufacturer and Roofing Inspector.
  - 1. Include letter from Manufacturer written for this Project indicating approval of Installer.
- C. Manufacturer Certificates: Signed by roofing manufacturer certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
  - 1. Submit evidence of compliance with performance requirements.
  - 2. Product Compatibility: Indicate manufacturer has verified compatibility of roofing system components, including but not limited to: Roofing membrane, flashing sheets, adhesives, and sealants.
- D. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of membrane roofing system.
- E. Chemical Resistance: Provide chemical resistance properties of roof membrane including Jet Fuel.
- F. Warranties: Unexecuted sample copies of special warranties including verification of required quality assurance maintenance inspections at designated intervals during warranty period.
- G. Inspection Reports: Reports of Roofing Inspector. Include weather conditions, description of work performed, tests performed, defective work observed, and corrective actions taken to correct defective work.
  - 1. Submit reports within 24 hours after inspection.

## 1.6 CLOSEOUT SUBMITTALS

- A. Executed copies of warranties.
- B. Maintenance Data: To include in maintenance manuals.

## 1.7 QUALITY ASSURANCE

A. Installer Qualifications: An employer of workers trained and certified by manufacturer, including a full-time on-site supervisor with experience installing products comparable to those

DIVISION 07 SECTION 075416 - Page 3 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- specified, able to communicate verbally with Contractor, Resident Engineer, and employees, and qualified by the manufacturer to install manufacturer's product and furnish warranty of type specified.
- B. Manufacturer Qualifications: Approved manufacturer listed in this Section, UL listed for roofing systems comparable to that specified for this Project, with experience in manufacture of thermoplastic roof membrane products in successful use in similar applications.
- C. Roofing Inspector Qualifications: A technical representative of manufacturer not engaged in the sale of products and experienced in the installation and maintenance of the specified roofing system, qualified to perform roofing observation and inspection specified in Field Quality Control Article, to determine Installer's compliance with the requirements of this Project, and approved by the manufacturer to issue warranty certification. The Roofing Inspector shall be one of the following:
  - 1. An authorized full-time technical employee of the manufacturer.
- D. Manufacturer's Installation Instructions: Obtain and maintain on-site access to manufacturer's written recommendations and instructions for installation of products.

## 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
  - 1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

### 1.9 PROJECT / FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.
- B. Daily Protection: Coordinate installation of roofing so insulation and other components of roofing system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.

DIVISION 07 SECTION 075416 - Page 4 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- 1. Provide tie-offs at end of each day's work to cover exposed roofing and insulation with a course of roofing sheet securely in place with joints and edges sealed.
- 2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing.
- 3. Remove temporary plugs from roof drains at end of each day.
- 4. Remove and discard temporary seals before beginning work on adjoining roofing.

#### 1.10 WARRANTY

- A. Manufacturer's Warranty: Roof System Manufacturer's standard form in which Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within warranty period, as follows.
  - 1. Form of Warranty: Manufacturer's QA NDL Warranty.
  - 2. Scope of Warranty: Work of this Section and including sheet metal details and termination details installed by the roof system Installer and approved by the Roof System Manufacturer. Warranty shall be an entire system.
  - 3. Warranty Period: 30 years from date of completion.
- B. Manufacturer Inspection and Preventive Maintenance Service: To report maintenance responsibilities necessary for preservation of Owner's warranty rights and to perform periodic routine maintenance required, as described in Manufacturer's standard form. The cost of manufacturer's inspections and preventive maintenance is included in the Contract Sum.
  - 1. Scope of Service: Manufacturer's standard form.
  - 2. Reporting: Roof final inspection, Roof Warranty and subsequent warranty inspections shall be maintained in an online database (OLI) by manufacturer for the duration of the warranty period. Building owner, the City, shall have full access to the OLI database.
  - 3. Inspections to occur in following years: 2, 5, 10, 15, 20 and 25 following completion.
- C. Installer Warranty: Installer's warranty signed by Installer, as follows.
  - 1. Form of Warranty: Form acceptable to Roofing Manufacturer and Owner.
  - 2. Scope of Warranty: Work of this Section.
  - 3. Warranty Period: 5 years from date of completion.

DIVISION 07 SECTION 075416 - Page 5 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Basis of Design: The roof system specified in this Section is based upon products of Tremco, Inc., Beachwood, OH, (800) 562-2728, www.tremcoroofing.com that are named in other Part 2 articles. Provide specified products or approved equal.
  - 1. Manufacturers of comparable products: Approved by Resident Engineer no later than 5 Working Days after the determination of the Approved Low Bidder.
- B. Source Limitations: Obtain components for roofing system from same manufacturer as membrane roofing or manufacturer approved by membrane roofing manufacturer.

## 2.2 PERFORMANCE REQUIREMENTS

- A. General Performance: Installed membrane roofing and base flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Membrane roofing and base flashings shall remain watertight.
  - 1. Accelerated Weathering: Roofing system shall withstand 10,000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.
  - 2. Impact Resistance: Roof membrane shall resist impact damage when tested according to ASTM D 3746/C 3746M, ASTM D 4272/D 4272M, or the "Resistance to Foot Traffic Test" in FM Approvals 4470.
- B. Roofing System Design: Provide membrane roofing system that is identical to systems that have been successfully tested by a qualified testing and inspecting agency in accordance with ANSI/FM 4474, UL 580, or UL 1897, and to resist uplift pressures calculated in accordance with ASCE-7 and applicable code.
- C. Flashings and Fastening: Provide base flashings, perimeter flashings, detail flashings and component materials and installation techniques that comply with requirements and recommendations of the following:
  - 1. FM Global 1-49: Loss Prevention Data Sheet for Perimeter Flashings.
  - 2. FM Global 1-29: Loss Prevention Data Sheet for Above Deck Roof Components.
  - 3. NRCA Roofing Manual (Sixth Edition) for construction details and recommendations.
  - 4. SMACNA Architectural Sheet Metal Manual (Seventh Edition) for construction details.
  - 5. Comply with requirements of Division 07 Section "Sheet Metal Flashing and Trim".

DIVISION 07 SECTION 075416 - Page 6 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- D. Exterior Fire-Test Exposure: ASTM E 108, Class A; for application and roof slopes indicated, as determined by testing identical membrane roofing materials by a qualified testing agency. Materials shall be identified with appropriate markings of applicable testing agency.
- E. Fire-Resistance Ratings: Comply with fire-resistance-rated assembly designs indicated on Drawings. Identify products with appropriate markings of applicable testing agency.
  - 1. Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.
- F. Energy Performance: Roofing system shall have an initial solar reflectance index of not less than 0.70 and an emissivity of not less than 0.75 when tested according to CRRC-1.

## 2.3 MATERIALS, GENERAL

- A. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roof membrane manufacturer based on testing and field experience.
- B. Roof material color: Contractor shall coordinate with City's Resident Engineer, Owner, and Asset Owner (Parks and Recreation Department) to determine and obtain approval for the color of roof membrane prior to installation.

## 2.4 THERMOPLASTIC MEMBRANE MATERIALS

#### A. KEE Roof Membrane:

- 1. Thermoplastic Ketone Ethylene Ester (KEE) coated polyester fabric-reinforced fleece-backed sheet, ASTM D6754. KEE roof membrane shall be installed to manufacturer's specifications. Contractor shall coordinate with City's Resident Engineer and Park & Recreation Department, submit color samples to the City and Owner, and obtain City's approval of the color KEE roof membrane prior to installation.
  - a. Basis of design product: TremPly KEE FB Single Ply Roof Membrane or approved equal.
  - b. Breaking Strength, minimum, ASTM D751: Machine direction, 500 lbf (87 kN/m); Cross machine direction 400 lbf (70 kN/m).
  - c. Tear Strength, minimum, ASTM D751: Machine direction, 125 lbf (22 kN/m); Cross machine direction (145 lbf (25 kN/m).
  - d. Elongation at Break, ASTM D751: 20 percent.
  - e. Dynamic Impact/Puncture Resistance, ASTM D5635: Pass.
  - f. Minimum Membrane Thickness, nominal, less backing, ASTM D751: 60 mils (1.5 mm).

DIVISION 07 SECTION 075416 - Page 7 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- g. Thickness over fiber, optical method: 0.016 inches.
- h. Accelerated Weathering, ASTM G155 and ASTM G154: Not greater than 5,000 hr., no cracking or crazing.
- i. Abrasion Resistance, ASTM D3389: Not greater than 2,000 cycles, H-18 wheel, 1,000 g load.
- j. Color: White, Gray, or Tan.
- k. Solar Reflectance Index (SRI), ASTM E1980: 110 (White, initial), 86 (White, 3-yr aged).
- B. Sheet Flashing: Manufacturer's standard smooth-backed sheet flashing of same material, type, reinforcement, thickness, and color as KEE sheet membrane.

#### 2.5 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary membrane roofing materials recommended by roofing system manufacturer for intended use, and compatible with membrane roofing.
  - 1. Liquid-type auxiliary materials shall comply with VOC limits of authorities having jurisdiction.
- B. Membrane Bonding Adhesive:
  - 1. Bonding adhesive, waterborne low-VOC, for bonding KEE fleece-backed single ply membranes and flashings to substrates.
    - a. Basis of design product: TremPly KEE FB WBII Bonding Adhesive or approved equal.
    - b. VOC, maximum, ASTM D3960: 153 g/L.

## C. Flashing Membrane Adhesive:

- 1. Bonding adhesive, solvent based fast drying, VOC-compliant, for bonding KEE smooth-backed single ply membranes and flashings to substrates.
  - a. Basis of design product: TremPly KEE LV Bonding Adhesive or approved equal.
  - b. VOC, maximum, ASTM D 3960: 200 g/L.
- D. Metal Termination Bars: Manufacturer's standard, predrilled stainless-steel or aluminum bars, approximately 1 by 1/8 inch (25 mm by 3 mm) thick; with anchors.
- E. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening components to substrate, and acceptable to membrane roofing system manufacturer.

DIVISION 07 SECTION 075416 - Page 8 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- F. Termination Joint Sealant: Silicone, S, NS, 25 or 50, NT: Single-component, nonsag, plus 25 to 50 percent and minus 25 to 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 25, Use NT, and compatible with adjacent materials.
- G. Prefabricated Pipe Flashings: As recommended by roof membrane manufacturer.
- H. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, lap sealants, termination reglets, and other accessories.

### 2.6 ROOF INSULATION MATERIALS

- A. General: Preformed roof insulation boards manufactured or approved by roofing manufacturer, selected from insulation manufacturer's standard sizes, suitable for application, and of thicknesses indicated.
  - 1. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated, not less than two times the roof slope.
- B. Roof Insulation: Provide roof insulation product in thicknesses indicated in Part 3 as follows:
  - 1. Board Insulation, Polyisocyanurate: CFC- and HCFC- free, with recycled content glass-fiber mat facer on both major surfaces, ASTM C1289 Type II Class 1.
    - a. Basis of design product: Tremco, Trisotech Insulation or approved equal.
    - b. Compressive Strength, ASTM C1621: Grade 3: 25 psi (172 kPa).
    - c. Conditioned Thermal Resistance at 75 deg. F (24 deg. C): 14.4 at 2.5 inches (50.8 mm) thick.
- C. Tapered Insulation: Provide factory-tapered insulation boards fabricated to slope of 1/4 inch per 12 inches (1:48) unless otherwise indicated.
  - 1. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated, not less than two times the roof slope.

#### 2.7 ROOF INSULATION ACCESSORIES

- A. Cover Board:
  - 1. Gypsum panel, glass-mat-faced, ASTM C1177/C1177M. Base Layer
    - a. Basis of design product: Tremco/GP Gypsum DensDeck or approved equal.
    - b. Thickness: 1/4 inch (6 mm). 4' x 8' board

DIVISION 07 SECTION 075416 - Page 9 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- 2. Gypsum panel, glass-mat-faced, primed, ASTM C1177/C1177M. Top Layer
  - a. Basis of design product: Tremco/GP Gypsum DensDeck Prime or approved equal.
  - b. Thickness: 1/4 inch (6 mm). 4' x 4' board
- B. Cover Board Adhesive (top layer):
  - 1. Urethane adhesive, bead-applied, low-rise two-component solvent-free low odor, formulated to adhere roof insulation to substrate.
    - a. Basis of design product: Tremco, Low Rise Foam Insulation Adhesive or approved equal.
    - b. Flame Spread Index, ASTM E84: 10.
    - c. Smoke Developed Index, ASTM E84: 30.
    - d. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 0 g/L.
    - e. Tensile Strength, minimum, ASTM D412: 250 psi (1724 kPa).
    - f. Peel Adhesion, minimum, ASTM D903: 17 lbf/in (2.98 kN/m).
    - g. Flexibility, 70 deg. F (39 deg. C), ASTM D816: Pass.
- C. Tapered Edge Strips: ASTM C 208, Type II, Grade 1, cellulosic-fiber insulation board.
- D. Insulation Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roof insulation and cover boards to substrate, and acceptable to roofing system manufacturer.

# 2.8 WALKWAY MATERIALS

- A. Walkway / Protection Mat Material:
  - 1. Walkway roll, reinforced KEE membrane roll with serrated slip-resistant surface, fabricated for heat welding to compatible KEE membrane surface.
    - a. Basis of design product: TremPly KEE Walkway Roll or approved equal.
    - b. Roll Size: 30 inches by 50 ft (760 mm by 15.2 m).
    - c. Thickness: 0.047 inch (0.6 mm).
    - d. Breaking strength: 56 lbs (9.8 kN/m).
    - e. Color: Light yellow.

DIVISION 07 SECTION 075416 - Page 10 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- 2. Protection mat, reinforced KEE membrane mat with serrated slip-resistant surface and enhanced puncture resistance, fabricated for heat welding to compatible KEE membrane surface.
  - a. Basis of design product: TremPly KEE Protection Mat or approved equal.
  - b. Mat Size: 28 inches by 48 feet (710 mm by 13.1 m).
  - c. Thickness: 0.234 inch (5.9 mm).
  - d. Puncture resistance: 850 lbs (148 kN/m).
  - e. Tear strength: 350 lbs (61 kN/m).
  - f. Color: Yellow.

#### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of roofing system:
  - 1. Verify that roof openings and penetrations are in place and curbs are set and braced and that roof drain bodies are securely clamped in place.
  - 2. Verify that wood cants, blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
  - 3. Wood Roof Deck: Verify that deck is sound and dry and securely fastened with no projecting fasteners and with no adjacent units in excess of 1/16 inch (1.6 mm) out of plane relative to adjoining deck.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.
- B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.
- C. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

DIVISION 07 SECTION 075416 - Page 11 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

## 3.3 INSTALLATION, GENERAL

- A. Install roofing system in accordance with manufacturer's written instructions and approved details.
- B. NRCA Installation Details: Install roofing system in accordance with applicable NRCA Manual Plates and NRCA recommendations; modify as required to comply with manufacturer's approved details and perimeter fastening requirements of FM Global references if applicable.

#### 3.4 INSULATION INSTALLATION

- A. Coordinate installing membrane roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.
- B. Comply with membrane roofing system and insulation manufacturer's written instructions for installing roof insulation.
- C. Tapered Insulation and Crickets: Install tapered insulation under area of roofing to conform to slopes indicated.
  - 1. Where crickets are indicated or required to provide positive slope to drain, make slope of crickets minimum of two times the roof slope and not less than 1/4 inch in 12 inches.
- D. Install insulation under area of roofing to achieve required thickness. Where overall insulation thickness is 2.7 inches (68 mm) or greater, install two or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches (150 mm) in each direction.
  - 1. Flat Insulation System on Sloped Roof Deck: Install insulation at minimum thickness as follows:
    - a. Minimum total thickness of Continuous Insulation: 2.5".
  - 2. Insulation Drain Sumps: Tapered insulation sumps, not less than 2 by 2 feet, sloped to roof drain, with a minimum insulation thickness of not less than one inch less than the Project-stipulated continuous insulation thickness based upon code requirements.
- E. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.
- F. Install insulation with long joints of insulation in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
  - 1. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
- G. Mechanically Fastened Insulation: Install each layer of insulation and secure to deck using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to deck type.

DIVISION 07 SECTION 075416 - Page 12 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- 1. Fasten insulation to resist uplift pressure at corners, perimeter, and field of roof.
- H. Cover Boards: Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches (150 mm) in each direction. Loosely butt cover boards together.
  - 1. Secure cover boards to resist uplift pressure at corners, perimeter, and field of roof.
  - 2. Mechanically fasten 1st cover board layer.
  - 3. Adhere second cover board layer by setting in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining cover board in place.

#### 3.5 ADHERED MEMBRANE ROOFING INSTALLATION

- A. Adhere membrane roofing over area to receive roofing and install according to membrane roofing system manufacturer's written instructions.
- B. Start installation of membrane roofing in presence of membrane roofing system manufacturer's technical personnel.
- C. Accurately align membrane roofing and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.
- D. Water-Based Bonding Adhesive: Apply to substrate at rate required by manufacturer. Install membrane immediately into adhesive, avoiding any air entrapment; do not allow adhesive to dry. Roll membrane into wet adhesive. Do not apply adhesive to splice area of membrane.
- E. In addition to adhering, mechanically fasten membrane roofing securely at terminations, penetrations, and perimeter of roofing.
- F. Apply membrane roofing with side laps shingled with slope of roof deck where possible.
- G. Welded Seams: Clean seam areas, overlap membrane roofing, and hot-air weld side and end laps of membrane roofing and sheet flashings according to manufacturer's written instructions to ensure a watertight seam installation.
  - 1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of sheet membrane.
  - 2. Verify field strength of seams a minimum of twice daily and repair seam sample areas.
  - 3. Repair tears, voids, and lapped seams in roofing that does not comply with requirements.
- H. Spread sealant bed over deck drain flange at roof drains and securely seal membrane roofing in place with clamping ring.
- I. Replace all support blocks with new Durablocks or equivalent, set on KEE protection pads, existing durablocks may be re-used.

DIVISION 07 SECTION 075416 - Page 13 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

- J. Completely repair and reseal all HVAC ductwork joints and plenum drops with solarguard acrylic sealer and polyester reinforcing membrane.
- K. Seal any fasteners or penetrations on existing sheet metal caps with Tremseal Pro.

### 3.6 BASE FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.
- B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.
- D. Clean seam areas, overlap, and firmly roll sheet flashings into the adhesive. Hot-air weld side and end laps to ensure a watertight seam installation.
- E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.
- B. The mechanical equipment will not be removed. For non-liftable existing sheet metal caps, install per **Exhibit B** Tremco's detail drawing No. 3 labeled Non-Liftable Tremply Kee Typical Wood or Skylight Curb Flashing (Blocking Alternate) T-Bar Restrain or of similar detail drawing for an approved equal product.

## 3.7 WALKWAY INSTALLATION

A. Flexible Walkways: Install walkway products leading from roof access rails to and around all rootop units. Heat weld to substrate or adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

## 3.8 FIELD QUALITY CONTROL

- A. Roofing Inspector: Manufacturer shall provide daily job site visits to report on job quality and shall provide City with daily job site progress reports with photos for the duration of the project.
- B. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion.
- C. Repair or remove and replace components of membrane roofing system where inspections indicate that they do not comply with specified requirements.
- D. Additional inspections, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

DIVISION 07 SECTION 075416 - Page 14 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

## 3.9 PROTECTING AND CLEANING

- A. Protect membrane roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Resident Engineer and Owner.
- B. Correct deficiencies in or remove membrane roofing system that does not comply with requirements; repair substrates; and repair or reinstall membrane roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 075416

DIVISION 07 SECTION 075416 - Page 15 of 43 KETONE ETHYLENE ESTER (KEE) ROOFING

#### DIVISION 07 - SECTION 076200.02 - SHEET METAL FLASHING AND TRIM

#### PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section includes:

- 1. Roof drainage sheet metal fabrications.
- 2. Low-slope roof sheet metal fabrications.
- 3. Miscellaneous sheet metal flashing and trim.

## B. Related Requirements:

1. Division 07 low slope membrane roofing section for installing sheet metal flashing and trim integral with roofing and for related warranty requirements.

### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each manufactured product and accessory.
- B. Shop Drawings: For sheet metal flashing and trim.
  - 1. Include plans, elevations, sections, and attachment details.
  - 2. Include identification of material, thickness, weight, and finish for each item and location in Project.
  - 3. Indicate details meet requirements of SMACNA and NRCA required by this Section.
  - 4. Detail formed flashing and trim at scale of not less than 1-1/2 inches per 12 inches (1:10).
- C. Samples for Verification: For each type of exposed finish.

#### 1.3 INFORMATIONAL SUBMITTALS

A. Contractor's Product Certificates: For each type of coping and roof edge flashing that is SPRI ES-1 tested.

#### 1.4 CLOSEOUT SUBMITTALS

A. Warranties: Manufacturer's executed warranty documents. Submit prior to acceptance of Work.

DIVISION 07 SECTION 076200.02 - Page 1 of 43 SHEET METAL FLASHING AND TRIM

## 1.5 QUALITY ASSURANCE

- A. Fabricator Qualifications: Employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance.
  - 1. For copings and roof edge flashings that are SPRI ES-1 tested; fabrication shop shall be listed as able to fabricate required details as tested and approved.

### 1.6 DELIVERY, STORAGE, AND HANDLING

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

### 1.7 WARRANTY

- A. Special Warranty on Finishes: Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
  - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
    - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
    - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
    - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
  - 2. Finish Warranty Period: 20 years from date of Substantial Completion.

## PART 2 - PRODUCTS

## 2.1 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies 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. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Sheet Metal Standard for Flashing and Trim: Comply with NRCA's "The NRCA Roofing Manual" and SMACNA's "Architectural Sheet Metal Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.

DIVISION 07 SECTION 076200.02 - Page 2 of 43 SHEET METAL FLASHING AND TRIM

- C. Flashings and Fastening: Comply with requirements of Division 07 roofing sections. Provide base flashings, perimeter flashings, detail flashings and component materials and installation techniques that comply with requirements and recommendations of the following:
  - 1. FM Global 1-49: "Property Loss Prevention Data Sheet for Perimeter Flashings."
  - 2. FM Global 1-29: "Property Loss Prevention Data Sheet for Above Deck Roof Components."
  - 3. NRCA: "The NRCA Roofing Manual" for construction details and recommendations.
- D. SPRI Wind Design Standard: Manufacture and install copings and roof edge flashings tested in accordance with ANSI/SPRI/FM 4435/ES-1.
- E. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects.

#### 2.2 SHEET METALS

- A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying strippable, temporary protective film before shipping.
- B. Metallic-Coated Steel Sheet: Provide zinc-coated (galvanized) steel sheet according to ASTM A 653/A 653M, G90 (Z275) coating designation or aluminum-zinc alloy-coated steel sheet according to ASTM A 792/A 792M, Class AZ50 (Class AZM150) coating designation, Grade 40 (Grade 275); prepainted by coil-coating process to comply with ASTM A 755/A 755M.
  - 1. Basis of Design Product: Tremco, Inc., TremLock Sheet or approved equal
  - 2. Surface: Smooth, flat.
  - 3. Exposed Coil-Coated Finish:
    - a. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
  - 4. Color: As selected from manufacturer's full range.
  - 5. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with minimum total dry film thickness of 0.5 mil (0.013 mm).

#### 2.3 UNDERLAYMENT MATERIALS

A. Self-Adhering, High-Temperature Sheet: Minimum 30 mils (0.76 mm) thick, consisting of a slip-resistant polyethylene- or polypropylene-film top surface laminated to a layer of butyl- or

DIVISION 07 SECTION 076200.02 - Page 3 of 43 SHEET METAL FLASHING AND TRIM

SBS-modified asphalt adhesive, with release-paper backing; specifically designed to withstand high metal temperatures beneath metal roofing. Provide primer according to written recommendations of underlayment manufacturer.

1. Low-Temperature Flexibility: ASTM D 1970; passes after testing at minus 20 deg F (29 deg C) or lower.

### 2.4 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, protective coatings, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and as recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.
- B. Fasteners: Wood screws, 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.
  - 1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
    - a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating. Provide metal-backed EPDM or PVC sealing washers under heads of exposed fasteners bearing on weather side of metal.
    - b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.
    - c. Spikes and Ferrules: Same material as gutter; with spike with ferrule matching internal gutter width.
  - 2. Fasteners for Zinc-Coated (Galvanized) and Aluminum-Zinc Alloy-Coated Steel Sheet: Series 300 stainless steel or hot-dip galvanized steel according to ASTM A 153/A 153M or ASTM F 2329.
- C. Sealant Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch (13 mm) wide and 1/8 inch (3 mm) thick.
- D. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane at concealed joints and silicone at exposed joints; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
- E. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.
- F. Bituminous Coating: Cold-applied asphalt emulsion according to ASTM D 1187.
- G. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

DIVISION 07 SECTION 076200.02 - Page 4 of 43 SHEET METAL FLASHING AND TRIM

## 2.5 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with details shown and recommendations in cited sheet metal standard that apply to design, dimensions, geometry, metal thickness, and other characteristics of item required. Fabricate sheet metal flashing and trim in shop to greatest extent possible.
  - 1. 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.
  - 2. Obtain field measurements for accurate fit before shop fabrication.
  - 3. Form sheet metal flashing and trim to fit substrates without excessive oil canning, buckling, and tool marks; true to line, levels, and slopes; and with exposed edges folded back to form hems.
  - 4. Conceal fasteners and expansion provisions where possible. Do not use exposed fasteners on faces exposed to view.
- B. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to a tolerance of 1/4 inch in 20 feet (6 mm in 6 m) on slope and location lines and within 1/8-inch (3-mm) offset of adjoining faces and of alignment of matching profiles.
- C. Expansion Provisions: Form metal for thermal expansion of exposed flashing and trim.
  - 1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with butyl sealant concealed within joints.
- D. Sealant Joints: Where movable, nonexpansion-type joints are required, form metal to provide for proper installation of elastomeric sealant according to cited sheet metal standard.
- E. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
- F. Fabricate cleats and attachment devices of sizes as recommended by cited sheet metal standard for application, but not less than thickness of metal being secured.
- G. Seams: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use. Rivet joints where necessary for strength.
- H. Do not use graphite pencils to mark metal surfaces.

### 2.6 LOW-SLOPE ROOF SHEET METAL FABRICATIONS

A. Roof Edge Flashing (Gravel Stop) and Fascia Cap: Fabricate in minimum 96-inch- (2400-mm-) long, but not exceeding 12-foot- (3.6-m-) long sections. Shop fabricate interior and exterior corners.

DIVISION 07 SECTION 076200.02 - Page 5 of 43 SHEET METAL FLASHING AND TRIM

- 1. Joint Style: Butted with expansion space and 6-inch-(150-mm-) wide, concealed splice plate.
- 2. Fabricate from the Following Materials:
  - a. Embedded metal details and scuppers shall be KEE clad metal as require by roof system manufacturer.
- B. Copings: Fabricate in minimum 96-inch- (2400-mm-) long, but not exceeding 12-foot- (3.6-m-) long, sections. Fabricate joint plates of same thickness as copings. Furnish with continuous cleats to support edge of external leg and drill elongated holes for fasteners on interior leg. Miter corners, fasten and seal watertight. Shop fabricate interior and exterior corners.
  - 1. Coping Profile: As indicated, or if not indicated, as selected from SMACNA Manual profiles.
  - 2. Joint Style: Butted with expansion space and 6-inch-(150-mm-) wide, concealed splice plate.
  - 3. Fabricate from the Following Materials:
    - a. Galvanized Steel or Aluminum-Zinc Alloy-Coated Steel: 0.028 inch (0.71 mm) thick.
- C. Cleats for Roof Edge Flashing and Copings:
  - 1. Galvanized Steel or Aluminum-Zinc Alloy-Coated Steel: 0.034 inch (0.85 mm) thick.
- D. Counterflashing: Shop fabricate interior and exterior corners. Fabricate from the following materials:
  - 1. Galvanized Steel or Aluminum-Zinc Alloy-Coated Steel: 0.022 inch (0.56 mm) thick.

## PART 3 - EXECUTION

## 3.1 UNDERLAYMENT INSTALLATION

- A. Self-Adhering Sheet Underlayment: Install self-adhering sheet underlayment, wrinkle free. Prime substrate if recommended by underlayment manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation; use primer for installing underlayment at low temperatures. Apply in shingle fashion to shed water, with end laps of not less than 6 inches (150 mm) staggered 24 inches (600 mm) between courses. Overlap side edges not less than 3-1/2 inches (90 mm). Roll laps and edges with roller. Cover underlayment within 14 days.
- B. Install slip sheet, wrinkle free, over underlayment before installing sheet metal flashing and trim.

DIVISION 07 SECTION 076200.02 - Page 6 of 43 SHEET METAL FLASHING AND TRIM

## 3.2 INSTALLATION, GENERAL

- 1. Install sheet metal flashing and trim to comply with details indicated and recommendations of cited sheet metal standard that apply to installation characteristics required.
- 2. Space cleats not more than 12 inches (300 mm) apart. Attach each cleat with at least two fasteners. Bend tabs over fasteners.
- 3. Do not use graphite pencils to mark metal surfaces.
- B. Metal Protection: Where dissimilar metals contact each other, or where metal contacts pressuretreated wood or other corrosive substrates, protect against galvanic action or corrosion by painting contact surfaces with bituminous coating or by other permanent separation as recommended by sheet metal manufacturer or cited sheet metal standard.
  - 1. Coat concealed side of uncoated-aluminum and stainless steel sheet metal flashing and trim with bituminous coating where flashing and trim contact wood, ferrous metal, or cementitious construction.
  - 2. Underlayment: Where installing sheet metal flashing and trim directly on cementitious or wood substrates, install underlayment and cover with slip sheet.
- C. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at maximum of 10 feet (3 m) with no joints within 24 inches (600 mm) of corner or intersection.
  - 1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with sealant concealed within joints.
- D. Fasteners: Use fastener sizes that penetrate wood blocking or sheathing not less than 1-1/4 inches (32 mm) for nails and not less than 3/4 inch (19 mm) for wood screws.
- E. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.
- F. Seal joints as required for watertight construction.
  - 1. Use sealant-filled joints unless otherwise indicated. Embed hooked flanges of joint members not less than 1 inch (25 mm) into sealant. Form joints to completely conceal sealant. When ambient temperature at time of installation is between 40 and 70 deg F (4 and 21 deg C), set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F (4 deg C).
  - 2. Prepare joints and apply sealants to comply with requirements in Section 079200 "Joint Sealants."

DIVISION 07 SECTION 076200.02 - Page 7 of 43 SHEET METAL FLASHING AND TRIM

- G. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets with solder to width of 1-1/2 inches (38 mm); however, reduce pre-tinning where pre-tinned surface would show in completed Work.
  - 1. Do not solder metallic-coated steel and aluminum sheet.
  - 2. Do not use torches for soldering.

### 3.3 ROOF FLASHING INSTALLATION

- A. Install sheet metal flashing and trim to comply with performance requirements and cited sheet metal standard.
  - 1. Provide concealed fasteners where possible, and set units true to line, levels, and slopes.
  - 2. Install work with laps, joints, and seams that are permanently watertight and weather resistant.
- B. Roof Edge Flashing:
  - 1. Install roof edge flashings in accordance with ANSI/SPRI/FM 4435/ES-1.
- C. Copings:
  - 1. Install copings in accordance with ANSI/SPRI/FM 4435/ES-1.
- D. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing.
  - 1. Insert counterflashing in reglets or receivers and fit tightly to base flashing.
  - 2. Extend counterflashing 4 inches (100 mm) over base flashing.
  - 3. Lap counterflashing joints minimum of 4 inches (100 mm).
- E. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Seal with sealant and clamp flashing to pipes that penetrate roof.

#### 3.4 ERECTION TOLERANCES

A. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerance of 1/4 inch in 20 feet (6 mm in 6 m) on slope and location lines within 1/8-inch (3-mm) offset of adjoining faces and of alignment of matching profiles.

#### 3.5 CLEANING AND PROTECTION

A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.

DIVISION 07 SECTION 076200.02 - Page 8 of 43 SHEET METAL FLASHING AND TRIM

- 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 sheet metal flashing and trim installation, remove unused materials and clean finished surfaces as recommended by sheet metal flashing and trim manufacturer. Maintain sheet metal flashing and trim in 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 076200.02

#### DIVISION 09 - SECTION 099653 - ELASTOMERIC WALL COATINGS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes surface preparation and application of elastomeric coatings to the following exterior vertical substrates:
  - 1. Concrete.
  - 2. Stucco.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Initial Selection: For each type of elastomeric coating.
- C. Samples for Verification: For each type of elastomeric coating indicated, in each color and gloss.
  - 1. Submit Samples on same type of substrate as that to receive application, 8 inches square.
  - 2. Apply coats on Samples in steps to show each separate coat, including primers and block fillers as applicable.
  - 3. Label each coat of each Sample.
  - 4. Label each Sample for location and application area.

## 1.3 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Quantity: Furnish an additional 1 gal. of each material, color, and texture applied.

## 1.4 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  - 1. Owner will select one surface to represent surfaces and conditions for application of each paint system.
    - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft.

DIVISION 09 SECTION 099653 - Page 1 of 43 ELASTOMERIC WALL COATINGS

- b. Other Items: Resident Engineer will designate items or areas required.
- 2. Final approval of color selections will be based on mockups.
- 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  - 1. Maintain containers in clean condition, free of foreign materials and residue.
  - 2. Remove rags and waste from storage areas daily.

### 1.6 FIELD CONDITIONS

- A. Apply coatings only when temperature of surfaces to be coated and ambient air temperatures are between 50 and 90 deg F unless otherwise permitted by manufacturer's written instructions.
- B. Do not apply coatings in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces not in compliance with requirements in Article 3.1 Examination.
- C. Allow wet surfaces to dry thoroughly and attain temperature and conditions specified before starting or continuing coating operation.

#### PART 2 - PRODUCTS

### 2.1 EXTERIOR WATERBORNE, PIGMENTED ACRYLIC ELASTOMERIC COATINGS

- A. Coatings, General: Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 1. For each coat in a paint system, products shall be recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- B. Acrylic Coating, Elastomeric: High-solids breathable acrylic polymer coating formulated for use on masonry, EIFS, stucco and metal substrates.
  - 1. Basis of design product: Tremco, Solargard Hy-Build or approved equal.
  - 2. Tensile Strength at 77 deg. F, (25 deg. C): 375 psi (2585 kPa).
  - 3. Tear Resistance, ASTM D522: 135 lbf/in (23 kN/m).
  - 4. Elongation at 77 deg. F, (25 deg. C) ASTM D2370: 200 percent.

DIVISION 09 SECTION 099653 - Page 2 of 43 ELASTOMERIC WALL COATINGS

- 5. Flexibility at -15 deg F (-26 deg C), ASTM D522: Pass 1/2 inch mandrel bend.
- 6. Solids by volume, minimum ASTM D5201): 50 percent.
- 7. Water Vapor Permeance, ASTM E96: 12 perms.
- 8. Minimum thickness, 2 coat application 16 mils (0.81 mm) wet per coat.
- C. Primer, Masonry: Acrylic primer formulated for use on masonry, EIFS, stucco, and other cementitious surfaces, and wood.
  - 1. Basis of design product: Tremco, Solargard Masonry Primer or approved equal.
  - 2. Flexibility at -15 deg F (-26 deg C), ASTM D1737: Pass 1/8 inch mandrel bend.
  - 3. Solids by volume, percent: 40 percent.
  - 4. VOC: 62 g/L.

#### 2.2 ACCESSORY MATERIALS

- A. Crack Fillers: Elastomeric coating manufacturer's recommended, factory-formulated crack fillers or sealants, including crack filler primers, compatible with substrate and other materials indicated. Solarguard Acyrlic Sealer, Tremseal Pro or approved queal.
- B. Concrete Unit Masonry Block Filler: Elastomeric coating manufacturer's recommended, factory-formulated, high-performance latex block filler compatible with substrate and other materials indicated.

#### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with manufacturer's requirements for maximum moisture content, alkalinity, and other conditions affecting performance of work.
- B. Begin coating only when moisture content of substrate is 12 percent or less when measured with an electronic moisture meter.
- C. Begin coating no sooner than 28 days after substrate is constructed and is visually dry on both sides.
- D. Verify that substrate is within the range of alkalinity recommended by manufacturer.
- E. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.

DIVISION 09 SECTION 099653 - Page 3 of 43 ELASTOMERIC WALL COATINGS

F. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.

#### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in the "MPI Architectural Painting Specification Manual" applicable to substrates and coating systems indicated.
- B. Remove hardware and hardware accessories, plates, machined surfaces, light fixtures, and similar items already installed that are not to be coated. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and coating.
  - 1. After completing coating operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of coatings, including dirt, oil, grease, and incompatible paints and encapsulants. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
  - 1. Remove incompatible primers and reprime substrate with compatible primers as required to produce coating systems indicated.
  - 2. Perform cleaning and coating application so dust and other contaminants from cleaning process will not fall on wet, newly coated surfaces.
- D. Crack Repair: Fill cracks according to manufacturer's written instructions before coating surfaces.

### 3.3 APPLICATION

- A. Apply elastomeric coatings according to manufacturer's written instructions.
  - 1. Use equipment and techniques best suited for substrate and type of material being applied.
  - 2. Coat surfaces behind movable items the same as similar exposed surfaces.
  - 3. Apply each coat separately according to manufacturer's written instructions.
- B. Primers: Apply at a rate to ensure complete coverage.
- C. Block Fillers: Apply at a rate to ensure complete coverage with pores filled.
- D. Elastomeric Finish Coat: Apply in number and thickness of coats indicated in Part 2 product listing.

DIVISION 09 SECTION 099653 - Page 4 of 43 ELASTOMERIC WALL COATINGS

- E. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform finish, color, and appearance.
- F. Apply coatings to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- G. Apply coatings to prepared surfaces as soon as practicable after preparation and before subsequent surface soiling or deterioration.
- H. Spray Application: Use spray equipment for application only when permitted by authorities having jurisdiction. Wherever spray application is used, do not double back with spray equipment to build up film thickness of two coats in one pass.

### 3.4 FIELD QUALITY CONTROL

A. Field Testing and Inspection: Owner reserves the right to engage the services of a qualified testing agency to verify installed thickness of elastomeric coatings.

### 3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from coating application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Resident Engineer, and leave in an undamaged condition.
- D. At completion of construction activities, touch up and restore damaged or defaced coated surfaces.

#### 3.6 ELASTOMERIC COATING SCHEDULE

#### A. Concrete Substrates:

- 1. Elastomeric Coating System:
  - a. Prime Coat: As recommended in writing by topcoat manufacturer.
  - b. Topcoat: Elastomeric, pigmented, exterior, water-based coating.

### B. Concrete Unit Masonry Substrates:

- 1. Elastomeric Coating System:
  - a. Prime Coat: As recommended in writing by topcoat manufacturer.

DIVISION 09 SECTION 099653 - Page 5 of 43 ELASTOMERIC WALL COATINGS

- b. Block Filler: As recommended in writing by topcoat manufacturer.
- c. Topcoat: Elastomeric, pigmented, exterior, water-based coating.

## C. Stucco Substrates:

- 1. Elastomeric Coating System:
  - a. Prime Coat: As recommended in writing by topcoat manufacturer.
  - b. Topcoat: Elastomeric, pigmented, exterior, water-based coating.

END OF SECTION 099653

#### DIVISION 11 - SECTION 112429.01 - FACILITY FALL PROTECTION

#### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Fall protection systems, including:
  - 1. Perimeter Safety Rails, designated locations.

## 1.2 REFERENCES

- A. General: Applicable edition of references cited in this Section is current edition published on date of issue of Project specifications, unless otherwise required by building code in force.
- B. American National Standards Institute (ANSI), www.ansi.org.
  - 1. A 21.1 Safety Requirements for Floor and Wall Openings, Railings and Toe Boards.
  - 2. A 58.1 Minimum Design Loads in Buildings and Other Structures.
  - 3. A 117.1 Accessible and Usable Buildings and Facilities.
- C. Code of Federal Regulations (CFR):
  - 1. 29 CFR 1910.29 Fall protection systems and falling object protection-criteria and practices.
- D. California Occupational Safety & Health Administration (CAL OSHA):
  - 1. 1620 Design of Temporary Railing.
  - 2. 1621 Railings and Toe Boards.
  - 3. 1633 Elevator Shafts to be Guarded.
  - 4. 3209 Standard Guardrails.
  - 5. 3210 Guardrails at Elevated Locations.
  - 6. 3211 Wall Openings.
  - 7. 3212 Floor Openings, Floor Holes and Roofs.
  - 8. 3213 Service Pits and Yard Surface Openings.
  - 9. 3214 Stair Rails and Handrails.

DIVISON 11 SECTION 112429.01 - Page 1 of 43 FACILITY FALL PROTECTION

### 1.3 COORDINATION

- A. Coordinate selection of fall protection and fall restraint devices and attachment provisions to meet City and OSHA safety requirements. Safety program and personal protection equipment shall be provided by the Contractor.
- B. Coordinate layout and location of facility fall protection with the Resident Engineer. Contractor shall provide the Resident Engineer Submit fall protection plan and exhibits indicating protection of walkways around the exterior of the building, location of caged and uncaged ladders, safety clips, anchorage, tie-downs, edge distances to roof edges with and without parapets in accordance with OSHA and City requirements.
- C. Provide non penetrating Cal-OSHA approved fall protection rails between HVAC units and adjacent parapet wall by Tremco / Fibergrate or approved equal. Provide non penetrating roof ladder access gate kits at top edge of all roof ladders by Tremco / Fibergrate or approved equal. Provide manufacturer 20 year warranty on pre-engineered fall protection rails.
- D. Roof shall be equipped with fall protection barriers (aluminum railings) according to OSHA requirements when equipment is less than 10 feet distance from edge of roof parapets. Uncaged ladders shall have safety clips.

### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of fall protection and accessory, including brackets and fasteners.
  - 1. Submit manufacturer's published literature including structural design data, structural properties data, grating load/deflection tables, corrosion resistance tables, certificates of compliance, test reports as applicable, concrete anchor systems and their allowable load tables, and design calculations for systems not sized or designed in the contract documents.
- B. Shop Drawings: Contractor shall provide Shop Drawings to Show locations and layout of fall protection components; include dimensioned plans, elevations, sections, and details of installation.

### 1.5 INFORMATION SUBMITTALS

- A. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, according to ASTM E 894 and ASTM E 935.
- B. Contractor's Certificate: Submit document indicating that Contractor has received and reviewed Owner's Safety Plan requirements related to fall protection installation.
- C. Field quality-control test reports.

DIVISON 11 SECTION 112429.01 - Page 2 of 43 FACILITY FALL PROTECTION

### 1.6 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

## 1.7 QUALITY ASSURANCE

A. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

#### 1.8 PRODUCT DELIVERY AND STORAGE

- A. Deliver manufactured materials in original, unbroken pallets, packages, containers, or bundles bearing the label of the manufacturer. Adhesives, resins and their catalysts and hardeners shall be crated or boxed separately and noted as such to facilitate their movement to a dry indoor storage facility.
- B. Store and handle materials carefully to prevent abrasion, cracking, chipping, twisting, other deformations, and other types of damage.
  - 1. Store adhesives, resins and their catalysts in dry indoor storage facilities, between 70- and 85-degrees F (21 to 29 degrees C) until they are required for use.

#### 1.9 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Three years from date of substantial completion.

#### PART 2 - PRODUCTS

## 2.1 PERFORMANCE REQUIREMENTS

A. Occupational Safety and Health Standards: Provide fall protection components complying with requirements of 29 CFR 1910.23 and 29 CFR 1910.29, including structural performance.

## 2.2 MANUFACTURERS

- A. Basis-of-Design Manufacturer/Products: Subject to compliance with requirements, provide listed products of Fibergrate Composite Structures, Dallas TX, (800) 527-4043. Provide specified products or approved equal
- B. Single Source: Provide fall protection components from a single manufacturer through a single source, unless otherwise indicated.

DIVISON 11 SECTION 112429.01 - Page 3 of 43 FACILITY FALL PROTECTION

### 2.3 ROOF RAILING GUARD

- 1. System Description: Non-penetrating roof guardrail system having a minimum finished height of 42 inches (1067 mm) with a mid-rail installed at 21 inches (533 mm) above the walking surface; including posts, rails, fittings, and counterweights; and having the following characteristics:
  - a. Fiberglass Reinforcement: Continuous roving, continuous strand mat, and surfacing veil.
  - b. Resin: Fire retardant vinyl ester.
  - c. Flexural Strength (Full Section): 70,000 psi (482 MPa).
  - d. Flame Spread: ASTM E 84; 25 or less.
  - e. Color: Yellow, with UV resistant coating.
- 2. Mounting: Compression-mounted to hatch curb.
- 3. Access: Manufacturer's standard self-closing gate.
- B. Miscellaneous Fittings: Galvanized cast iron with and feature 9/16-inch (14 mm) diameter socket head set screws for clamping to the FRP round tube pipes, posts, rails and outriggers.

#### 2.4 FABRICATION

- A. Cut and drill FRP and metal shapes cleanly and accurately. Remove burrs and ease edges. Remove sharp or rough areas on exposed surfaces.
- B. Nonwelded Connections: Connect members with concealed mechanical fasteners and fittings. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.
- C. Form changes in direction by inserting prefabricated elbow fittings.
- D. Close exposed ends of railing members with prefabricated end fittings.

#### 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.
- B. Verify that roof assembly is sound, dry, smooth, clean, sloped for drainage, securely anchored and ready for placement of fall protection.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

DIVISON 11 SECTION 112429.01 - Page 4 of 43 FACILITY FALL PROTECTION

### 3.2 INSTALLATION

- A. Install fall protection to comply with requirements of 29 CFR 1910.29 and authorities having jurisdiction.
- B. Set fall protection components accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
  - 1. Do not weld, cut, or abrade surfaces of components that are coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
  - 2. Set components plumb within a tolerance of 1/8 inch in 3 feet (4 mm in 1 m).
  - 3. Align horizontal members so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet (6 mm in 3.5 m).
- C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

### 3.3 FIELD QUALITY CONTROL

## A. Testing Agency:

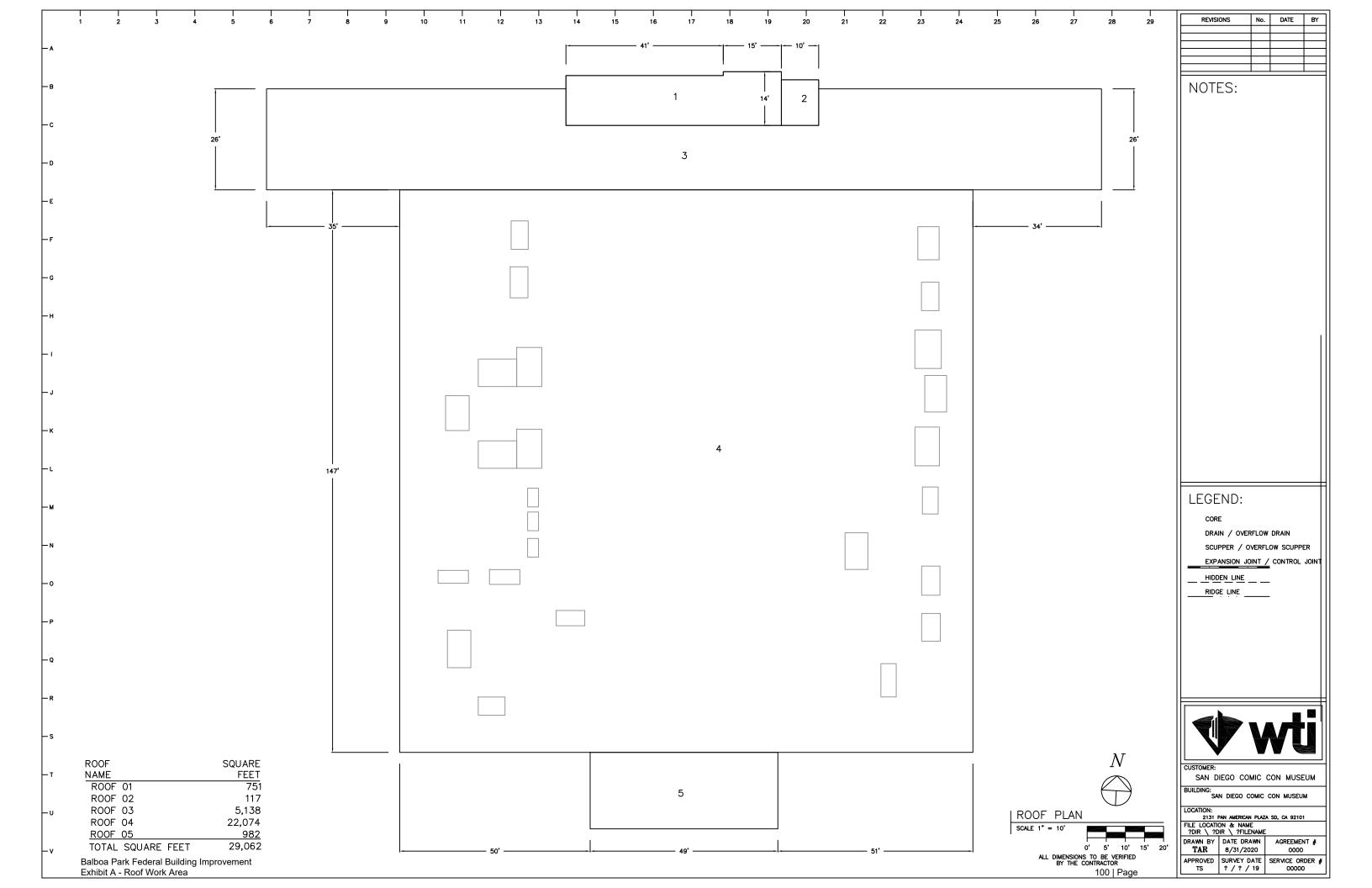
- 1. City may engage a qualified testing agency to perform tests and inspections and to prepare test reports. Payment for these services will be made by Owner.
- B. Extent and Testing Methodology: Testing agency will randomly select completed railing assemblies for testing that are representative of different railing designs and conditions in the completed Work. Test railings according to ASTM E 894 and ASTM E 935 for compliance with performance requirements.
- C. Remove and replace railings where test results indicate that they do not comply with specified requirements unless they can be repaired in a manner satisfactory to Resident Engineer and comply with specified requirements.
- D. Perform additional testing and inspecting, at Contractor's expense, to determine compliance of replaced or additional work with specified requirements.

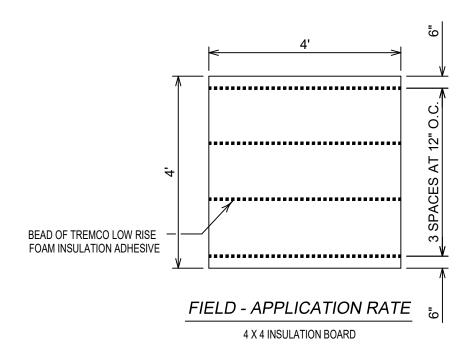
#### 3.4 ADJUSTING AND CLEANING

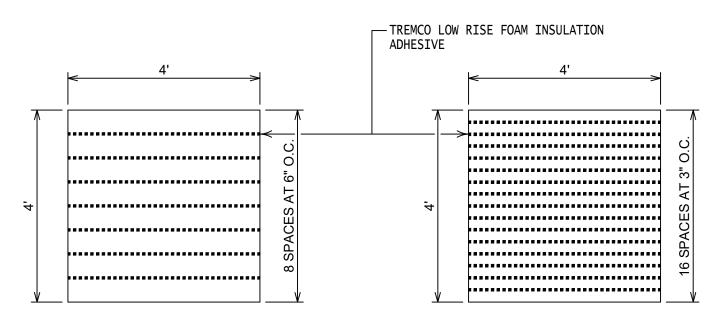
- A. Clean exposed surfaces according to manufacturer's written instructions.
- B. Replace components that have been damaged or that cannot be successfully repaired by finish touchup or similar minor repair procedures.

**END OF SECTION 112429.01** 

DIVISON 11 SECTION 112429.01 - Page 5 of 43 FACILITY FALL PROTECTION







PERIMETERS - APPLICATION RATE

4 X 4 INSULATION BOARD

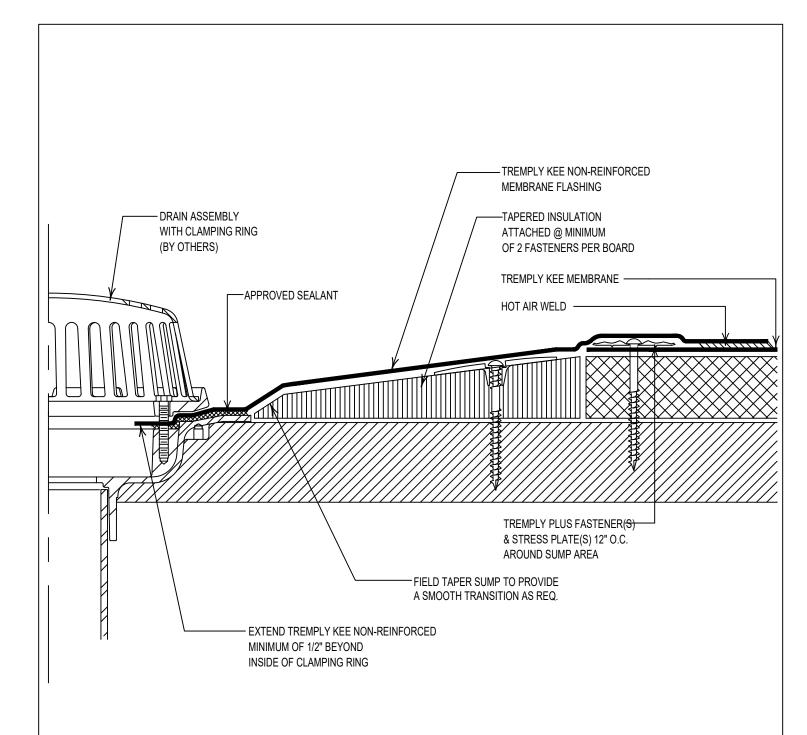
**CORNER - APPLICATION RATE** 

4 X 4 INSULATION BOARD

TREMPLY KEE
TREMCO LOW RISE FOAM
INSULATION ADHESIVE APPLICATION
DWG NO. 06

ROOFING & BUILDING MAINTENANCE

N.T.S.



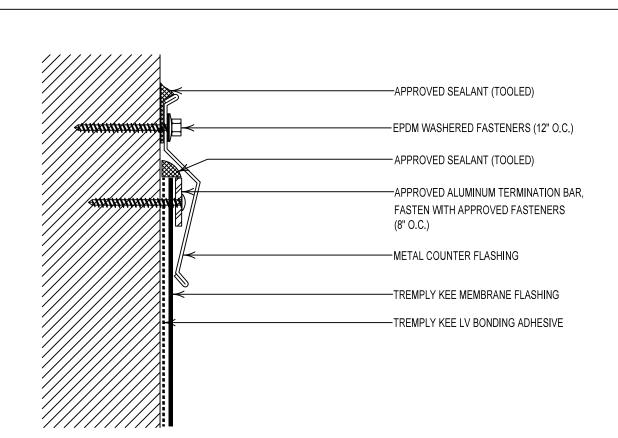
# **NOTES**

1. USE TAPERED ROOF INSULATION (EDGE STRIPS) TO CREATE DRAIN SUMP. IF TOTAL INSULATION THICKNESS IS LESS THAN OR EQUAL TO 1 1/2 IN., TAPER 12 IN. FROM THE DRAIN CENTER. IF TOTAL INSULATION THICKNESS IS GREATER THAN 1 1/2 IN., TAPER 18 IN. FROM DRAIN CENTER.

TREMPLY KEE
TYPICAL DRAIN FLASHING WITH
FLEECEBACK MEMBRANE
DWG NO. 25

N.T.S.

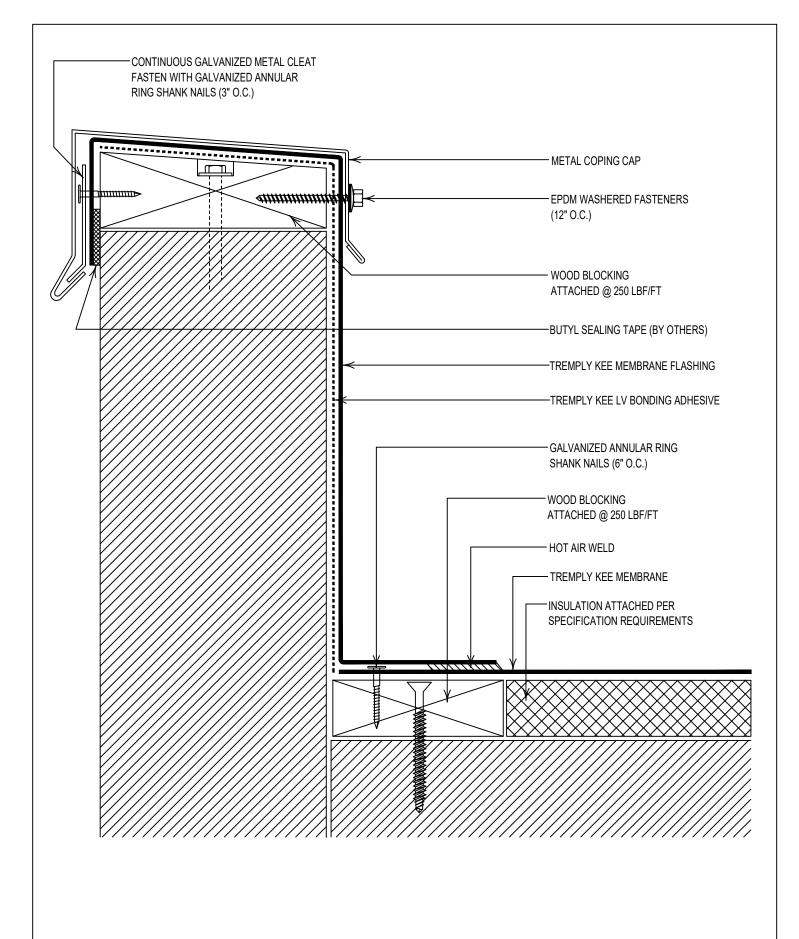




TREMPLY KEE WALL FLASHING TERMINATION'S

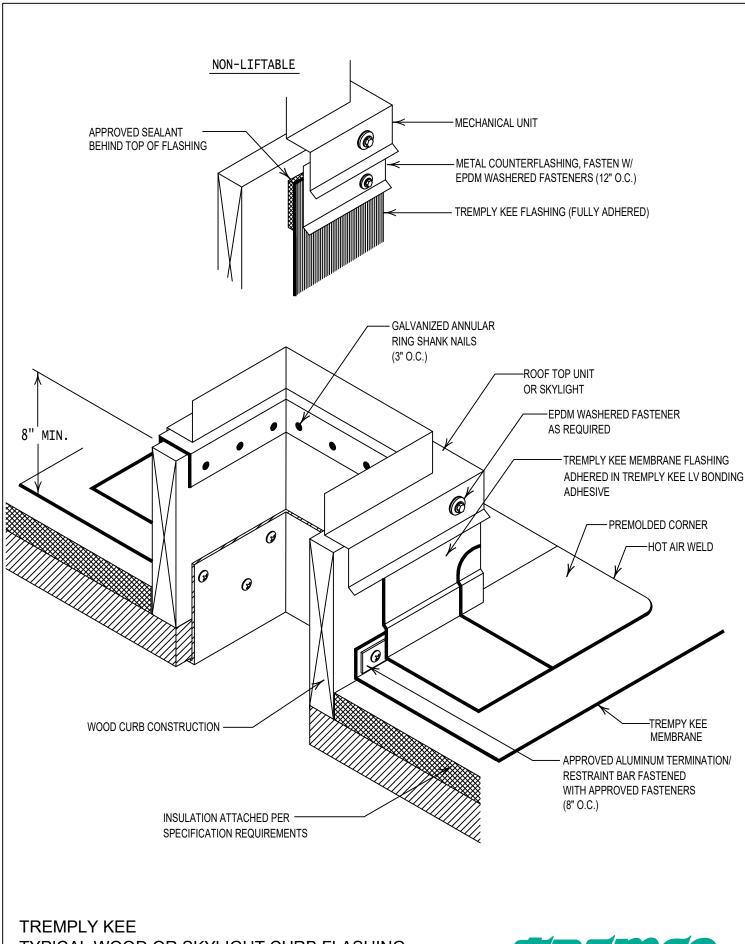
DWG NO. 07 N.T.S.





TREMPLY KEE
WALL FLASHING
WITH METAL CAP FLASHING
DWG NO. 08

TREMCO.
ROOFING & BUILDING MAINTENANCE

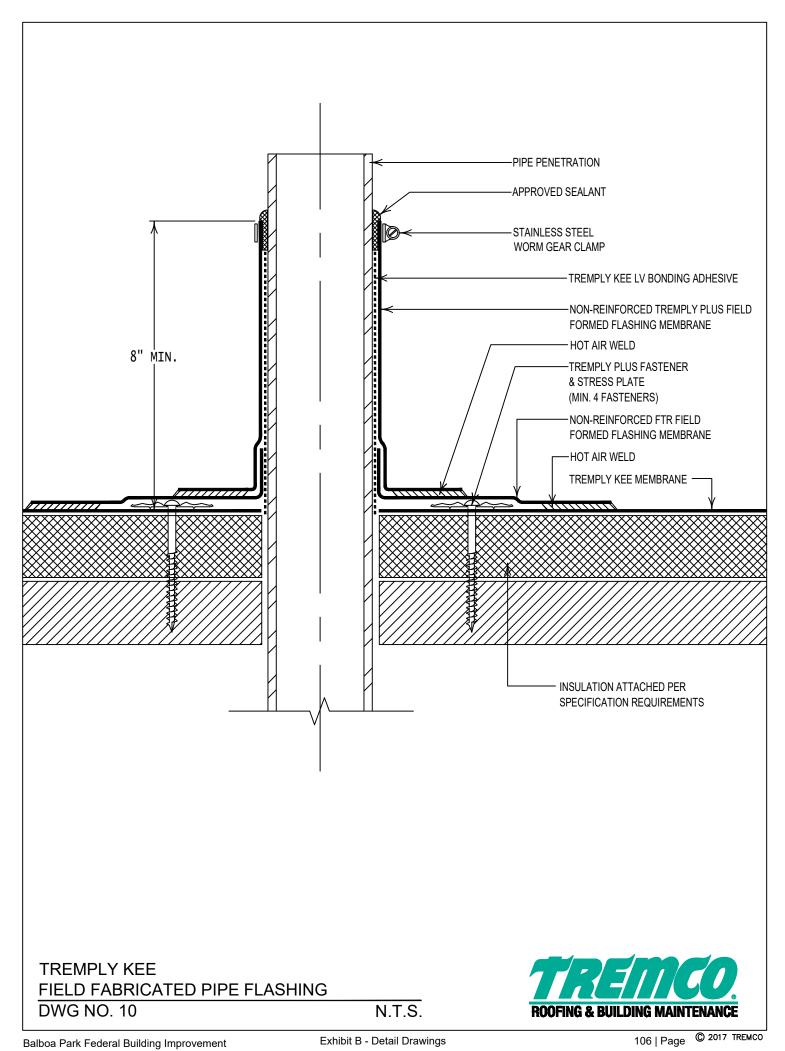


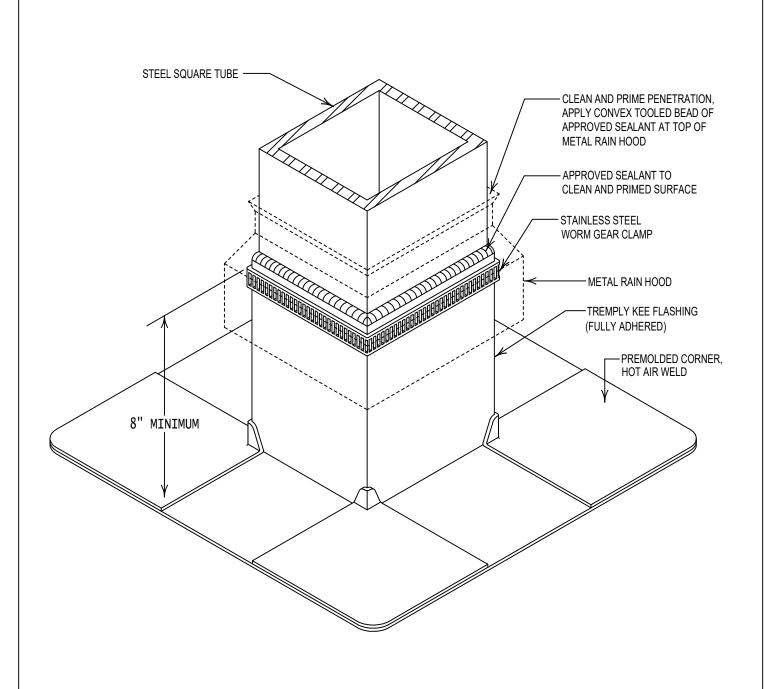
TREMPLY KEE
TYPICAL WOOD OR SKYLIGHT CURB FLASHING
(BLOCKING ALTERNATE) T-BAR RESTRAINT

DWG NO. 03

N.T.S.

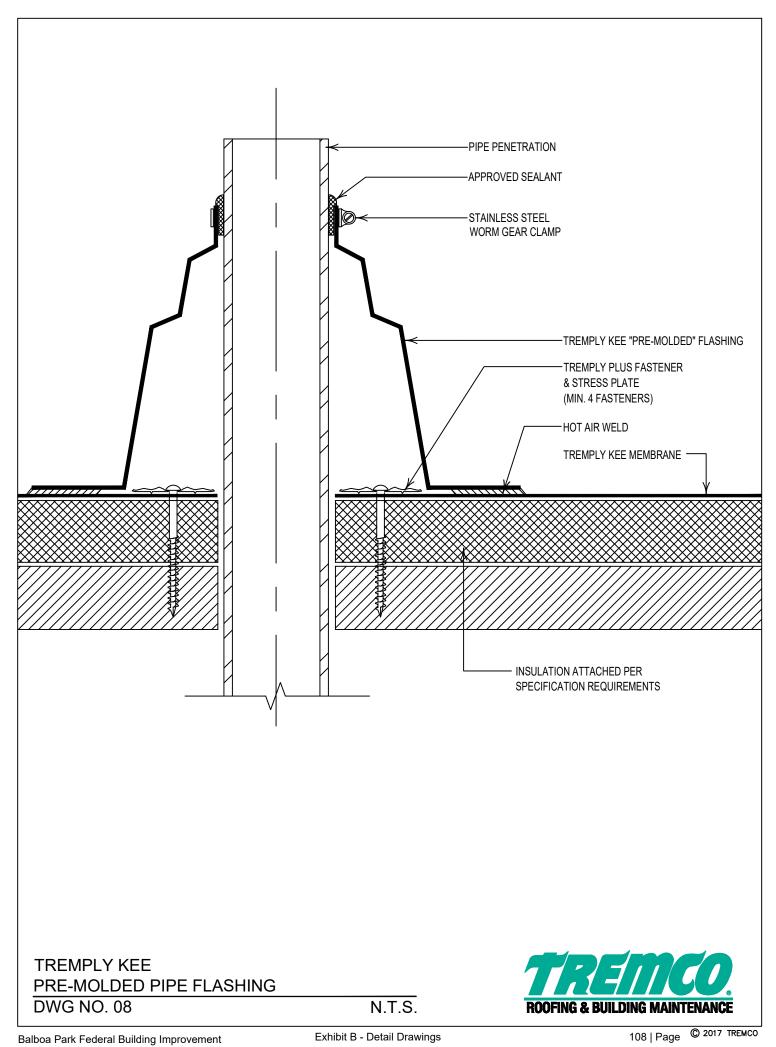


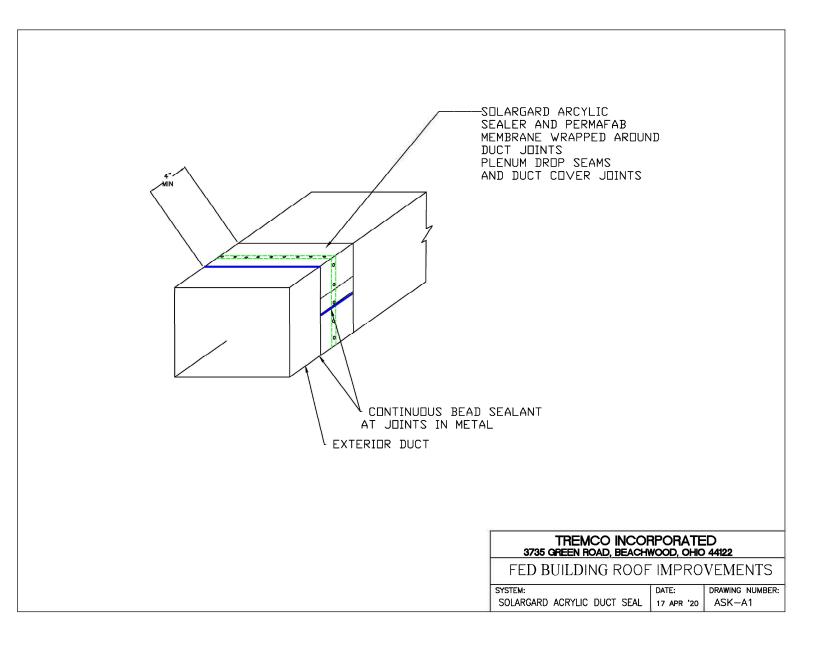




TREMPLY KEE
FIELD FABRICATED SQUARE TUBE FLASHING
DWG NO. 20
N.T.S.







# SUPPLEMENTARY SPECIAL PROVISIONS

**APPENDICES** 

# APPENDIX A

## NOTICE OF EXEMPTION

#### NOTICE OF EXEMPTION

(Check one or both	)		
TO: <u>X</u>	Recorder/County Clerk P.O. Box 1750, MS A-33 1600 Pacific Hwy, Room 260 San Diego, CA 92101-2400  Office of Planning and Research 1400 Tenth Street, Room 121 Sacramento, CA 95814	FROM:	City of San Diego Engineering & Capital Projects Department 525 B Street, Suite 750, MS 908A San Diego, CA 92101

**Project Name:** Balboa Park Federal Building Improvements Project No. / WBS No.: B-20066.02.06

Project Location-Specific: 2131 Pan American Plaza, San Diego, CA 92101, Balboa Park Community Planning Area, Council District 3.

Project Location-City/County: San Diego/San Diego

**Description of nature and purpose of the Project:** The project would include replacement of the roof of the existing building including removal of roofing and insulation on the existing wooden deck; installation of new base flashing at walls, curbs, and penetrations; and new raised curbs for heating, ventilation, and air conditioning (HVAC) equipment.

Name of Public Agency Approving Project: City of San Diego

Name of Person or Agency Carrying Out Project: Gretchen Eichar, 525 B Street, Suite 750, San Diego, CA 92101, (619) 533-4110

#### **Exempt Status:**

- ( ) Ministerial (Sec. 21080(b)(1); 15268);
- ( ) Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ( ) Emergency Project (Sec. 21080(b)(4); 15269 (b), (c), and
- (X) Categorical Exemption: 15301(a), and (d) [Existing Facilities], 15302 [Replacement or Reconstruction], and 15303 [New Construction]
- **Statutory Exemptions:**

Reasons why project is exempt: The City of San Diego conducted an environmental review and determined that the project meets the categorical exemption criteria set forth in CEQA State Guidelines, Section 15301(a) and (d) [Existing Facilities], which allows for the operation, repair, maintenance, or minor alteration of existing public facilities and mechanical equipment, involving negligible or no expansion of existing or former use, including replacement of an existing roof and replacement of deteriorated wood within roof decking; 15302 [Replacement or Reconstruction], which allows for the replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced, including replacement of an existing roof, replacement of wood within roof decking, and new base flashing within the footprint of the existing roof, and; 15303 [New Construction] which allows for installation of small new equipment including new curbs for HVAC equipment; and where the exceptions listed in Section 15300.2 would not apply. All work has been reviewed and determined to be consistent with the U.S. Secretary of the Interior's Standards. No significant impact to an historic resource would occur as a result of the project.

Lead Agency Contact Person: Gretchen Eichar

Telephone: (619) 533-4110

If filed by applicant:

1. Attach certified document of exemption finding.

2. Has a notice of exemption been filed by the public agency approving the project? ( ) Yes ( ) No

It is hereby certified that the City of San Diego has determined the above activity to be exempt from CEQA

Carrie Purcell, Assistant Deputy Director

Check One:

(X) Signed By Lead Agency

Date Received for Filing with County Clerk or OPR:

( ) Signed by Applicant

#### **APPENDIX B**

#### MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE

#### MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE

- 1. Soil amendment
- 2. Fiber mulch
- 3. PVC or PE pipe up to 16 inch diameter
- 4. Stabilizing emulsion
- 5. Lime
- 6. Preformed elastomeric joint seal
- 7. Plain and fabric reinforced elastomeric bearing pads
- 8. Steel reinforced elastomeric bearing pads
- 9. Waterstops (Special Condition)
- 10. Epoxy coated bar reinforcement
- 11. Plain and reinforcing steel
- 12. Structural steel
- 13. Structural timber and lumber
- 14. Treated timber and lumber
- 15. Lumber and timber
- 16. Aluminum pipe and aluminum pipe arch
- 17. Corrugated steel pipe and corrugated steel pipe arch
- 18. Structural metal plate pipe arches and pipe arches
- 19. Perforated steel pipe
- 20. Aluminum underdrain pipe
- 21. Aluminum or steel entrance tapers, pipe downdrains, reducers, coupling bands and slip joints
- 22. Metal target plates
- 23. Paint (traffic striping)
- 24. Conductors
- 25. Painting of electrical equipment
- 26. Electrical components
- 27. Engineering fabric
- 28. Portland Cement
- 29. PCC admixtures
- 30. Minor concrete, asphalt
- 31. Asphalt (oil)
- 32. Liquid asphalt emulsion
- 33. Epoxy

## APPENDIX C

#### SAMPLE CITY INVOICE WITH CASH FLOW FORECAST

City of San Diego, CM&FS Div., 9753 Chesapeake Drive, SD CA 92123

Project Name:

Work Order No or Job Order No.

City Purchase Order No.

Resident Engineer (RE):

RE Phone#: Fax#:

Contractor's Name:

Contractor's Address:

Invoice No.

Invoice No.

Invoice Date:

Billing Period: ( To )

Previous Totals To Date This Estimate Contract Authorization Item # Item Description Totals to Date % / QTY Unit Price Qty Extension Amount % / QTY Amount Amount 0.00 1 2 \$ \$ 0.00% 3 \$ \$ 0.00% 0.00% 4 \$ 5 0.00% \$ 0.00% 6 \$ 0.00% \$ 0.00% 8 \$ \$ \$ 0.00% 5 0.00% 6 \$ \_ 0.00% 0.00% 8 \$ \_ \$ 9 \$ \$ 0.00% -0.00% 10 \$ 11 \$ \$ 0.00% 0.00% \$ \$ 12 \$ \_ 13 \$ \$ 0.00% \_ 14 \$ \$ 0.00% --0.00% 15 \$ 0.00% 16 \$ Field Orders \$ 0.00% 0.00% \$ **CHANGE ORDER No.** \$ 0.00% 0.00% \$ Total Authorized Amount (including approved Change Order) \$ Total Billed

#### **SUMMARY** A. Original Contract Amount I certify that the materials Retention and/or Escrow Payment Schedule \$ B. Approved Change Order #00 Thru #00 have been received by me in \$0.00 Total Retention Required as of this billing (Item E) the quality and quantity specified C. Total Authorized Amount (A+B) Previous Retention Withheld in PO or in Escrow \$0.00 D. Total Billed to Date \$0.00 Add'l Amt to Withhold in PO/Transfer in Escrow: E. Less Total Retention (5% of D ) **Resident Engineer** Amt to Release to Contractor from PO/Escrow: F. Less Total Previous Payments **Construction Engineer** G. Payment Due Less Retention \$0.00 \$0.00 Contractor Signature and Date: H. Remaining Authorized Amount

NOTE: CONTRACTOR TO CALCULATE TO THE 2ND DECIMAL PLACE.

WBS #:	B18108
Date Submitted:	10/10/2018
NTP Date:	3/23/2018
Final Statement of WD Date:	5/23/2020
Contract #:	K-XX-XXXX-XXX-X
Contract Amount:	\$5,617,000

# Construction Cash Flow Forecast "Sewer and Water Group Job 965 (W)"

Year	January	February	March	April	May	June	July	August	September	October	November	December
2018				15,000	25,000	52,000	52,000	100,000	10,000	100,000	100,000	100,000
2019	10,000	10,000	85,000	58,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	1,000,000
2020	100,000	100,000	100,000	1,000,000	1,000,000							
2021												
2022												
2023												
2024												
2025												

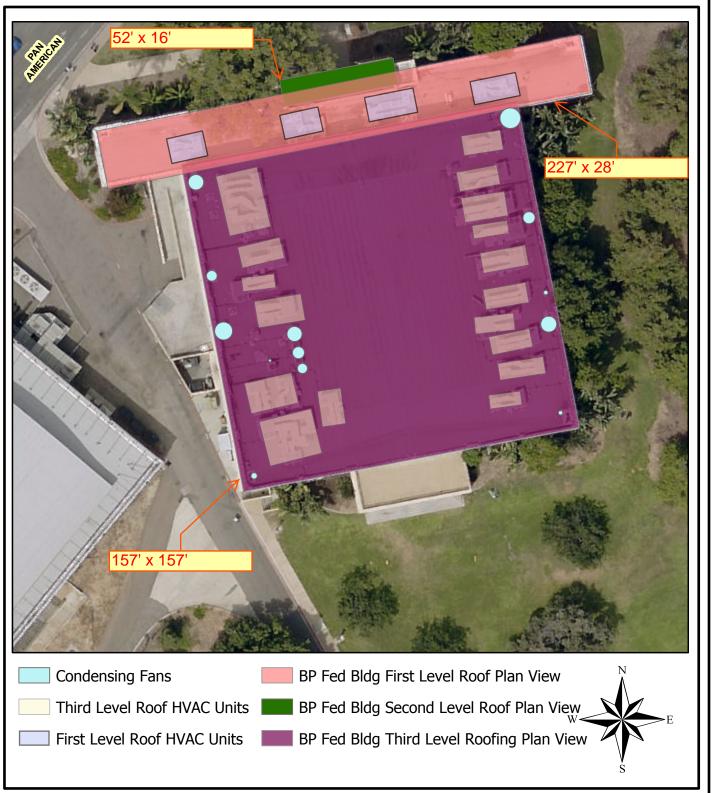
# APPENDIX D LOCATION MAP



# SAN DIEGO Public Works Balboa Park Federal Building

PREDESIGN SENIOR ENGINEER ALAINE JAMES (619) 241-3753 PREDESIGN PROJECT MANAGER MICHELLE GARCIA QUILICIO (619) 533-6635 PREDESIGN PROJECT ENGINEER SILVIA RENDON 619-533-4246 PREDESIGN PROJECT ENGINEER/ DRAFTER JULIUS DELAPENA (619) 533-3765

#### ROOFING LEVELS PLAN VIEW DIMENSIONS



COMMUNITY NAME: Balboa Park

DATE: FEBUARY 12, 2020

**COUNCIL DISTRICT: 3** 



SAP ID: B20066

### APPENDIX E

#### **CONTRACTOR'S NOTES**

#### **CONTRACTOR'S NOTES**

CONST	STRUCTION STORM WATER PROTECTION NOTES							
a.	TOTAL SITE DISTURBANCE AREA: 0.00							
b.	HYDROLOGIC UNIT/WATERSHED: Pueblo San Diego HU/ San Diego Bay Watershed							
C.	HYDRO	ROLOGIC SUBAREA NAME & NO: Lindberg HSA - 908.21						
d.	THE C	THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE						
	X	MWPCP						
		WPCP THE PROJECT IS SUBJECT TO MUNICIPAL STORM WATER PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100						
		WPPP						
		THE PROJECT IS SUBJECT TO MUNICIPAL STORM WATER PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100 AND CONSTRUCTION GENERAL PERMIT ORDER 2009-0009-DWQ AS AMENDED BY ORDER 2010-0014-DWQ AND 2012-0006-DWQ						
		TRADITIONAL: RISK LEVEL 1□ 2□ 3□						
		LUP: RISK TYPE 1□ 2□ 3□						
		CONSTUCTION SITE PRIORITY						
e.		□ ASBS □ HIGH □ MEDIUM ☒ LOW						

1.

### APPENDIX F

#### **PRE-APPROVED STAGING AREA**



# SAN DIEGO Engineering and Capital Projects

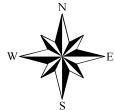
# **Balboa Park Federal Building**

PRE-APPROVED STAGING AREA





Pre-approved Staging Areas



COMMUNITY NAME: Balboa Park

DATE: FEBUARY 12, 2020

Balboa Park Federal Building Improvement Appendix F - Pre-Approved Staging Area

**COUNCIL DISTRICT: 3** 

#### **ATTACHMENT F**

#### **RESERVED**

#### **ATTACHMENT G**

#### **CONTRACT AGREEMENT**

#### CONTRACT AGREEMENT

#### **CONSTRUCTION CONTRACT**

of the Base Bid consisting of an amount not to exc	eed \$				
		(\$		), which	is comprise
Balboa Park Federal Building Improvement;	Bid No.	K-22-2	035-DBB-3;	in the t	otal amoun
herein called "City", and	_, herein	called	"Contractor	" for cor	nstruction c
This contract is made and entered into between 1	THE CITY	OF SAN	l DIEGO, a r	nunicipal	corporation

IN CONSIDERATION of the payments to be made hereunder and the mutual undertakings of the parties hereto, City and Contractor agree as follows:

- 1. The following are incorporated into this contract as though fully set forth herein:
  - a) The attached Faithful Performance and Payment Bonds.
  - b) The attached Proposal included in the Bid documents by the Contractor.
  - c) Reference Standards listed in the Instruction to Bidders and the Supplementary Special Provisions (SSP).
  - d) That certain documents entitled **Balboa Park Federal Building Improvement** on file in the office of the Purchasing & Contracting Department as Document No. **B-20066**, as well as all matters referenced therein.
- The Contractor shall perform and be bound by all the terms and conditions of this contract
  and in strict conformity therewith shall perform and complete in a good and workmanlike
  manner Balboa Park Federal Building Improvement, Bid Number K-22-2035-DBB-3, San
  Diego, California.
- 3. For such performances, the City shall pay to Contractor the amounts set forth at the times and in the manner and with such additions or deductions as are provided for in this contract, and the Contractor shall accept such payment in full satisfaction of all claims incident to such performances.
- 4. No claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
- 5. This contract is effective as of the date that the Mayor or designee signs the agreement and is approved by the City Attorney in accordance with San Diego Charter Section 40.

#### **CONTRACT AGREEMENT (continued)**

Mayor or designee, pursuant to Resolutionauthorizing such execution.	signed by the City of San Diego, acting by and through its No. R or Municipal Code							
THE CITY OF SAN DIEGO	APPROVED AS TO FORM							
	Mara W. Elliott, City Attorney							
Ву	Ву							
Print Name:	Print Name:							
Mayor or designee	Deputy City Attorney							
Date:	Date:							
CONTRACTOR								
Ву								
Print Name:	_							
Title:	_							
Date:	_							
City of San Diego License No.:	_							
State Contractor's License No.:								
DEPARTMENT OF INDUSTRIAL RELATIONS	(DIR) REGISTRATION NUMBER:							

#### **CERTIFICATIONS AND FORMS**

The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certifications, forms and affidavits submitted as part of this bid are true and correct.

#### **BIDDER'S GENERAL INFORMATION**

#### To the City of San Diego:

Pursuant to "Notice Inviting Bids", specifications, and requirements on file with the City Clerk, and subject to all provisions of the Charter and Ordinances of the City of San Diego and applicable laws and regulations of the United States and the State of California, the undersigned hereby proposes to furnish to the City of San Diego, complete at the prices stated herein, the items or services hereinafter mentioned. The undersigned further warrants that this bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

The undersigned bidder(s) further warrants that bidder(s) has thoroughly examined and understands the entire Contract Documents (plans and specifications) and the Bidding Documents therefore, and that by submitting said Bidding Documents as its bid proposal, bidder(s) acknowledges and is bound by the entire Contract Documents, including any addenda issued thereto, as such Contract Documents incorporated by reference in the Bidding Documents.

## NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23 UNITED STATES CODE 112 AND PUBLIC CONTRACT CODE 7106

State of California

County of San Diego

The bidder, being first duly sworn, deposes and says that he or she is authorized by the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

#### **DRUG-FREE WORKPLACE**

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the WHITEBOOK, Section 5-1.3, "Drug-Free Workplace", of the project specifications, and that;

This company has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

#### AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the Americans With Disabilities Act (ADA) outlined in the WHITEBOOK, Section 5-1.2, "Americans with Disabilities Act", of the project specifications, and that:

This company has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

#### **CONTRACTOR STANDARDS - PLEDGE OF COMPLIANCE**

I declare under penalty of perjury that I am authorized to make this certification on behalf of the company submitting this bid/proposal, that as Contractor, I am familiar with the requirements of City of San Diego Municipal Code § 22.3004 regarding Contractor Standards as outlined in the WHITEBOOK, Section 5-1.4, ("Contractor Standards"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3004.

#### **EQUAL BENEFITS ORDINANCE CERTIFICATION**

I declare under penalty of perjury that I am familiar with the requirements of and in compliance with the City of San Diego Municipal Code § 22.4300 regarding Equal Benefits Ordinance.

#### **EQUAL PAY ORDINANCE CERTIFICATION**

Contractor shall comply with the Equal Pay Ordinance (EPO) codified in the San Diego Municipal Code (SDMC) at section 22.4801 through 22.4809, unless compliance is not required based on an exception listed in SDMC section 22.4804.

Contractor shall require all of its subcontractors to certify compliance with the EPO in their written subcontracts.

Contractor must post a notice informing its employees of their rights under the EPO in the workplace or job site.

By signing this Contract with the City of San Diego, Contractor acknowledges the EPO requirements and pledges ongoing compliance with the requirements of SDMC Division 48, section 22.4801 et seq., throughout the duration of this Contract.

#### PRODUCT ENDORSEMENT

I declare under penalty of perjury that I acknowledge and agree to comply with the provisions of City of San Diego Administrative Regulation 95.65, concerning product endorsement. Any advertisement identifying or referring to the City as the user of a product or service requires the prior written approval of the City.

#### **AFFIDAVIT OF DISPOSAL**

(To be submitted upon completion of Construction pursuant to the contracts Certificate of Completion)

WHEREAS, on the	DAY OF		, 2	the undersigned
entered into and execu	uted a contract with the City	of San Diego, a municipal	corporation, for	:
	Balboa Park Fed	eral Building Improveme	ent	
		Project Title)		
as particularly describ	ed in said contract and ide	ntified as Bid No. <b>K-22-2</b>		
'	the Contractor to affirm that disposed of in a legal mann	t "all brush, trash, debris, a	and surplus mate	erials resulting from
terms of said contract,	consideration of the final po the undersigned Contractor n disposed of at the followin	r, does hereby affirm that	_	
and that they have bee	en disposed of according to	all applicable laws and reg	gulations.	
Dated this	DAY OF	,	<del>.</del>	
By:				
By:Contra	actor			
ATTEST:				
State of	County of		_	
County and State, duly	DAY OF, 2 commissioned and sworn,	personally appeared		
whose name is subscri	bed thereto, and acknowled	lged to me that said Contr	actor executed t	he said Release.
Notary Public in and fo	or said County and State			

#### LIST OF SUBCONTRACTORS

#### \*\*\* PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY \*\*\* TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY\*\*\* SEE INSTRUCTIONS TO BIDDERS, FOR FURTHER INFORMATION

In accordance with the requirements of the "Subletting and Subcontracting Fair Practices Act", Section 4100, of the California Public Contract Code (PCC), the Bidder is to list below the name, address and license number of each Subcontractor who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement, in an amount of or in excess of 0.5% of the Contractor's total Bid. Failure to comply with this requirement may result in the Bid being rejected as non-responsive. The Contractor is to list only one Subcontractor for each portion of the Work. The Bidder's attention is directed to the Special Provisions – General; Paragraph 2-3 Subcontracts, which stipulates the percentage of the Work to be performed with the Bidder's own forces. The Bidder is to also list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which the Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB®	WHERE CERTIFIED®	CHECK IF JOINT VENTURE PARTNERSHIP
Name:							
Name:							

①	As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):					
	Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE		
	Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE		
	Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE		
	Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB		
	Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone		
	Service-Disabled Veteran Owned Small Business	SDVOSB				
2	As appropriate, Bidder shall indicate if Subcontractor is certifi	ed by:				
	City of San Diego	CITY	State of California Department of Transportation	CALTRANS		
	California Public Utilities Commission	CPUC				
	State of California's Department of General Services	CADoGS	City of Los Angeles	LA		
	State of California	CA	U.S. Small Business Administration	SBA		

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.

#### NAMED EQUIPMENT/MATERIAL SUPPLIER LIST

#### \*\*\* PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY \*\*\* TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY \*\*\* SEE INSTRUCTIONS TO BIDDERS FOR FURTHER INFORMATION

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB①	WHERE CERTIFIED②
Name:						
Address:						
City:						
State:						
Zip:						
Phone:						
Email:						
Name:						
Address:						
City:						
State:						
Zip:						
Phone:						
Email:						
<ul><li> As appropriate, Bidder shall identify Vendo</li></ul>	I r/Supplier as one of the foll	lowing and shall include	e a valid proof	I of certification (except	for OBE, SLBE and ELBE):	
Certified Minority Business Enterprise		_	-	siness Enterprise	,	WBE
Certified Disadvantaged Business Enterp	rise DE	BE Certif	ied Disabled Ve	eteran Business Enter	orise	DVBE
Other Business Enterprise	OB			ocal Business Enterpr	se	ELBE
Certified Small Local Business Enterprise			Small Disadvantaged Business SDB			
Woman-Owned Small Business			one Business		HL	JBZone
Service-Disabled Veteran Owned Small B	usiness SD	OVOSB				

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.

City of Los Angeles

CITY

CA

CPUC

**CADoGS** 

State of California Department of Transportation

U.S. Small Business Administration

City of San Diego

State of California

California Public Utilities Commission

State of California's Department of General Services

2

As appropriate, Bidder shall indicate if Vendor/Supplier is certified by:

**CALTRANS** 

LA

SBA

#### **ELECTRONICALLY SUBMITTED FORMS**

FAILURE TO FULLY <u>COMPLETE</u> AND SUBMIT ANY OF THE FOLLOWING FORMS WILL DEEM YOUR BID NON-RESPONSIVE.

#### PLANETBIDS WILL NOT ALLOW FOR BID SUBMISSIONS WITHOUT THE ATTACHMENT OF THESE FORMS

The following forms are to be completed by the bidder and submitted (uploaded) electronically with the bid in PlanetBids.

- A. BID BOND See Instructions to Bidders, Bidders Guarantee of Good Faith (Bid Security) for further instructions
- **B. CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS**
- C. MANDATORY DISCLOSURE OF BUSINESS INTERESTS FORM
- D. DEBARMENT AND SUSPENSION CERTIFICATION FOR PRIME CONTRACTOR
- E. DEBARMENT AND SUSPENSION CERTIFICATION FOR SUBCONTRACTORS, SUPPLIERS AND MANUFACTURERS

#### **BID BOND**

# See Instructions to Bidders, Bidder Guarantee of Good Faith (Bid Security)

KNOW ALL MEN BY THESE PRESENTS,									
That		as Principal,							
and		as Surety, are held							
and firmly bound unto The City of San Diego hereinafter called "OWNER," in the sum of <b>10% OF THE TOTAL BID AMOUNT</b> for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.									
NOW THEREFORE, if said Principal is awarded a conthe manner required in the "Notice Inviting Bids" agreement bound with said Contract Documents, furnishes the required Performance Bond and Payvoid, otherwise it shall remain in full force and effes said OWNER and OWNER prevails, said Surety shall including a reasonable attorney's fee to be fixed by	enters into a written Aurnishes the required comment Bond, then this coet. In the event suit is long all costs incurred by	Agreement on the form of ertificates of insurance, and obligation shall be null and brought upon this bond by							
SIGNED AND SEALED, this	day of	, 20							
(SEAL) (Principal)	(Su	(SEAL) rety)							
By:	Ву:								
(Signature)	(Signature)								
(SEAL AND NOTARIAL ACKNO	OWLEDGEMENT OF SUR	ETY)							

#### **CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS**

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

CHECK ONE E	BOX ONLY.				
	a complaint		egal administi	rative proc	has NOT been the subject o eeding alleging that Bidde uppliers.
	The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidde discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:				
DATE OF CLAIM	Location	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL ACTION TAKEN
Contractor N	ame:				
Certified By	Title Name				
		INGITIC		Date _	
	<del></del>	Signature			

**USE ADDITIONAL FORMS AS NECESSARY** 

#### **Mandatory Disclosure of Business Interests Form**

#### **BIDDER/PROPOSER INFORMATION**

Legal Name		DBA		
Street Address City		State Zip		
			•	
Contact Person, Title		Phone	Fax	

Provide the name, identity, and precise nature of the interest\* of all persons who are directly or indirectly involved\*\* in this proposed transaction (SDMC § 21.0103).

- \* The precise nature of the interest includes:
- the percentage ownership interest in a party to the transaction,
- the percentage ownership interest in any firm, corporation, or partnership that will receive funds from the
- transaction, the value of any financial interest in the transaction,
- any contingent interest in the transaction and the value of such interest should the contingency be satisfied, and any
- philanthropic, scientific, artistic, or property interest in the transaction.
- \*\* Directly or indirectly involved means pursuing the transaction by:
- communicating or negotiating with City officers or employees,
- submitting or preparing applications, bids, proposals or other documents for purposes of contracting with the City,
- or directing or supervising the actions of persons engaged in the above activity.

Name	Title/Position			
City and State of Residence	Employer (if different than Bidder/Proposer)			
Interest in the transaction				

Name	Title/Position				
City and State of Residence	Employer (if different than Bidder/Proposer)				
Interest in the transaction					

#### \* Use Additional Pages if Necessary \*

Under penalty of perjury under the laws of the State of California, I certify that I am responsible for the completeness and accuracy of the responses contained herein, and that all information provided is true, full and complete to the best of my knowledge and belief. I agree to provide written notice to the Mayor or Designee within five (5) business days if, at any time, I learn that any portion of this Mandatory Disclosure of Business Interests Form requires an updated response. Failure to timely provide the Mayor or Designee with written notice is grounds for Contract termination.

Print Name, Title	Signature	Date

#### **DEBARMENT AND SUSPENSION CERTIFICATION**

#### PRIME CONTRACTOR

#### FAILURE TO COMPLETE AND SUBMIT AT TIME OF BID SHALL RENDER BID NON-RESPONSIVE

#### **EFFECT OF DEBARMENT OR SUSPENSION**

To promote integrity in the City's contracting processes and to protect the public interest, the City shall only enter into contracts with responsible- bidders and contractors. In accordance with San Diego Municipal Code §22.0814 (a): Bidders and contractors who have been debarred or suspended are excluded from submitting bids, submitting responses to requests for proposal or qualifications, receiving contract awards, executing contracts, participating as a subcontractor, employee, agent or representative of another *person* contracting with the City.

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s).

NAME	TITLE
	****
	a corporation, state secretary, treasurer, and manager thereof, lividual co-partners composing firm; if Bidder or other interested
The Bidder, under penalty of perjury, certifies that, except as a capacity of owner, partner, director, officer, manager:	noted below, he/she or any person associated therewith in the
<ul> <li>Is not currently under suspension, debarment, volur State or local agency;</li> </ul>	ntary exclusion, or determination of ineligibility by any Federal,
<ul> <li>has not been suspended, debarred, voluntarily excluded within the past 3 years;</li> </ul>	led or determined ineligible by any Federal, State or local agency
does not have a proposed debarment pending; and	
<ul> <li>has not been indicted, convicted, or had a civil judgn any matter involving fraud or official misconduct with</li> </ul>	nent rendered against it by a court of competent jurisdiction in in the past 3 years.
If there are any exceptions to this certification, insert the excep	otions in the following space.
Exceptions will be considered in determining bidder responsib applies, initiating agency, and dates of action.	ility. For any exception noted above, indicate below to whom it
Contractor Name:	
Certified By	Title

**NOTE**: Providing false information may result in criminal prosecution or administrative sanctions.

Date \_\_\_

Name

Signature

#### **DEBARMENT AND SUSPENSION CERTIFICATION**

## SUBCONTRACTORS, SUPPLIERS AND MANUFACTURERS \*TO BE COMPLETED BY BIDDER\*

#### FAILURE TO COMPLETE AND SUBMIT AT TIME OF BID SHALL RENDER BID NON-RESPONSIVE

Names of the Principal individual owner(s)

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s) for their subcontractor/supplier/manufacturers.

Please	indicate if principal owner is serv	ving in the capac	city of <b>subcontract</b>	or, supplier, and/or	manufacturer:
	SUBCONTRACTOR		SUPPLIER		MANUFACTURER
	NAME			TITI	.E
	SUBCONTRACTOR		SUPPLIER		MANUFACTURER
	NAME			TITI	LE .
]	SUBCONTRACTOR		SUPPLIER		MANUFACTURER
	NAME			TITI	LE .
	SUBCONTRACTOR		SUPPLIER		MANUFACTURER
	NAME			TITI	.E
ontra	ctor Name:				
ertifie	ed By			Title	
		Name			
				Date	
ignat	ure				

\*\*USE ADDITIONAL FORMS AS NECESSARY\*\*