ADDENDUM NO. 2

TO THE CONTRACT DOCUMENTS

FOR

DAVIDSON ELEMENTARY SCHOOL - SINGLE POINT ENTRY

FOR THE

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

777 North F Street
San Bernardino, CA 92410

DSA No. 04-118593       File No. 36-55       RCA Job No. 1-78-26

NOTICE TO BIDDERS

This Addendum forms a part of the Contract and modifies the original documents DSA Approved on November 14, 2019. It is intended that all work affected by the following modifications shall conform with related provisions and general conditions of the contract of the original drawings and specifications. Modify the following items wherever appearing in any drawing or sections of the specifications. Acknowledge receipt of Addendum No. 2 in the space provided on the Bid Form. Failure to do so may subject bidder to disqualification.

GENERAL ITEMS

Item No. 2.1 General Items:
   2.1.1 The Engineer’s Estimate is between $350,000 to $450,000.

CHANGES TO THE SPECIFICATIONS

Item No. 2.2 Reference Attachment 1 - Bid Form:
   2.2.1 Replace Attachment 1 - Bid Form in its entirety per attached.

Item No. 2.3 Reference Section 01 30 00 - Administrative Requirements:
   2.3.1 Add attached Submittal / Shop Drawing Transmittal in its entirety. Submittals sent for review without signed Submittal / Shop Drawing Transmittal shall be deemed incomplete and will be returned to contractor unreviewed.

Item No. 2.4 Reference Section 01 52 00 - Construction Facilities:
   2.4.1 Temporary construction lay-down area shall be per attached Exhibit 01 52 00.

Item No. 2.5 Reference New Section 07 01 50.20 - Roofing, Restoration, Patch and Repair:
   2.5.1 Add attached new Section 07 01 50.20 in its entirety.
Item No. 2.6  Reference Section 08 71 00 - Door Hardware:
   2.6.1 Hardware Schedule revised per attached revised Section 08 71 00.

Item No. 2.7  Reference Section 08 80 00 - Glazing:
   2.7.1 Add Plastic Films to section per attached revised Section 08 80 00.

Item No. 2.8  Reference New Section 27 53 13 - Clock System:
   2.8.1 Add attached new Section 27 53 13 in its entirety.

Item No. 2.9  Reference Section 28 13 53.11 - Network Compatible Intercom (IX System):
   2.9.1 Replace section in its entirety per attached Section 28 13 53.11.

CHANGES TO THE DRAWINGS

Item No. 2.10  Reference Sheet C-3.1:
   2.10.1 Added bollards and revised landscape area near Admin entry per attached Sketch CSK-02.00.

Item No. 2.11  Reference Sheet C-4.1:
   2.11.1 Line data table revised to reflect site plan updates per attached Sketch CSK-02.01.

Item No. 2.12  Reference Sheet LI-1:
   2.12.1 Irrigation plan revised to reflect planter changes per attached Sketch LSK-2.1.

Item No. 2.13  Reference Sheet LP-1:
   2.13.1 Planting plan revised per attached Sketch LSK-2.2.

Item No. 2.14  Reference Sheet AS-1.0:
   2.14.1 Revise size of Gate G1 to be (N) 7'-6” X 4'-0” (PR).

Item No. 2.15  Reference Sheet ASD-1.1:
   2.15.1 Clarifying notes added for existing features and extents of new and demo work revised per clouded areas of attached revised Sheet ASD-1.1.

Item No. 2.16  Reference Sheet ASD-1.2:
   2.16.1 Add new Details 6 and 7 per attached Sketch ASK-02.01.

Item No. 2.17  Reference Sheet ASD-1.3:
   2.17.1 Detail 5 height of curb clarified to vary (refer to Civil for applicable curb heights) and Detail 17 replaced in its entirety per attached Sketch ASK-02.02.
   2.17.2 Detail 7, dimension of center post to be verified in field.

Item No. 2.18  Reference Sheet A1-1.0:
   2.18.1 Sheet revised per clouded areas of attached Sheet A1-1.0 and as described below:
   a. Detail 3, Note 2 added clarifying installation heights and Keynote 22.403 added
   b. Detail 4, Keynotes revised
   c. Detail 5, Accent Wall clarified to be Elevation 4
   d. Detail 7, Note 2 added clarifying installation heights.
   e. Detail 22, Note added to remove areas of dry rot.
   f. Detail 24:
      Mow curb added at planter against building wall
      Note added for roller shade locations
      Planter area reduces adjacent to Door 101A and Keynote 27.400 for Airphone added
      Circulation desk revised
      Keynotes clarified at Staff Restroom 104
   g. Detail 25, Note added clarifying installation heights and Keynotes added.
Item No. 2.19  Reference Sheet A1-2.1:

2.19.1 Sheet revised per clouded areas of attached Sheet A1-2.1 and as described below:
   a. Detail 1, note added.
   b. Detail 2:
      Dimensions clarified
      Keynote 05.104 added
      Light Fixture Type revised

Item No. 2.20  Reference Sheet A1-4.1:

2.20.1 Sheet revised per clouded areas of attached Sheet A1-4.1 and as described below:
   a. Detail 5, revise casework and graphics layouts
   b. Detail 8, revise Type 102 casework to be Type 211 at Elevation 13
   c. Detail 24, desk layout reversed

Item No. 2.21  Reference Sheet A1-5.1:

2.21.1 Elevations, Keynotes and Legend revised per clouded areas of attached revised Sheet A1-5.1.

Item No. 2.22  Reference Sheet A1-8.1:

2.22.1 Detail 13, Exterior Window dimensions clarified per attached Sketch ASK-02.03.

Item No. 2.23  Reference Sheet A1-9.1:

2.23.1 Schedule and finishes revised per clouded areas of attached revised Sheet A1-9.1.

Item No. 2.24  Reference Sheet AD-3.0:

2.24.1 Add new Details 2 and 17 per attached Sketch ASK-02.04.
2.24.2 Add new Detail 6 per attached Sketch ASK-02.09.
2.24.3 Detail 19 mortar bed note revised per attached Sketch ASK-02.05.
2.24.4 Delete Detail 23B in its entirety per attached Sketch ASK-02.06.
2.24.5 Details 24 and 25, wood framing and header clarified to be existing per attached Sketch ASK-02.07.
2.24.6 Add new Details 29 and 30 per attached Sketch ASK-02.08.

Item No. 2.25  Reference Sheet M1-1.0:

2.25.1 Revised ductwork and return air grille location for new ceiling layout per attached Sketch MSK-1.00.

Item No. 2.26  Reference Sheet P0-0.2:

2.26.1 Plumbing Schedule: Revise WC-1 from the Kohler #K-4405 Highline to Kohler #K-96057 Highcliff water closet.

Item No. 2.27  Reference Sheet E0.2:

2.27.1 Add Plan Note #3 to sheet per attached revised Sheet E0.2.

Item No. 2.28  Reference Sheet E1.0:

2.28.1 Sheet revised per clouded areas of attached revised Sheet E1.0 and as described below:
   a. Add Plan Notes 8, 9, 10, and 11.
   b. Revise Overall site plan adding temporary system pathway + conductors from existing Administration Office to temporary Administration office in Room B5.

Item No. 2.29  Reference Sheet E2.0:

2.29.1 Sheet revised per clouded areas of attached revised Sheet E2.0 and as described below:
   a. Revised plan notes 9, 11.
   b. New plan notes 24, 25, 26
   c. Detail 1 – Renovation Power Plan
      1. Add notation for exterior electrical device work.
      2. Add power for electrified door hardware.
      3. Provide location for PA System microphone and zone controller.
   d. Detail 2 – Demolition Power and Signal Plan
      1. Add general note for existing conduit above ceilings to be demolished and installed new.
      2. Add work scope for temporary location and connection of PA System microphone and zone controller.
      3. Move Plan note #2 from renovation plan for clarity.
Item No. 2.30  Reference Sheet E3.0:
2.30.1 Detail 1 revised Lighting at Reception 101 and Detail 2 added general note for existing conduit above ceilings to be demolished and installed new per attached revised Sheet E3.0.

Item No. 2.31  Reference Sheet E4.0:
2.31.1 Sheet revised per clouded areas of attached revised Sheet E4.0 and as described below:
  a. Detail 1 – Renovation Security Plan:
     1. Add permanent location for intrusion keypads
     2. Add notes for IP Video Intercom system at Reception 101 main entry door.
  b. Detail 1 – Demolition Security Plan:
     1. Add General Note for existing conduit above ceilings to be demolished and installed new.
     2. Add work scope for temporary location and connection of intrusion system keypads.

Item No. 2.32  Reference Sheet EFA2.0:
2.32.1 Annunciator Panel added per attached revised Sheet EFA2.0.

ATTACHMENTS
Exhibits          01 52 00
Specifications     Attachment 1 - Bid Form, 01 30 00.02, 07 01 50.20, 08 71 00, 08 80 00, 27 53 13, 28 13 53.11
Sketches          CSK-02.00 thru CSK-02.01, LSK-2.1 thru LSK-2.2, ASK-02.01 thru ASK-02.09, MSK-1.00
Sheets            A1-1.0, A1-2.1, A1-4.1, A1-5.1, A1-9.1, ASD-1.1, E0.2, E1.0, E2.0, E3.0, E4.0, EFA2.0

END OF ADDENDUM NO. 2

___________________
Roger Clarke, Principal
#C-21340
N. DAVIDSON A1
Attachment 1 - Bid Form
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

Project: F20-04 SINGLE POINT ENTRY – DAVIDSON ELEMENTARY SCHOOL

Project Address: Davidson Elementary School - 2844 N Davidson Ave, San Bernardino, CA 92405

Bid No. ________________

CONTRACTOR NAME:

DIR REGISTRATION NUMBER:

ADDRESS:

TELEPHONE: (                )

FAX: (                )

EMAIL:

TO: SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT, acting by and through its Governing Board, herein called “DISTRICT”.

1. Pursuant to and in compliance with your Notice Inviting Bids and other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the contract, the local conditions affecting the performance of the contract, the cost of the work at the place where the work is to be done, with the drawings and specifications, and other contract documents, hereby proposes and agrees to perform within the time stipulated, the contract, including all of its component parts, and everything required to be performed, including its acceptance by the DISTRICT, and to provide and furnish any and all labor, materials, tools, expendable equipment, and utility and transportation services necessary to perform the contract and complete all of the work in a workmanlike manner required in connection with the construction of:

**Bid No. F20-04 Davidson Elementary School Parking Lot and Security Enhancements**

in the DISTRICT described above, all in strict conformance with the drawings and other contract documents on file at the Purchasing Office of said DISTRICT for amounts set forth herein.

2. Bidder acknowledges the following Addenda:

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3. Bidder shall provide Unit Cost per square foot for Plaster Repairs:

   a. Unit Cost per Square Foot: $__________

4. **Total Base Bid**

   A. Base Bid
   
   ($__________________________)

   B. Allowance
   
   ($_______ 60,000.00)

**TOTAL PRICE – ENTIRE JOB** (Base Bid A + Allowance B)

**TOTAL CASH PURCHASE PRICE IN WORDS & NUMBERS:**

($__________________________)

DOLLARS

($__________________________

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...)
4. **Alternate Bids:** N/A

5. **Time for Completion:**

   The DISTRICT may give a notice to proceed within ninety (90) days of the award of the bid by the DISTRICT. Once the CONTRACTOR has received the notice to proceed, the CONTRACTOR shall complete the work in the time specified in the Agreement. By submitting this bid, CONTRACTOR has thoroughly studied this Project and agrees that the time period for this Project was adequate for the timely and proper completion of the Project. Further, CONTRACTOR has included in the analysis of the time required for this Project, Rain Days, Governmental Delays, and the requisite time to complete Punch List.

   In the event that the DISTRICT desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the CONTRACTOR, giving the notice to proceed may be postponed by the DISTRICT. It is further expressly understood by the CONTRACTOR, that the CONTRACTOR shall not be entitled to any claim of additional compensation as a result of the postponement of giving the notice to proceed.

   If the CONTRACTOR believes that a postponement will cause a hardship to it, the CONTRACTOR may terminate the contract with written notice to the DISTRICT within ten (10) days after receipt by the CONTRACTOR of the DISTRICT’s notice of postponement. Should the CONTRACTOR terminate the contract as a result of a notice of postponement, the DISTRICT shall have the authority to award the contract to the next lowest responsible bidder, if applicable.

   It is understood that the DISTRICT reserves the right to reject any or all bids and/or waive any irregularities or informalities in this bid or in the bid process. The CONTRACTOR understands that it may not withdraw this bid for a period of ninety (90) days after the date set for the opening of bids.

6. **Bid Security:**

   Attached is bid security in the amount of not less than ten percent (10%) of the total bid:

   - Bid bond (10% of the Bid), certified check, or cashier’s check (circle one)

7. **Designated Subcontractors:**

   The required List of Designated Subcontractors is attached hereto.

8. **Non-Collusion Declaration**

   The required is attached hereto.

9. **Substitution Request Form:**

   The Substitution Request Form, if applicable, is attached hereto.

10. **Acceptance:**

    It is understood and agreed that if written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned after the opening of the bid, and within the time this bid is required to remain open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the DISTRICT a contract in the form attached hereto in accordance with the bid as
accepted, and that he will also furnish and deliver to the DISTRICT the Performance Bond and Payment Bond, all within **five (5) calendar days** after award of contract, and that the work under the contract shall be commenced by the undersigned bidder, if awarded the contract, by the start date provided in the DISTRICT’s Notice to Proceed, and shall be completed by the CONTRACTOR in the time specified in the contract documents.

11. **Notices:**

All notices or other correspondence should be addressed to the undersigned at the address stated below:

The names of all persons interested in the foregoing proposal as principals are as follows:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

(IMPORTANT NOTICE: If bidder or other interested person is a corporation, state the legal name of such corporation, as well as the names of the president, secretary, treasurer, and manager thereof; if a co-partnership, state the true names of the firm, as well as the names of all individual co-partners comprising the firm; if bidder or other interested person is an individual, state the first and last names in full.)

12. **Protest Procedures:**

If there is a bid protest, the grounds shall be submitted as set forth in the Instructions to Bidders.

13. **CONTRACTOR’s License:**

a. The undersigned bidder shall be licensed and shall provide the following California CONTRACTOR’s license information:

   License Number: __________________________

   License expiration date: ______________________

   Name on License: ___________________________

   Class of License: ___________________________

   DIR Registration Number: ____________________

b. If the bidder is a joint venture, each member of the joint venture must include the above information.
14. **Time is of the Essence:**

   Time is of the essence regarding this contract, therefore, in the event the bidder to whom the Contract is awarded fails or refuses to post the required bonds and return executed copies of the Agreement form within **five (5) calendar days** from the date of receiving the Notice of Award, the DISTRICT may declare the bidder’s bid deposit or bond forfeited as damages.

15. **Declaration:**

   The bidder declares that he/she has carefully examined the location of the proposed work, that he/she has examined the Contract Documents, including the Plans, General Conditions of the contract, Supplemental Conditions, Addenda, and Specifications, all other documents issued to bidders and read the accompanying instructions to bidders, and hereby proposes and agrees, if this proposal is accepted, to furnish all materials and do all work required to complete the said work in accordance with the Contract Documents, in the time and manner therein prescribed for the unit cost and lump sum amounts set forth in this Bid Form.

16. **Debarment:**

   In addition to seeking remedies for False Claims under Government Code Section 12650 et seq. and Penal Code Section 72, the DISTRICT may debar a CONTRACTOR pursuant to Article 15 of the General Conditions if the Board, or the Board may designate a hearing officer who, in his or her discretion, finds the CONTRACTOR has done any of the following:

   a. Intentionally or with reckless disregard, violated any term of a contract with the DISTRICT;
   
   b. Committed an act or omission which reflects on the CONTRACTOR's quality, fitness or capacity to perform work for the DISTRICT;
   
   c. Committed an act or offense which indicates a lack of business integrity or business honesty; or,
   
   d. Made or submitted a false claim against the DISTRICT or any other public entity (See Government Code Sections 12650, et. seq., and Penal Code Section 72)

17. **Designation of Subcontractors:**

   In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code Sections 4100 et. seq.) and any amendments thereof, each bidder shall list subcontractors on the DISTRICT's form Subcontractor list. This subcontractor list shall be submitted with the bid and is a required form.
18. Bid Certification

I agree to receive service of notices at the e-mail address listed below.

I, the below-indicated bidder, declare under penalty of perjury that the information provided and representations made in this bid are true and correct.

_____________________________________________________
Proper Name of Company

_____________________________________________________
Name of Bidder Representative

_____________________________________________________
Street Address

_____________________________________________________
City, State, and Zip

_____________________________________________________
Phone Number

_____________________________________________________
Fax Number

_____________________________________________________
E-mail

_____________________________________________________
Signature of Authorized Bidder Representative

_____________________________________________________
Signatory Name & Title (Printed)

Date:

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of authorized officers or agents and the document shall bear the corporate seal; if bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his signature shall be placed above.

All signatures must be made in permanent blue ink.
SUBMITTAL / SHOP DRAWING TRANSMITTAL

To: Ruhnau Clarke Architects

Contractor:

Attn: Construction Dept.

Contractor’s Submittal No.

Project Name: Davidson ES Entry Modifications

RCA’s Project No.: 1-78-26

Subcontractor:

CONTRACTOR TO FILL OUT THE FOLLOWING COVERING ONE COMPLETE SECTION OF THE SPECIFICATIONS ONLY:

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- Initial Submittal
- 1st Resubmittal
- ___ Resubmittal
- Submittal was a previously approved substitution.
- Approved Substitution Request Transmittal Form is enclosed.

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CONTRACTOR COMPLETE EITHER (A) OR (B) FOLLOWING, CHECK ONE:

(A) WE HAVE VERIFIED THAT THE MATERIAL OR EQUIPMENT CONTAINED IN THIS SUBMITTAL MEETS ALL THE REQUIREMENTS SPECIFIED OR SHOWN (NO EXCEPTIONS).

☐

(B) WE HAVE VERIFIED THAT THE MATERIAL OR EQUIPMENT CONTAINED IN THIS SUBMITTAL MEETS ALL THE REQUIREMENTS SPECIFIED OR SHOWN, EXCEPT FOR THE FOLLOWING DEVIATIONS (LIST DEVIATIONS ON AN ATTACHED SHEET OR INDICATE DEVIATIONS CLEARLY ON SHOP DRAWINGS OR SUBMITTALS).

☐

CONSTRUCTION MANAGERS CERTIFICATION

THIS IS TO CERTIFY THAT THE CONSTRUCTION MANAGER IS REASONABLY CERTAIN THAT THE MATERIAL SPECIFIED IN THIS SUBMITTAL MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND THE SUBMITTAL IS COMPLETE PER THE CONTRACT DOCUMENTS.

SIGNATURE: ____________________________________________

☐

CONTRACTORS CERTIFICATION

THIS IS TO CERTIFY THAT THE CONTRACTOR IS REASONABLY CERTAIN THAT THE MATERIAL SPECIFIED IN THIS SUBMITTAL MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

SIGNATURE: ____________________________________________

ARCHITECT’S USE ONLY BELOW THIS LINE.

Action:

☐ No Exception Taken ☐ Make Corrections Noted ☐ Rejected/Resubmit ☐ Revise and Resubmit

Comments: ____________________________________________

Date Received By RRC: __________________________

Date Sent to Consultant:

Structural: __________________________

Mechanical: __________________________

Electrical: __________________________

Other: __________________________

Date Received From:

Consultant: __________________________

No. of Copies Received: __________________________

Final Distribution: Contractor _____ Inspector _____ District/P.M. _____ Architect _____

Final Distribution Date: __________________________
SECTION 07 01 50.20
ROOFING, RESTORATION, PATCH, AND REPAIR

PART 1  GENERAL

1.01  SECTION INCLUDES

A. Partial removal of existing roofing system in preparation for new penetrations.

B. Patching and repair shall not void or reduce Contractor's and manufacturer's warranty of existing roofing. Removal of existing roofing and repair is to be done by the Roofing Contractor in which the roofing system was originally installed.

1.02  RELATED REQUIREMENTS

A. Section 06 10 00 - Rough Carpentry: Wood framing, plywood sheathing, wood curbs, cants, nailers, blocking and backing.

B. Section 07 62 00 - Sheet Metal Flashing and Trim: Counterflashings, reglets,.

C. Division 22 - Plumbing: Roof drains, plumbing items penetrating roofing membrane.


E. Division 26 - Electrical.

   1. Conduit penetrating roofing membrane.

1.03  REFERENCE STANDARDS


C. UL (DIR) - Online Certifications Directory; Current Edition.


1.04  ADMINISTRATIVE REQUIREMENTS

A. Coordinate with affected mechanical and electrical work associated with roof penetrations.

B. Preinstallation Meeting: Convene two weeks before starting work of this section.

   1. Attendance is mandatory at conference required in section specifying new roofing installation.

      a. Require attendance by Contractor's superintendent and other supervisory and quality control personnel having responsibility for roofing, supervisory personnel of roofing installer and, if required for warranty provisions, representative of roofing products manufacturer.

      b. Owner Representative, testing and inspection agency (if engaged by District), District's insurance underwriter (if necessary, at District's option), and Architect (if authorized by District) will attend.
c. At Contractor's option, installers of each component of related Work, including deck or substrate construction, rooftop equipment, penetrations of roof deck, and other Work integral with or adjacent to roofing may attend.

d. If required, attendance shall include Authority Having Jurisdiction (AHJ). Contractor shall verify requirement with Authority Having Jurisdiction (AHJ) and arrange for attendance.

2. Establish at pre-bid job walk, number of layers to be removed and reconfirm at pre-installation conference.

3. See new roofing installation section for additional information.

4. Agenda items specific to patch and repair.
   a. Review Drawings and Specifications for suitability for application of roofing system. Review application procedures and coordination required with related Work.  
      1) Discuss changes and deviations from Drawings and Specifications, if any, recommended or required.
      
      b. Walk roof areas to review and discuss substrate preparation including repair of unacceptable surfaces, roof drainage, penetrations, equipment curbs, and work performed by other trades which requires coordination with roofing system.
      
      c. Review Contract Document requirements and submittals for roofing system, including roofing schedule, inspection and testing, and environmental conditions.
         1) Identify which governing regulations or insurance requirements will affect roofing system installation.
      
      d. Discuss anticipated weather, as well as procedures for responding to unacceptable weather, including using temporary roofing.
         1) Temporary roofing, if necessary, will be added to scope of the Work by contract modification (change order or construction change directive), with acceptable adjustment in Contract Time and Contract Sum.
      
      e. Document discussions in writing, including actions required, and distribute copy of report to each meeting participant.
      
      f. Attendance by Owner Representative, Architect and independent testing and inspection agency shall not relieve Contractor of sole responsibility for means, methods, techniques and sequence of construction, in accordance with provisions of the Bidding and Contract Requirements.

   C. Schedule work to coincide with commencement of installation of new roofing system.

1.05 SUBMITTALS

   A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
   
   B. Product Data: Submit for each type of material.
   
   C. Shop Drawings: Indicate size, configuration, and installation details.
   
   D. Preconstruction Test Reports.
   
   E. Materials Removal Company Qualification Statement.
   
   F. Installer's Qualification Statement.
   
   G. Preconstruction Testing Agency Qualification Statement.
H. Certification required for existing buildings to be re-roofed per Chapter 3 of Part 1 of Division 2 of the Public Contract Code Section 1 Section 3006(b):

1. I, __________ (Name), __________ (Name of Employer), certify that I have not offered, given, or agreed to give, received, accepted, or agreed to accept, any gift, contribution, or any financial incentive whatsoever to or from any person in connection with the roof project contract. As used in this certification, “person” means any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals. Furthermore, I __________ (Name), __________ (Name of Employer), certify that I do not have, and throughout the duration of the contract, I will not have, any financial relationship in connection with the performance of this contract with any architect, engineer, roofing consultant, materials manufacturer, distributor, or vendor that is not disclosed below.

2. I __________ (Name), __________ (Name of Employer), have the following financial relationships with an architect, engineer, roofing consultant, materials manufacturer, distributor, or vendor, or other person in connection with the following roof project contract:

____________________________________________________________________
Name and Address of Building, Contract Date and Number

3. I certify that to the best of my knowledge, the contents of this disclosure are true, or are believed to be true.

____________________________________________________________________ (Signature) ____________ (Date)
____________________________________________________________________ (Print Name)
____________________________________________________________________ (Print Name of Employer)

4. Submit this certification to District, Owner Representative, and Architect.

1.06 QUALITY ASSURANCE

A. Comply with Title 24 Part 2 - California Building Code Sections 1504 Performance Requirements, 1505 Fire Classification and 1507 Requirements for Roof Coverings; and Part 6 - California Energy Code requirements

B. Materials Removal Firm Qualifications: Company specializing in performing the work of this section with minimum five years of documented experience.

C. Industry Standards:

1. Work specified in this Section shall comply to manufacturer's product data and application instructions.

2. Work shall also conform to recommended practices and details published in NRCA Roofing and Waterproofing Manual, NRCA ML104 and recommended practices and details of Western States Roofing Contractors Association (WSRCA), where such practices and details are more stringent.

D. Testing and Inspection:

1. At District's option, services of an independent inspection and testing agency may be obtained. Costs of this service will be paid for by District.

2. Contractor shall cooperate with independent testing and inspection agency.
1.07 SCHEDULING
A. Remove only existing roofing materials that can be replaced with new materials as the weather will permit.

1.08 FIELD CONDITIONS
A. Do not remove existing roofing membrane when weather conditions threaten the integrity of the building contents or intended continued occupancy.
B. Maintain continuous temporary protection prior to and during installation of new roofing system.

1.09 WARRANTY
A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces affected by reroofing, by methods and with materials acceptable to warrantor.
   1. Notify warrantor of existing roofing system before proceeding, and upon completion of reroofing.
   2. Obtain documentation verifying that existing roofing system has been inspected by warrantor and warranty remains in effect. Submit documentation at Project closeout.

PART 2 PRODUCTS

2.01 SYSTEM DESCRIPTION
A. Roofing Assembly Requirements:
   1. External Fire Exposure Classification: ASTM E108 Class A, UL (DIR) or Warnock Hersey listed.
B. Indicated Roof Areas: Patch and repair existing roofing, perimeter flashings, base flashings, counter flashings, vent stack flashings, roofing membrane, and insulation where required for the installation of new roof mounted equipment.
C. Patch and repair roofing as necessary to provide complete, weathertight installation conforming to referenced industry standards and as necessary to accommodate new Work.
D. Contract Drawings and Specifications:
   1. Contract Drawings and Specifications are diagrammatic and of a general nature only.
   2. Materials manufacturer's specifications for roofing and related flashings shall govern Work as if set forth herein, except as specifically indicated or where more stringent requirements are specified or required by Authority Having Jurisdiction (AHJ).
   3. All Work shall be completed as required to obtain specified warranty and guarantee.
E. Design Review:
   1. Contractor, roofing installer and manufacturer's representative of the original roofing installation (if known or identifiable) shall review Drawings and Specifications.
   2. Obtain confirmation from roofing installer and manufacturer of original roofing (if known or identifiable) that selected roofing materials for patching and repair are proper, compatible and adequate for the Project and that conditions and details indicated and specified do not conflict with requirements and recommendations of manufacturer.
2.02 MATERIALS
A. Temporary Protection: Sheet polyethylene; provide weights to retain sheeting in position.
   1. Provide thickness sufficient to prevent tearing or damage during use.
B. Protection Board: ASTM C208 cellulose fiber board, one face finished with mineral fiber, asphalt and kraft paper.

PART 3 EXECUTION

3.01 EXAMINATION
A. Verify existing site conditions.
B. Verify that existing roof surface is clear and ready for work of this section.
   1. Verify that roof deck is structurally sound to support live and dead load requirements of roofing system and sufficiently rigid to support construction traffic.

3.02 PREPARATION
A. Coordination: Coordinate patching and repairs of roofing with installation of penetrations, supports and other adjoining new construction which affects existing roofing.
B. Deck Preparation:
   1. Clean and prepare roof deck in accordance with roofing system manufacturer's instructions and recommendations.
   2. Correct substrate surfaces which are unacceptable to installer.
C. Sweep roof surface clean of loose matter.
D. Remove loose refuse and dispose off site.
   1. Free Fall Maximum: 8 feet, provide enclosed chutes for higher fall.
   2. Do not use District's disposal system.
E. Deck Condition: Firm, smooth, clean and sufficiently dry to suit roofing manufacturer's requirements.
   1. Conduct moisture test of deck and surrounding roofing.
   2. Do not proceed with roofing application until deck and surrounding materials are dry.

3.03 MATERIAL REMOVAL
A. Remove only existing roofing materials that can be replaced with new materials as the weather will permit.
B. Remove metal counter flashings.
C. Remove damaged portions of roofing membrane, perimeter base flashings, flashings around roof protrusions, pitch pans and pockets.
D. Cut and lay flat any membrane blisters.
E. Remove damaged insulation and fasteners, cant strips, blocking.
F. Remove sheathing paper and underlay.
G. Repair existing underlying deck surface to provide smooth working surface for new roof system.
3.04 TEMPORARY PROTECTION
   A. Provide temporary protective sheeting over uncovered deck surfaces.
   B. Turn sheeting up and over parapets and curbing. Retain sheeting in position with weights.
   C. Provide for surface drainage from sheeting to existing drainage facilities.
   D. Do not permit traffic over unprotected or repaired deck surface.

3.05 PATCHING AND REPAIRS
   A. General:
      1. It is intended to leave existing roofing intact as much as feasible.
         a. Roofing Work is intended to be patching and repair of portions of existing roofing due to new:
            1) Structural supports.
            2) Penetrations.
            3) Heating, ventilating and air conditioning (HVAC) equipment.
            4) Electrical system penetrations.
         b. Include repairs of areas damaged as result of construction activities.
      2. Comply with instructions and recommendations of manufacturer of existing roofing system for making patches and repairs.
      3. Comply also with recommended practices of referenced industry standards.
      4. Protect other Work from spillage of roofing materials and prevent materials from entering or clogging drains and conductors. Replace and restore other construction damaged or degraded by roofing Work.
      5. Apply roofing materials in accordance with NRCA Roofing and Waterproofing Manual and published details and recommendations of Western States Roofing Contractors Association (WSRCA).
   B. Flashing Replacement: Entire sheet of flashing membrane is to be adhered to vertical substrate and hot-air welded to the secured field membrane.
   C. Penetrations:
      1. Coordinate roofing Work with plumbing, mechanical and electrical Work and other Work involving penetrations of roofing membrane.
      2. Provide pipe and conduit penetrations as indicated on Drawings, or if more stringent, as detailed in NRCA - Roofing and Waterproofing Manual.
      3. Verify that penetrations through roof are adequately separated by a minimum of 18 inches from each other, away from curbs, platforms, sleepers and walls and are also located a minimum of 24 inches beyond all waterways.
   D. Other Roofing Accessories: Install other accessories in accordance with manufacturer's instructions and recommendations, and NRCA Construction Details, as applicable.
   E. Crickets and Tapered Areas: Install to provide positive slope at proper transitions at changes in roof plane.
   F. Flashing and Sheet Metal Work: Set and flash in integrated sheet metal.
3.06 FIELD QUALITY CONTROL
   A. Independent agency inspection and testing will be provided under provisions of Section 01 40 00.
   B. The drawings identify the approximate limits to material removal.
   C. Testing will identify the condition of existing materials and their reuse, repair or removal.
   D. Test Reports: Indicate existing insulation moisture content and existing roof system quality.

3.07 PROTECTION
   A. Provide temporary protective sheeting over uncovered deck surfaces.
   B. Turn sheeting up and over parapets and curbing. Retain sheeting in position with weights.
   C. Provide for surface drainage from sheeting to existing drainage facilities.
   D. Do not permit traffic over unprotected or repaired deck surface.

3.08 SCHEDULES
   A. Roof Areas as Indicated: Remove, where required, existing perimeter flashings, base flashings, counter flashings, vent stack flashings, roofing membrane, and insulation.
   B. Remove indicated roof mounted mechanical equipment and electrical equipment.

END OF SECTION
SECTION 08 71 00

DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Finish hardware except as otherwise specified or specifically omitted herein.

B. Related Sections:
   1. Section 06 20 00 - Finish Carpentry.
   2. Section 08 11 13 - Hollow Metal Doors and Frames.
   3. Section 32 31 13 - Chain Link Fences and Gates.

C. Specific Omissions: Hardware for the following is specified or indicated elsewhere.
   1. Windows.
   2. Cabinets and locks.
   3. Signs.
   4. Toilet accessories.
   5. Installation.
   6. Rough hardware.

1.2 REFERENCES

A. Published specifications, standards, tests, or recommended methods of trade, industry, or governmental organizations apply to Work of this Section where sited by abbreviations noted below (latest editions apply unless noted otherwise).

B. ADA - Americans with Disabilities Act Standards for Accessible Design.


D. BHMA - Builders Hardware Manufacturers Association.


F. DSA - Division of the State Architect.

G. NFPA 80 - Fire Doors and Windows.

H. UL - Underwriters Laboratories.

1.3 SUBSTITUTIONS & SUBMITTALS

A. Requests for substitutions must be made in writing 10 days prior to bid date to allow architect to issue an addendum. If proposing a substitute, submit that product data attached to one showing specified item and indicate savings to be made. Provide sample if requested. No other substitutions will be allowed.
   1. Items listed with no substitute manufacturers have been requested by the Owner to match existing.
B. Submit six copies of schedule within 4 weeks after project has been awarded. Organize schedule into "Hardware Sets" with an index of doors and heading, indicating complete designations of every item required for each door or opening. Include the following information:
1. Type, style, function, size, quantity and finish of each hardware item. Use BHMA finish codes as per ANSI A156.18.
2. Name, part number and manufacturer of each item.
3. Fastenings and other pertinent information.
4. Location of hardware set cross referenced to indications on drawings both on floor plans and in door schedule.
5. Explanation of all abbreviations, symbols, and codes contained in schedule.
6. Mounting locations for hardware.
7. Door and frame sizes and materials.

1.4 QUALITY ASSURANCE

A. Qualifications:
   1. Obtain each kind of hardware (latch and lock sets, exit devices, hinges, and closers) from only one manufacture, although several may be indicated as offering products complying with requirements.
   2. Hardware supplier shall be a direct factory contract supplier who has in his employment a certified hardware consultant (AHC) who is available at all reasonable times during the course of the work for project hardware consultation to the District, Architect, and Contractor.

B. Schedule Designations: Except as otherwise indicated, the use of one manufacturer's numeric designation system in schedules does not imply that another manufacturer's products will not be acceptable, unless they are not equal in design, size, weight, finish, function, or other quality of significance. See 1.3 A for substitutions.

1.5 REGULATORY REQUIREMENTS

A. Fire-Rated Openings: Comply with CBC Section 716 and NFPA No. 80. Provide only hardware tested and listed by UL for the type and size of each door required, which complies with the requirements of the door and frame labels.
   1. Where exit devices are required on fire rated doors, provide supplementary marking on door UL label indicating “Fire Door to be Equipped with Fire Exit Hardware”, and provide UL label on exit device indicating “Fire Exit Hardware”.
   2. Exit device touchpad shall be compliant with State Fire Marshall Standard 12-10-3, Section 12-10-302.

B. Conform to applicable requirements of the Americans with Disabilities Act Standards for Accessible Design regarding accessibility requirements for door and entrance hardware.

C. Doors and doorways that are part of an accessible route shall comply with CBC Section 11B-404.

D. The clear opening width for a door shall be 32 inches minimum. For a swinging door it shall be measured between the face of the door and the stop, with the door open 90 degrees. There shall be no projections into the opening below 34 inches and 4 inches maximum projections into the opening between 34 inches and 80 inches above the finish floor or ground. Door closers and stops shall be permitted to be 78 inches minimum above the finish floor or ground. CBC Section 11B-404.2.3.
E. Handles, pulls, latches, locks, and other operable parts on accessible doors shall comply with CBC Section 11B-309.4 and be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. Operable parts of such hardware shall be 34 inches minimum and 44 inches maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides. CBC Section 11B-404.2.7.

F. The force for pushing or pulling open a door shall be as follows: CBC Section 11B-404.2.9.
   1. Interior hinged doors, sliding or folding doors, and exterior hinged doors: 5 lbs. (22.2N) maximum.
   2. Required fire doors: the minimum opening force allowable by the DSA Authority, not to exceed 15 lbs. (66.7N). These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.
   3. The force required for activating any operable parts, such as lever hardware, or disengaging other devices shall be 5 lbs. (22.2N) maximum to comply with CBC Section 11B-309.4.

G. Door closing speeds shall be as follows: CBC Section 11B-404.2.8.
   1. Closer shall be adjusted so that the required time to move a door from an open position of 90 degrees to a position of 12 degrees from the latch is 5 seconds minimum.
   2. Spring hinges shall be adjusted so that the required time to move a door from an open position of 70 degrees to the closed position is 1.5 seconds minimum.

H. Thresholds shall comply with CBC Section 11B-404.2.5.

I. Floor stops shall not be located in the path of travel and 4 inches maximum from walls.

J. Hardware (including exit devices) shall not be provided with "Night Latch" (NL) function for any accessible doors or gates unless the following conditions are met: (Such conditions must be clearly demonstrated and indicated in the specifications)
   1. Such hardware has a ‘dogging’ feature.
   2. It is dogged during the time the facility is open.
   3. Such ‘dogging’ operation is performed only by employees as their job function (non-public use).

K. Pair of doors: Limit swing of one leaf to 90 degrees so that a clear floor space is provided beyond the arc of the swing for the wall-mounted tactile sign. CBC Section 11B-703.4.2.1.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Acceptance at Site: Individually package each unit of finish hardware complete with proper fastening and appurtenances, clearly marked on the outside to indicate contents and specific locations in the Work.

B. Deliver packaged hardware items at the times and to the locations (shop or field) for installation, as directed by the Contractor.

1.7 PROJECT CONDITIONS

A. Coordination: Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements
indicated, as necessary for proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents.

B. Upon request, check the Shop Drawings for doors and entrances to confirm that adequate provisions will be made for the proper installation of hardware.

1.8 WARRANTY

A. Provide guarantee from hardware supplier as follows:
   1. Closers: Five years, except electronic closers, two years.
   2. Exit Devices: Two years.
   3. All other Hardware: Two years.

PART 2 - MATERIALS

2.1 MANUFACTURERS

A. Approval of manufacturers other than those listed shall be in accordance with paragraph 1.3 A.

<table>
<thead>
<tr>
<th>Item</th>
<th>Manufacturer</th>
<th>Acceptable Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Hinges</td>
<td>McKinney/Ives</td>
<td>Ives/McKinney, Hager</td>
</tr>
<tr>
<td>Butt Hinges</td>
<td>McKinney/Ives</td>
<td>Ives/McKinney, Hager</td>
</tr>
<tr>
<td>Locksets</td>
<td>Schlage/Marks</td>
<td>Owners standard</td>
</tr>
<tr>
<td>Cylinders</td>
<td>Sargent</td>
<td>Owners standard</td>
</tr>
<tr>
<td>Exit Devices</td>
<td>Von Duprin/Sargent</td>
<td>Owners standard</td>
</tr>
<tr>
<td>Surface Closers</td>
<td>LCN/Sargent</td>
<td>Owners standard/LCN 4040XP series</td>
</tr>
<tr>
<td>Anti Vandal Pulls</td>
<td>Trimco/Ives</td>
<td>Rockwood, Ives</td>
</tr>
<tr>
<td>Kick Plates</td>
<td>Trimco</td>
<td>Rockwood, Ives</td>
</tr>
<tr>
<td>Door Stops</td>
<td>Trimco</td>
<td>Rockwood, Ives</td>
</tr>
<tr>
<td>Gate Closers</td>
<td>Locinox</td>
<td>As specified</td>
</tr>
<tr>
<td>Thresholds/Sweeps/Seals</td>
<td>Pemko</td>
<td>Reese, NGP</td>
</tr>
</tbody>
</table>

B. Furnish items of hardware required to complete the work in accordance with these specifications and the manufacturers’ instructions. Items of hardware not specified shall be provided even though inadvertently omitted from this specification. Items shall be of equal quality and type.

C. Where the exact types of hardware specified are not adaptable to the finished shape or size of the members requiring hardware, furnish suitable types having as nearly as practicable the same operation and quality as the type specified, subject to Architect’s approval.

2.2 MATERIALS

A. Locksets: Locksets and latchsets shall be as specified. Strikes shall be 16 gage curved steel, bronze or brass with 1" deep box construction, and have lips of sufficient length to clear trim and protect clothing.
1. Comply with requirements of local security ordinances.

B. Butt Hinges: Outswinging exterior doors shall have nonremovable (NRP) pin. Hinge open widths shall be minimum, but of sufficient size to permit door to swing 180 degrees.
   1. Furnish 3 hinges per leaf to 7 foot, 6 inch height. Add one for each additional 30 inches in height or fraction thereof.
   2. Provide 5 inch heavy weight hinges on doors over 3 feet, 5 inches width.

C. Continuous Hinges: Hinge open widths shall be minimum, but of sufficient size to permit door to swing 180 degrees. Where necessary to maintain door clearance at jamb trim, frame conditions, door reveals, and similar conditions, furnish wide throw hinges as approved by the Architect. Where door is indicated as having fire resistance rating, provide UL listed and labeled hardware.

D. Exit Devices: Furnish devices at wood doors with sex bolts unless otherwise specified. Lever handle trim shall match locksets.
   1. Provide glass bead kits of proper thickness where the rail assembly of the exit device crosses a lite.

E. Surface Door Closers: Full rack and pinion type with removable non-ferrous case. Place closers inside building, stairs, and rooms. Closers shall be non-handed, non-sized, and installed to permit door to swing 180 degrees.
   1. Flush transom offset brackets shall be used where parallel arm closers are listed for doors with fixed panels over.
   2. Provide drop brackets, shoe supports, and blade stop spacers as required at narrow top rails

F. Protection Plates: Provide kick, armor, or mop plates with four beveled edges, .050 inches minimum thickness, height called for in schedule by width less 2-inches. Furnish with machine or wood screws of bronze or stainless steel to match other hardware.

G. Floor Stops: Floor mounted door stops are prohibited where located in the path of travel. Where provided, install maximum 4 inches from wall surface.

H. Seals: Seals shall be finished to match adjacent frame color. UL label shall be applied on all rated doors.

I. Screws: Exposed screws shall be Phillips head. Do not use self-drilling, self-tapping screws, unless furnished by hardware manufacturer for the specific condition or for mounting flat-goods such as push plates and kick plates.

J. Silencers: Furnish silencers for interior hollow metal frames, 3 for single doors, 2 for pairs of doors.

K. Thresholds: Change in level between 1/4 inch and 1/2 inch shall be beveled with a slope no greater than 1 unit vertical to 2 units horizontal (50 percent slope). The floor or landing shall not be more than 1/2 inch lower than the threshold of the doorway.

2.3 FINISH

A. Generally to be BHMA 626 Satin Chromium.
1. Areas using BHMA 626 shall have push, pulls and kick plates of BHMA 630, Satin Stainless Steel, unless otherwise noted.

B. Factory paint door closers to match other hardware, unless otherwise noted.

C. Aluminum items shall be finished to match predominant adjacent material. Seals to coordinate with frame color.

2.4 KEYING REQUIREMENTS

A. Contact the District Locksmith with San Bernardino City Unified School District for keying requirements. Keying system shall be coordinated with the District and approved by District’s representative in writing. Furnish construction key system in accordance with lock manufacturers’ standard.

1. Key system shall be Sargent ‘A’ series keyway.

B. For protection of the District, key cylinders at the factory of the cylinder manufacturer where permanent records are maintained. Permanently inscribe each key with number that identifies cylinder manufacturer key symbol, and notation “DO NOT DUPLICATE”.

C. Keying Schedule: Submit three copies of separate detailed schedule indicating clearly how the District's final instructions on keying of locks have been fulfilled.

PART 3 - EXECUTION

3.1 HARDWARE LOCATIONS

A. Lockset: 34 to 44 inches above finished floor. Verify manufacturers’ template with door design.

B. Exit Device: 36 to 44 inches above finished floor. Verify manufacturers’ template with door design.

C. Door Pull: 40 inches from bottom of door to center of pull.

D. Floor Stop: Installed at a maximum of 4 inches from the face of the wall or partition.

E. Conform to CCR, Title 24, Part 2, and ADA for positioning requirements for accessibility.

3.2 INSTALLATION

A. Pre-Installation Meetings: Initiate and conduct with supplier, installer, and related trades, coordinate materials and techniques, and sequence complex hardware items and systems installation. Include manufacturers’ representatives of locks, panic hardware, and door closers in the meetings.

B. Install each hardware item per manufacturer’s instructions and recommendations. Do not install surface mounted items until finishes have been completed on the substrate. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

C. Set exterior door thresholds with full-width bead of elastomeric sealant on each point of contact with floor, providing a continuous weather seal. Anchor thresholds with stainless steel countersunk screws.
3.3 Adjusting

A. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly.

B. Inspection: Hardware supplier shall inspect hardware furnished within 10 days of contractors request and include with his guarantee a statement that this has been accomplished. Inspector or Contractor will sign off the hardware as being complete and correctly installed and adjusted. Further corrections of defective material shall be the responsibility of his representative.

3.4 Schedule of Door Hardware

A. Legend of listed manufacturers:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVE</td>
<td>Ives</td>
</tr>
<tr>
<td>LCN</td>
<td>LCN</td>
</tr>
<tr>
<td>LOC</td>
<td>Locinox</td>
</tr>
<tr>
<td>MCK</td>
<td>McKinney</td>
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<td>MRK</td>
<td>Marks</td>
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<td>PEM</td>
<td>Pemko</td>
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<tr>
<td>SAR</td>
<td>Sargent</td>
</tr>
<tr>
<td>SCH</td>
<td>Schlage</td>
</tr>
<tr>
<td>TRM</td>
<td>Trimco</td>
</tr>
<tr>
<td>VON</td>
<td>Von Duprin</td>
</tr>
</tbody>
</table>

B. The last column in the Hardware Schedule refers to the manufacturer listed above.

C. The Door Schedule on the Drawings indicates which Hardware Set is used with each door.

D. Schedule of Door Hardware:

See next page.

HW-1
Each pair door to have

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
<th>Quantity</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 CONTINUOUS HINGE</td>
<td>224HD MCK-25HD</td>
<td>2</td>
<td>IVE MCK</td>
</tr>
<tr>
<td>1 REMOVABLE MULLION</td>
<td>KR4954 x MT54L9805</td>
<td>1</td>
<td>VON SAR</td>
</tr>
<tr>
<td>1 EXIT DEVICE</td>
<td>AX-PA-98NL-OP x 110NL</td>
<td>1</td>
<td>SAR</td>
</tr>
<tr>
<td>1 VON5BL-SCH-8804 x L/TRIM</td>
<td>630</td>
<td>1</td>
<td>VON SAR</td>
</tr>
<tr>
<td>1 EXIT DEVICE</td>
<td>AX-PA-98EO</td>
<td>1</td>
<td>SAR</td>
</tr>
<tr>
<td>1 VON5BL-SCH-8810 x L/TRIM</td>
<td>630</td>
<td>1</td>
<td>SAR</td>
</tr>
<tr>
<td>1 MORTISE CYLINDER</td>
<td>42</td>
<td>1</td>
<td>SAR</td>
</tr>
<tr>
<td>1 RIM CYLINDER</td>
<td>34</td>
<td>1</td>
<td>SAR</td>
</tr>
<tr>
<td>1 ANTI VANDAL PULL</td>
<td>VR910NL1097HA-SP</td>
<td>1</td>
<td>TRM</td>
</tr>
<tr>
<td>1 ANTI VANDAL PULL</td>
<td>VR910DT1097HA-SP-NC</td>
<td>1</td>
<td>TRM</td>
</tr>
<tr>
<td>2 SURFACE CLOSER</td>
<td>4040XP-SCUSH x ST1695351-CPS</td>
<td>2</td>
<td>PEM SAR</td>
</tr>
<tr>
<td>2 KICK PLATE</td>
<td>K0050 - 10 x 2 LDW x B4E</td>
<td>2</td>
<td>PEM</td>
</tr>
<tr>
<td>1 MULLION SEAL</td>
<td>5110</td>
<td>1</td>
<td>PEM</td>
</tr>
<tr>
<td>1 SET DOOR SEAL</td>
<td>2893V HEAD &amp; JAMBS</td>
<td>1</td>
<td>PEM</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Quantity</td>
<td>Size/Model</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------</td>
<td>----------</td>
<td>--------------------</td>
</tr>
<tr>
<td>57V</td>
<td>Door sweep</td>
<td>2</td>
<td>628 PEM</td>
</tr>
<tr>
<td>per sill</td>
<td>Per sill detail</td>
<td>628 PEM</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Install door seals before closer

**HW-2**

Each single door to have

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Size/Model</th>
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</tr>
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<tr>
<td>224HDMCK-25HD</td>
<td>Continuous hinge</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4040XP-HEDA x ST1944351-PH10</td>
<td>Surface closer</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K0050 - 10 x 2 LDW x B4E</td>
<td>Kick plate</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1209</td>
<td>Floor stop</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2893V HEAD &amp; JAMBS</td>
<td>Door seals</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57V</td>
<td>Door sweep</td>
<td>1</td>
<td>628 PEM</td>
<td></td>
</tr>
<tr>
<td>per sill</td>
<td>Per sill detail</td>
<td>628 PEM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Install door seals before closer and rim strike

**Note:** Adjust exit device backset to allow compensate for strike jamb seal

**HW-3**

Each single door to have

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Size/Model</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>5BB1TA2714 - 4.5 x 4.5</td>
<td>Hinge</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ND70LD x RHO x K510-0661955-F8-SL9-S1</td>
<td>Lever cylinder</td>
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<tr>
<td>13-3266</td>
<td>Surface closer</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>4040XP-351-H</td>
<td>Surface closer</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K0050 - 10 x 2 LDW x B4E</td>
<td>Kick plate</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1214</td>
<td>Floor stop</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1229A</td>
<td>Silencers</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HW-4**

Each single door to have

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Size/Model</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>5BB1TA2714 - 4.5 x 4.5</td>
<td>Hinge</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ND405 x RHO x K510-0661951-S1</td>
<td>Privacy</td>
<td>1</td>
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<td></td>
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<tr>
<td>4040XP-REG351-O</td>
<td>Surface closer</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>K0050 - 10 x 2 LDW x B4E</td>
<td>Kick plate</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KM050 - 6 x 1 LDW x B4E</td>
<td>Mop plate</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1270CVPV</td>
<td>Wall bumper</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3071</td>
<td>Coat hook</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1229A</td>
<td>Silencers</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HW-SG1**

Each pair gate to have

---

San Bernardino City Unified School District

**Davidson ES Entry Modifications**

RCA Project No. 1-78-26

DOOR HARDWARE

08 71 00-8

ADDENDUM 2
<table>
<thead>
<tr>
<th></th>
<th>Exit Device</th>
<th>110N L/Trim x Wh</th>
<th>SAR</th>
<th>626</th>
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<tr>
<td>1</td>
<td>Exit Device</td>
<td>AX-PA-98NL-OP5BL-5CH-8804 x 110N L/Trim x Wh</td>
<td>626</td>
<td>VON630 SAR</td>
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<td></td>
<td>Rim Cylinder</td>
<td>34</td>
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<td>SAR</td>
</tr>
<tr>
<td>1</td>
<td>Anti Vandal Pull</td>
<td>VR910NL1097HA-SP</td>
<td>630</td>
<td>IVETRM</td>
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<tr>
<td>1</td>
<td>Anti Vandal Pull</td>
<td>VR910DT1097HA-SP-NC</td>
<td>630</td>
<td>IVETRM</td>
</tr>
<tr>
<td>2</td>
<td>Gate Hinge/Closer</td>
<td>MAMMOTH-180 x CLB-MAMMOTH ALU LOC</td>
<td>626</td>
<td>SAR</td>
</tr>
<tr>
<td></td>
<td>Anti Vandal Pull</td>
<td>VR910DT1097HA-SP-NC</td>
<td>630</td>
<td>IVETRM</td>
</tr>
</tbody>
</table>

Note: Balance of material provided by Chain Link Gate Manufacturer

END OF SECTION
SECTION 08 80 00
GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Insulating glass units.
   B. Plastic films.
   C. Glazing compounds and accessories.

1.02 RELATED REQUIREMENTS
   A. Section 07 25 00 - Weather Barriers.
   B. Section 07 92 00 - Joint Sealants: Sealants for other than glazing purposes.
   C. Section 08 43 13 - Aluminum-Framed Storefronts: Glazing furnished as part of storefront assembly.

1.03 REFERENCE STANDARDS
      1. Use 2014 as indicated in 2016 CBC Referenced Standards.
      1. Use 2010 as indicated in 2016 CBC Referenced Standards.
      1. Use 2011 as indicated in 2016 CBC Referenced Standards.
      1. Use 2012ae1 as indicated in 2016 CBC Referenced Standards.

1.04 ADMINISTRATIVE REQUIREMENTS
A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by each of the affected installers.

1.05 SUBMITTALS
A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
B. Product Data on Insulating Glass Unit Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.
C. Product Data on Glazing Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements, and identify available colors.
D. Manufacturer's Qualification Statement.
E. Installer's Qualification Statement.
F. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in District's name and registered with manufacturer.

1.06 QUALITY ASSURANCE
A. Perform Work in accordance with GANA (GM), GANA (SM), GANA (LGRM), and IGMA TM-3000 for glazing installation methods.
B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.
C. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years documented experience and personnel certified under the National Glass Association's Certified Glass Installer program.
D. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.

1.07 FIELD CONDITIONS
A. Do not install glazing when ambient temperature is less than 40 degrees F.
B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.08 WARRANTY
A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
B. Insulating Glass Units: Provide a five (5) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including providing products to replace failed units.

C. Remedial Provisions: Upon notification of defects, within the warranty period, party providing warranty or guarantee shall replace the glass and glazing at no cost to District.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Glass Fabricators:
   2. GlasPro, Inc.: www.glas-pro.com
   4. Substitutions: Refer to Section 01 60 00 - Product Requirements.

B. Float Glass Manufacturers:
   7. Substitutions: Refer to Section 01 60 00 - Product Requirements.

2.02 REGULATORY REQUIREMENTS

A. Comply with the all applicable codes and ordinances, including California Building Code (CBC), Title 24, Part 2, Chapter 24 as amended and adopted by authorities having jurisdiction, and US Consumer Product Safety Commission Standard 16 CFR 1201 CI and CII.

B. Where safety glass is indicated or required, provide glazing materials that conform to ANSI Z97.1 and CPSC 16 CFR 1201 and are so identified in accordance with CBC Section 2406.3.

C. Glass Identification:
   1. Per CBC Section 2403.1, each light shall bear the manufacturer's label designating the type and thickness of glass.
      a. When approved by the enforcement agency, labels may be omitted from other than safety glazing materials, provided an affidavit is furnished by the glazing contractor certifying that each light is glazed in accordance with approved plans and specifications.
      b. Identification of safety glazing material installed in hazardous locations as defined in Section 2406 of this chapter shall be identified by label which will specify the labeler, whether the manufacturer or installer, and state that safety glazing material has been utilized in such installations.
      c. The label shall be legible and visible from the inside of the building after installation and shall specify that label shall not be removed.
d. Tempered glass shall have an etched manufacturer's label.

2.03 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZING ASSEMBLIES

A. Provide type and thickness of exterior glazing assemblies to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of glass.
   1. Design Pressure: Calculated in accordance with applicable codes.
      a. Where glass thicknesses are not indicated, provide thickness based on the wind pressures required by the California Building Code (CBC), Title 24, Part 2, 2403 and 2404, wind pressure shall be assumed to have a one minute duration.
      b. Upon first application of design wind load for the specified durations, probability of breakage shall not exceed 8/1000 for vertical glass.
      c. Probability of breakage relative to glass thermal stress shall not exceed 8/1000 for vertical glass.
   2. Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass.
   3. Seismic Loads: Design and size glazing components to withstand seismic loads and sway displacement in accordance with the requirements of ASCE 7.
   4. Provide glass edge support system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths under specified design load.
   5. Glass thicknesses listed are minimum.

B. Vapor Retarder and Air Barrier Seals: Provide completed assemblies that maintain continuity of building enclosure vapor retarder and air barrier.
   1. In conjunction with vapor retarder and joint sealer materials described in other sections.
   2. To utilize the inner pane of multiple pane insulating glass units for the continuity of the vapor retarder and air barrier seal.

C. Thermal and Optical Performance: Provide exterior glazing products with performance properties as indicated. Performance properties are in accordance with manufacturer's published data as determined with the following procedures and/or test methods:
   1. Center of Glass U-Value: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
   2. Center of Glass Solar Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.

2.04 GLASS MATERIALS

A. Float Glass: Provide float glass based glazing unless otherwise indicated.
   1. Annealed Type: ASTM C1036, Type I - Transparent Flat, Class 1 - Clear, Quality - Q3.
   4. Fully Tempered Safety Glass: Complies with ANSI Z97.1 or 16 CFR 1201 criteria for safety glazing used in hazardous locations.
a. Where fully tempered is indicated, provide glass that has been tempered by the tong-less horizontal method.


6. Thicknesses: As indicated; provide greater thickness as required for exterior glazing wind load design.

2.05 INSULATING GLASS UNITS

A. Manufacturers:
   1. Any of the manufacturers specified for float glass.
   2. Fabricator certified by glass manufacturer for type of glass, coating, and treatment involved and capable of providing specified warranty.
   10. Substitutions: Refer to Section 01 60 00 - Product Requirements.

B. Insulating Glass Units: Types as indicated.
   1. Durability: Certified by an independent testing agency to comply with ASTM E2190.
   2. Coated Glass: Comply with requirements of ASTM C1376 for pyrolytic (hard-coat) or magnetic sputter vapor deposition (soft-coat) type coatings on flat glass; coated vision glass, Kind CV; coated overhead glass, Kind CO; or coated spandrel glass, Kind CS.
   3. Metal Edge Spacers: Aluminum, mitered and spigoted corners.
   5. Edge Seal:
      a. Single-Sealed System: Provide silicone, polysulfide, or polyurethane sealant as seal applied around perimeter.
   7. Purge interpane space with dry air, hermetically sealed.

C. Insulating Glass Units: Safety glazing.
   1. Applications:
      a. Glazed lites in exterior doors.
      b. Glazed sidelights and panels next to doors.
      c. Other locations required by applicable federal, state, and local codes and regulations.
      d. Other locations indicated on drawings.
   2. Space between lites filled with air.
3. Glass Type: Same as other vision glazing except use fully tempered float glass for both outboard and inboard lites.
4. Total Thickness: 1 inch.
5. Glazing Method: Dry glazing method, gasket glazing.

2.06 BASIS OF DESIGN - INSULATING GLASS UNITS
A. Basis of Design - Insulating Glass Units: Vision glazing, with Low-E coating.
   1. Applications: Exterior insulating glass glazing unless otherwise indicated.
   2. Space between lites filled with air.
   3. Total Thickness: 1 inch.
   4. Thermal Transmittance (U-Value), Winter - Center of Glass: 0.29, nominal.
   5. Visible Light Transmittance (VLT): 70 percent, nominal.
   6. Solar Heat Gain Coefficient (SHGC): 0.29, nominal.
   10. Edge Seal:
   12. Purge interpane space with dry air, hermetically sealed.
   14. Outboard Lite: Fully tempered float glass, 1/4 inch thick, minimum.
   15. Inboard Lite: Fully tempered float glass, 1/4 inch thick.
   16. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of another acceptable manufacturer.
   17. Substitution Procedures: See Section 01 60 00 - Product Requirements.
      a. For any product not identified as "Basis of Design", submit information as specified for substitutions.

2.07 PLASTIC FILMS
A. Type GF-1 - Decorative Plastic Film: Polyester type.
   1. Application: Locations as indicated on drawings.
   2. Series Type: Frost.
   4. Thickness Without Liner: 0.002 inch.
   5. Manufacturers:
      a. 3M Window Film: #SH2MAMM; www.3m.com/windowfilm.
      b. Substitutions: Refer to Section 01 60 00 - Product Requirements.
2.08 GLAZING COMPOUNDS
   A. Type GC-3 - Polysulfide Sealant: Two component; chemical curing, non-sagging type; ASTM C920, Type M, Grade NS, Class 25, Uses M, A, and G; with cured Shore A hardness range of 15 to 25; color as selected.
   B. Type GC-5 - Silicone Sealant: Single component; neutral curing; capable of water immersion without loss of properties; non-bleeding, non-staining; ASTM C920, Type S, Grade NS, Class 25, Uses M, A, and G; with cured Shore A hardness range of 15 to 25; color as selected.

2.08.09 ACCESSORIES
   A. Setting Blocks: Silicone, with 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot of glazing or minimum 4 inch by width of glazing rabbet space minus 1/16 inch by height to suit glazing method and pane weight and area.
   B. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness; ASTM C864 Option II. Minimum 3 inch long by one half the height of the glazing stop by thickness to suit application, self adhesive on one face.
   C. Glazing Tape, Back Bedding Mastic Type: Preformed, butyl-based, 100 percent solids compound with integral resilient spacer rod applicable to application indicated; 5 to 30 cured Shore A durometer hardness; coiled on release paper; black color.
      1. Width: As required for application.
      2. Thickness: As required for application.
   D. Glazing Gaskets: Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option II; color black.
   E. Glazing Clips: Manufacturer's standard type.

PART 3 EXECUTION

3.01 VERIFICATION OF CONDITIONS
   A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.
   B. Verify that the minimum required face and edge clearances are being provided.
   C. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.
   D. Verify that sealing between joints of glass framing members has been completed effectively.
   E. Proceed with glazing system installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION
   A. Clean contact surfaces with appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly bonded to substrates.
   B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
   C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.
3.03 INSTALLATION, GENERAL
   A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.
   B. Install glazing sealants in accordance with ASTM C1193, GANA (SM), and manufacturer's instructions.
   C. Do not exceed edge pressures around perimeter of glass lites as stipulated by glass manufacturer.
   D. Set glass lites of system with uniform pattern, draw, bow, and similar characteristics.
   E. Set glass lites in proper orientation so that coatings face exterior or interior as indicated.
   F. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld splatter, fire-safing, plastering, mortar droppings, etc.

3.04 INSTALLATION - DRY GLAZING METHOD (GASKET GLAZING)
   A. Application - Exterior and/or Interior Glazed: Set glazing infills from either the exterior or the interior of the building.
   B. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.
   C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.
   D. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.

3.05 FIELD QUALITY CONTROL
   A. See Section 01 40 00 - Quality Requirements, for additional requirements.
   B. Glass and Glazing product manufacturers to provide field surveillance of the installation of their products.
   C. Monitor and report installation procedures and unacceptable conditions.

3.06 CLEANING
   A. See Section 01 74 19 - Construction Waste Management and Disposal, for additional requirements.
   B. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.
   C. Remove non-permanent labels immediately after glazing installation is complete.
   D. Clean glass and adjacent surfaces after sealants are fully cured.
   E. Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written recommendations.

3.07 PROTECTION
   A. After installation, mark pane with an 'X' by using removable plastic tape or paste; do not mark heat absorbing or reflective glass units.
B. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

END OF SECTION
SECTION 27 53 13
CLOCK SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Clock system requirements.
B. Wireless clock systems and associated components:
C. Accessories.

1.02 REFERENCE STANDARDS
B. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2015.
C. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.03 ADMINISTRATIVE REQUIREMENTS
A. Coordination:
   1. Coordinate the placement of clocks with potential conflicts and/or view obstructions installed under other sections or by others.
   2. Coordinate the work with other installers to provide power for clocks and equipment at required locations.
B. Sequencing:
   1. Do not install clocks until final surface finishes and painting are complete.

1.04 SUBMITTALS
A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
B. Product Data: Provide manufacturer's standard catalog pages and data sheets for each system component. Include ratings, configurations, standard wiring diagrams, dimensions, finishes, service condition requirements, and installed features.
C. Shop Drawings: Include plan views indicating locations of system components and proposed size, type, and routing of conduits and/or cables. Include elevations and details of proposed equipment arrangements. Include system interconnection schematic diagrams. Include requirements for interface with other systems.
D. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and operation of product.
E. Manufacturer's detailed field testing procedures.
F. Field quality control test reports.
G. Operation and Maintenance Data: Include detailed information on system operation, equipment programming and setup, replacement parts, and recommended maintenance procedures and intervals.
   1. Include contact information for entity that will be providing contract maintenance and trouble call-back service.

H. Warranty: Submit sample of manufacturer's warranty and documentation of final executed warranty completed in District's name and registered with manufacturer.

I. Project Record Documents: Record actual locations of system components and installed wiring arrangements and routing.

J. Software: One copy of software not resident in read-only memory.

1.05 QUALITY ASSURANCE

A. Comply with the following:
   1. CEC, NFPA 70.
   2. Applicable TIA/EIA standards.

B. Maintain at the project site a copy of each referenced document that prescribes execution requirements.

C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

D. Installer Qualifications: Company with minimum three years documented experience with similar clock systems and providing contract maintenance service as a regular part of their business; manufacturer's authorized installer.
   1. Contract maintenance office located within 200 miles of project site.

E. Maintenance Contractor Qualifications: Same entity as installer.

F. Products: Listed, classified, and labeled as suitable for the purpose intended.

G. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Receive, inspect, handle, and store products in accordance with manufacturer's instructions.

B. Store products in manufacturer's unopened packaging, keep dry and protect from damage until ready for installation.

1.07 FIELD CONDITIONS

A. Maintain field conditions within manufacturer's required service conditions during and after installation.

1.08 WARRANTY

A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

B. Provide minimum one year manufacturer warranty covering repair or replacement due to defective materials or workmanship.
PART 2  PRODUCTS

2.01 CLOCK SYSTEM REQUIREMENTS
   A. Provide modifications and extensions to existing clock system consisting of all required equipment, conduit, boxes, wiring, connectors, hardware, supports, accessories, software, system programming, etc. as necessary for a complete operating system that provides the functional intent indicated.
   B. Interface with Existing Clock System:
      1. Existing Master Clock Unit:
         a. Manufacturer/Model: Simplex.
         b. Location: As indicated on Drawings.
   C. Interface with Other Systems:
      1. Provide products compatible with other systems requiring interface with clock system.

2.02 WIRELESS CLOCK SYSTEMS
   A. Provide components as indicated or as required for extension of wireless time correction signal between master clock unit and wireless secondary indicating clocks.
      1. Product(s):
         a. Wireless Repeater: Sonoff 4CH, or equal.

2.03 ACCESSORIES
   A. Provide components and wiring as indicated or as required for connection to auxiliary devices and other systems indicated.

PART 3  EXECUTION

3.01 EXAMINATION
   A. Verify that field measurements are as indicated.
   B. Verify that characteristics of system components are consistent with the indicated requirements.
   C. Verify that mounting surfaces are ready to receive system components.
   D. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION
   A. Perform work in accordance with NECA 1 (general workmanship).
   B. Install products in accordance with manufacturer's instructions.

3.03 FIELD QUALITY CONTROL
   A. See Section 01 40 00 - Quality Requirements, for additional requirements.
   B. Prepare and start system in accordance with manufacturer's instructions.
C. Program system parameters according to requirements of District.
D. Test for proper interface with other systems.
E. Correct defective work, adjust for proper operation, and retest until entire system complies with Contract Documents.
F. Submit detailed reports indicating inspection and testing results and corrective actions taken.

3.04 CLEANING
A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

3.05 CLOSEOUT ACTIVITIES
A. See Section 01 78 00 - Closeout Submittals, for closeout submittals.
B. See Section 01 79 00 - Demonstration and Training, for additional requirements.
C. Demonstration: Demonstrate proper operation of system to District, and correct deficiencies or make adjustments as directed.
D. Training: Train District's personnel on operation, adjustment, and maintenance of system.
   1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
   2. Instructor: Qualified contractor familiar with the project and with sufficient knowledge of the installed system.
   3. Location: At project site.

3.06 PROTECTION
A. Protect installed system components from subsequent construction operations.

END OF SECTION
SECTION 28 13 53.11
IP NETWORK COMPATIBLE INTERCOM (IX SYSTEM)

GENERAL

1.01 SECTION INCLUDES
A. IP Video Intercom. (Aiphone IX Series s system)

1.02 RELATED SECTIONS
A. Section 27 10.00.10 - Ethernet Cabling.

1.03 REFERENCES
A. Standards Institute (ANSI/TIA/EIA) 568 - Commercial Building Telecommunications Cabling Standard.

1.04 SYSTEM DESCRIPTION
A. IP Network Compatible Video Intercom System: A network-based communication and security system featuring video entry security, internal communication, emergency stations, and paging. All units and app in the systems shall be able to unlock doors remotely on a network, view and assist onsite visitors from an offsite location, broadcast emergency announcements, and communicate using a PoE network.

1. Power Source: Power over Ethernet (802.3af).
2. Network Interface: 10 BASE-T / 100 BASE-TX Ethernet CAT 6a (RJ-45).
3. Network Protocols: IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, MJPEG, RTSP, RTP, RTCP, IGMP, MLD, SMTP, DHCP, NTP, DNS.
4. Bandwidth Usage:
   a. G.711: 64Kbps x 2 per video call.
   b. 64Kbps per monitor.
   c. H.264: 24Kbps ~ 2,048Kbps.
5. Communication: Hands-free (VOX), push-to-talk (simplex), or handset (full-duplex).
6. Video Display: 7 inches color LCD.
7. Camera: Type:
   a. 1/4 inch (6 mm) color CMOS.
   b. View Area: 2 feet 2 inches (660 mm) vertical x 3 feet 1 inch (940 mm) horizontal at 20 inches (508 mm).
   c. Resolution: VGA or higher
8. Video Stream: ONVIF Profile S.
9. Door Release: Programmable Form C dry contact, 24V AC/DC, 500mA (which requires 24V DC power supply).
   a. District standard electric strike: HES model 9600 Series 24 V DC.
11. Wire Type: CAT-6a. (District standard: Panduit)
12. Distance:
   a. Base Bid to include up to 100 l. f. of cabling
   b. Maximum allowable to any station to Network Node: not to exceed 330 feet (100 meters).

1.05 SUBMITTALS

A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
B. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.
C. Shop Drawings: Submit the following:
   1. Wiring Diagrams: Indicate wiring for each item of equipment and interconnections between items of equipment.
   2. Include manufacturer's names, model numbers, ratings, power requirements, equipment layout, device arrangement, complete wiring point-to-point diagrams, and conduit layouts.
D. Installation and Operation Manuals:
   1. Submit manufacturer's installation and operation manual, including operation instructions and component wiring diagrams.
   2. Provide detailed information required for Owner to properly operate equipment.
E. Warranty: Submit manufacturer's standard warranty.

1.06 QUALITY ASSURANCE

B. Installer Qualifications: Factory trained and experienced with system installations of scope and size required for the Project.
C. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
D. Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
E. Handling: Protect materials during handling and installation to prevent damage.

1.07 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
PART 2  PRODUCTS

2.01 MANUFACTURERS
   B.  Requests for substitutions will be considered in accordance with provisions of Document 00 43 25 - Substitution Request Form - During Procurement.

2.02 SYSTEM DESIGN
   A.  Master Station(s): Provide one master station at each campus.
      1.  Aiphone Model IX-MV7-HW Provide one per campus at designated location.
   B.  Audio Video Door Stations:
      1.  Model IX-DA - Surface Mount: Provide one per campus at designated location.
      or
      2.  Model IX-DF - Flush Mount: Provide one per campus at designated location.
   C.  Signage:
      1.  At each Door Station/Wall Box Contractor shall provide weatherproof signage Signage: “ASSISTANCE” (English) and “ASISTENCIA” (Spanish).
   D.  Functional Components: As indicated on the drawings or as required to complete system.
      1.  Video Master Station Model IX-MV7-HW:
         a.  An IP addressable video master station with a 7 inch color LCD monitor. It can be wall or desk mounted (desk stand included. This station requires a 802.3af compliant Power-over-Ethernet network.
      2.  Audio/Video Door Station: Model IX-DA, IX-DF, or IX-DV
         a.  Station connects to a PoE network using CAT-6a cable.
      3.  Optional Components (Unit price items to be used at District option):
         a.  RY-IP44 IP Programmable Relay Adaptor:
         b.  45 Degree Mullion Mounting Bracket Model KMB-45:
         d.  Stainless Steel Enclosure Model SBX-ISDVF:
            1)  18-Guage stainless steel enclosure designed for surface mounting the IX-DF door stations.

PART 3  EXECUTION

3.01 EXAMINATION
   A.  Examine areas to receive integrated security and communication system.
   B.  Notify District of conditions that would adversely affect installation or subsequent use.
   C.  Do not begin installation until unacceptable conditions are corrected.
3.02 PREPARATION
   A. Verify the following compliance before starting installation.
      1. The unit turns inoperative during power failure.
      2. Keep the intercom wires at least 1 foot (30 cm) away from strong electrical wiring (AC 100-240 V) including, in particular, wiring for inverter electrical appliances. Noise and malfunction could result.
      3. If a strong light shines on the main unit screen, the picture may turn white or only silhouettes will be visible.
      4. Other manufacturer’s devices (such as sensor, detectors, door releases) used with this system, comply with the manufacturer’s installation requirements.
      5. The LCD panel is manufactured with very high precision techniques, inevitably will have a very small portion of its picture elements always lit or not lit at all. This is not considered a unit malfunction. Please be aware of this in advance.

3.03 INSTALLATION
   A. Install integrated security and communication system in accordance with manufacturer's instructions at locations indicated on the Drawings.
   B. Mount equipment plumb, level, square, and secure. For video entrance stations and video door stations, comply with manufacturer's design requirements to provide optimum picture quality of station monitoring.

3.04 SET-UP AND ADJUSTING
   A. Adjust integrated security and communication system for proper operation in accordance with manufacturer’s instructions.

3.05 DEMONSTRATION AND TRAINING
   A. Demonstration:
      1. Demonstrate that integrated security and communication system functions properly.
      2. Perform demonstration at final system inspection by qualified representative of manufacturer.
   B. Instruction and Training:
      1. Provide instruction and training of Owner’s personnel as required for operation of integrated security and communication system.
      2. Provide hands-on demonstration of operation of system components and complete system, including user-level program changes and functions.
      3. Provide instruction and training by qualified representative of manufacturer.
      4. Provide DVD copy of video recorded training session(s)

3.06 PROTECTION
   A. Protect installed integrated security and communication system from damage during construction.

END OF SECTION
ADD 02 - NEW MOW STRIP AND NEW BOLLARDS (REFERENCE SHEET ASD-1.2)

DAVIDSON ELEMENTARY SCHOOL
PARKING LOT AND SECURITY ENHANCEMENTS
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

ADD #02 - MOW STRIP & BOLLARD
07/02/2020

CONCRETE MOW STRIP @ BLDG
1'-1" 0-0"
DOOR SCHEDULE

<table>
<thead>
<tr>
<th>DOOR No.</th>
<th>DOOR TYPE</th>
<th>WIDTH</th>
<th>HEIGHT</th>
<th>THICKNESS</th>
<th>HDWR GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>101A</td>
<td>C</td>
<td>6'-0&quot;</td>
<td>7'-0&quot;</td>
<td>1 3/4&quot;</td>
<td>1</td>
</tr>
<tr>
<td>101B</td>
<td>A</td>
<td>3'-0&quot;</td>
<td>7'-0&quot;</td>
<td>1 3/4&quot;</td>
<td>2</td>
</tr>
<tr>
<td>103A</td>
<td>D</td>
<td>3'-0&quot;</td>
<td>7'-0&quot;</td>
<td>1 3/4&quot;</td>
<td>3</td>
</tr>
<tr>
<td>104A</td>
<td>B</td>
<td>3'-0&quot;</td>
<td>7'-0&quot;</td>
<td>1 3/4&quot;</td>
<td>4</td>
</tr>
</tbody>
</table>

DOOR TYPES

WINDOW TYPES

PANIC HDWR, WHERE OCCURS, SEE DOOR SCHEDULE

SAFETY GLAZING

KICK PLATE

SEE DOOR SCHEDULE

EXTERIOR WINDOW HOLLOW METAL FRAME

PLAN VIEW

SIDE VIEW

VENT VIEW

WINDOW THROAT SIZE

SAFETY GLAZING

SEE DOOR SCHEDULE

SEE DOOR SCHEDULE

SEE DOOR SCHEDULE

SEE DOOR SCHEDULE

SEE DOOR SCHEDULE

ADD 02 - DOOR SCHEDULE, DOOR TYPES & WINDOW TYPES (REFERENCE SHEET A1-8.1)

DAVIDSON ELEMENTARY SCHOOL

PARKING LOT AND SECURITY ENHANCEMENTS
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

04-118593

36-55

07-02-2020

3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664

5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5999

02

ADD #02 - WINDOW TYPES

07/02/2020

02 - 78-26

1/4" = 1'-0"
ADD 02 - NEW BASE CABINET SECTION AND NEW ROLLER SHADE DETAILS (REFERENCE SHEET AD-3.0)

DAVIDSON ELEMENTARY SCHOOL
PARKING LOT AND SECURITY ENHANCEMENTS
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

EXT. H.M. WINDOW - ROLLER SHADE

BASE CABINET SECTION

1"=1'-0"
DOOR, PER SCHED.

TILE WITH FULL MORTAR BED, SEE FINISH SCHEDULE & C.M.F. LEGEND FOR TILE TYPE

DEPRESSED SLAB, PER STRUCT. DWGS.

ACCESSIBLE BEVELED TILE THRESHOLD, 1:2 SLOPE TYP. EA. SIDE. SEE FINISH SCHEDULE & C.M.F. LEGEND FOR TILE TYPE

VINYL COMPOSITION TILE, SHEET VINYL LINOLEUM, CARPET, RUBBER FLOORING, RESINOUS FLOORING, OR EXTERIOR CONCRETE. SEE FINISH SCHEDULE

TYP. INT. DOOR THRESHOLD @ TILE

3" = 1'-0"

ADD 02 - INT. DOOR THRESHOLD (REFERENCE SHEET AD-3.0)

DAVIDSON ELEMENTARY SCHOOL

PARKING LOT AND SECURITY ENHANCEMENTS
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

04-118593
36-55
07-02-2020
1-78-26

RUHNAU CLARKE ARCHITECTS
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664
5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

LICENSED ARCHITECT
STATE OF CALIFORNIA
No. C-21340
Exp. 10-31-21

ASK-02.05
TYPICAL EXT THRESHOLD DETAIL

NOTES:
1. FURNISH AND INSTALL DOOR SEALS OR WEATHER STRIPPING AS SPECIFIED. NOT SHOWN HERE FOR SAKE OF CLARITY
2. SLOPE F.F. 2% MAX. TO GRAIN
3. WHEN NEW H.M. FRAMES OCCUR AT (E) WALLS, DO NOT EMBED H.M. FRAME INTO CONCRETE SLAB

ADD 02 - EXTERIOR DOOR THRESHOLD (REFERENCE SHEET AD-3.0)
ADHERED WALL FLASHING

4X BLKG. WOOD CURB
CANT STRIP

SELF FLASHING RTU
(ROOF TOP UNIT)

#10 X 1 1/4" W/ 6" O.C., TYP.
OPTIONAL COUNTER-
FLASHING (SEE NOTE)

CAP FLASHING
SURFACING
FLASHING BASE PLY
BUILT-UP ROOFING
SYSTEM
UNDERLAMENT

NOTE:
COUNTER FLASHING SKIRT REQUIRED
WHEN FASTENERS ARE EXPOSED.

ADHERED WALL FLASHING
1 1/2" = 1'-0"
30

MECHANICAL EQUIPMENT CURB

MECH. UNIT, REFER TO:
MECHANICAL DETAIL 2(M)-1.0
FOR ADDITIONAL INFORMATION
TYPICAL

MECH. EQUIP CURB, REFER TO MECH:
DETAIL B(M)-0.2 AND
STRUCT. DET. 3(S)-1.1 FOR
ANCHOR CONNECTIONS, TYP.

(4) ROOF SHTRG
CANT STRIP, REFER TO DETAIL:
30°, FOR ADDITIONAL INFO.

MAX.
KET = 95°

(4) 2X, SEE STRUCT. PLAN 5-2.1

COUNTERTOP SECTION

MECHANICAL EQUIPMENT CURB
1" = 1'-0"
29

ADD 02 - MECHANICAL EQUIPMENT CURB AND ADHERED WALL FLASHING DETAILS (REFERENCE SHEET AD-3.0)

DAVIDSON ELEMENTARY SCHOOL
PARKING LOT AND SECURITY ENHANCEMENTS
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

04-118593
36-55
07-02-2020
VARIANCE

RUNNACHLARKE.COM
3775 TENTH STREET, RIVERSIDE, CALIFORNIA 92501 (951) 684 4664
5751 PALMER WAY, SUITE C, CARLSBAD, CALIFORNIA 92010 (760) 438 5899

1 78-26
ASK-02.08
WALL MOUNTED TV

THERMAL BATT INSULATION
4X BLOCKING WITH SIMPSON A34 @ TOP & BOTTOM EA. END (STAGGERED), TYP
3/8" LAG SCREW INTO WOOD BLOCKING WITH 2.5" MIN PENETRATION (TOTAL 4 MIN)
TELEVISION MOUNTING BRACKET MAX T.V. WEIGHT=154 lbs
TELEVISION DISPLAY. FOR LOCATION SEE FLOOR PLAN
5/8" TYPE 'X' GWB
2X WOOS STUDS @ 16" O.C., TYP
FINISH PER FINISH SCHED

WALL MOUNTED TV
1 1/2"=1'-0"
6

ADD 02 - WALL MOUNTED TV (REFERENCE SHEET AD-3.0)
3" = 1'-0"

DAVIDSON ELEMENTARY SCHOOL
PARKING LOT AND SECURITY ENHANCEMENTS
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

RODRIGUEZ CLARK ARCHITECTS
STATE OF CALIFORNIA

LICENSSED ARCHITECT
No. C-21340
Exp. 10-31-21

04-118593
36-55
07-02-2020
1-78-26

ASK-02.09
NOTE:
SEE DETAIL FOR ADDITIONAL INFORMATION, SEE DETAIL FOR NEW TILE PATTERN,
SEE DETAIL FOR ADDITIONAL INFORMATION SEE DETAIL TYP OF 3 TILE / FINISHES.
MATCH ALL (E) FINISHES.

EXP. 10−31−19 No. C−21340
AREAS WITHIN PROJECT SCOPE OF WORK.
CUT OUT ALL DRY ROT AS REQUIRED IN NOTE:

PAINT ALL SUPPLY & RETURNS OF ALL ACCENT PAINTED CEILING AREAS

TYPES REFER TO ELECTRICAL & MECHANICAL DRAWINGS FOR CEILING COMPONENT CALLOUTS AND FIXTURE WALLS AT ROOF / FLOOR DECK

ALL MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT TO BE HELD AS TIGHT AS POSSIBLE TO ALL EXPOSED STRUCTURE, INCLUDING MECHANICAL & PLUMBING EQUIPMENT TO BE PAINTED.

ALL EXPOSED STRUCTURE, INCLUDING MECHANICAL & PLUMBING EQUIPMENT TO BE PAINTED.

SUSPENDED CEILING SEISMIC BRACING DETAILS AND TRAPEZE DETAILS

ACOUSTICAL CEILING TILES AND GRID TO BE CENTERED IN ROOM. SEE SHEET ALL CEILING HEIGHTS ARE RELATIVE TO THE FINISH FLOOR DIRECTLY BENEATH.

ALL LIGHT FIXTURES TO BE CENTERED IN SPACE, U.N.O.

GENERAL NOTES REFER TO ELECTRICAL DRAWINGS FOR MORE INFO.
LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS FOR MORE INFO.
WALL MOUNTED EXIT SIGN, REFER TO ELECTRICAL DRAWINGS FOR MORE INFO.
CEILING MOUNTED EXIT SIGN, REFER TO ELECTRICAL DRAWINGS FOR MORE INFO.
RECESSED LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS FOR MORE INFO.
PENDANT LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS FOR MORE INFO.
RECESSED LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS FOR MORE INFO.
MECHANICAL DIFFUSER & REGISTER, REFER TO CEILING PANELS, SEE DETAIL 2'

2' JOIST FRAMING INFO., SEE STRUCTURAL DETAIL GYPSUM CEILING BOARD. FOR TYPICAL CEILING PANEL PER DETAIL 13