



December 17, 2020

## ADDENDUM NO. 2

TO THE CONTRACT DOCUMENTS

**FOR**

PACIFIC HIGH SCHOOL – MODERNIZATION

**FOR THE**

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

777 North F Street

San Bernardino, CA 92410

DSA No. 04-118035      File No. 36-H7      RCA Job No. 1-78-21

### NOTICE TO BIDDERS

This Addendum forms a part of the Contract and modifies the original documents DSA Approved on January 16, 2020.

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

- |              |  |
|--------------|--|
| Item No. 2.1 | General Items:   |
| 2.1.1        | For bidder clarification, Buildings 'N'-Boy's Lockers, 'O'-Girl's Lockers, 'P'-Gym are not part of bid, Not in Contract.   |
| 2.1.2        | Reference Front End Bid Documents, a revised <b>Attachment 1- Bid Form</b> will be available for bidder reference at Crisp Imaging public plan room website <a href="http://www.crispimg.com">www.crispimg.com</a>   |
| 2.1.3        | Reference Front End Bid Documents, a revised <b>Supplementary General Conditions</b> , along with <b>Exhibits #01-A &amp; 01-B</b> , will be available for bidder reference at Crisp Imaging public plan room website <a href="http://www.crispimg.com">www.crispimg.com</a> |
| 2.1.4        | Reference Front End Bid Documents, a revised <b>Summary of Work</b> will be available for bidder reference at Crisp Imaging public plan room website <a href="http://www.crispimg.com">www.crispimg.com</a>  |

- |              |  |
|--------------|--|
| Item No. 2.2 | General Items:   |
| 2.2.1        | Remove the following specification sections from the Bid, Not in Contract: |
|              | 00 01 08 – Deferred Approvals  |
|              | 04 20 01 – Masonry Veneer  |
|              | 05 31 00 – Steel Decking   |
|              | 05 40 00 – Cold-Formed Metal Framing                                       |
|              | 07 42 13 – Metal Wall Panels   |
|              | 08 44 13 - Glazed Aluminum Curtain Walls                                   |
|              | 08 45 00 - Translucent Wall and Roof Assemblies                            |
|              | 09 64 66 - Wood Athletic Flooring  |
|              | 09 65 66 - Resilient Athletic Flooring                                     |
|              | 09 72 16.26 - Architectural Vinyl Graphic Film                             |
|              | 10 14 46 - Vinyl Wall Graphics   |
|              | 10 51 13 - Metal Lockers   |
|              | 10 82 13.10 - Exterior Metal Architectural Screen                          |
|              | 11 52 13 – Projection Screens  |
|              | 11 66 23 - Gymnasium Equipment   |
|              | 11 66 43 - Interior Scoreboards  |
|              | 12 66 13 - Telescoping Bleachers   |
|              | 14 42 13 - Incline Wheelchair Lifts  |

## CHANGES TO THE SPECIFICATIONS

- |              |   |
|--------------|---|
| Item No. 2.3 | Reference Section 01 52 13 – Field Offices and Sheds  |
| 2.3.1        | Paragraph 2.05, add new Item I to read:<br>“I. Data/Wifi must continually support 200MB per second.”  |
| 2.3.2        | Paragraph 3.02, add new Item C to read:<br>“C. Contractor shall supply Owners/Inspector trailer 390 Calendar Days after Notice to Proceed.” |
| Item No. 2.4 | Reference Section 07 41 13 – Metal Roof Panels:   |
| 2.4.1        | Remove section in its entirety, no longer applies to project  |
| Item No. 2.5 | Reference Section 09 67 00 – Fluid-Applied Flooring:  |
| 2.5.1        | Remove section in its entirety, no longer applies to project  |
| Item No. 2.6 | Reference Section 10 22 39 – Folding Panel Partitions:  |
| 2.6.1        | Remove section in its entirety, no longer applies to project  |
| Item No. 2.7 | Reference Section 12 24 00 - Window Shades:   |
| 2.7.1        | Replace section per attached revised Section 12 24 00.  |
| Item No. 2.8 | Reference Section 32 12 43 - Grasscrete:  |
| 2.8.1        | Remove section in its entirety, no longer applies to project  |

## CHANGES TO THE DRAWINGS

- |               |  |
|---------------|--|
| Item No. 2.9  | Reference Sheet C-3.5:                                   |
| 2.9.1         | Revise per clouded areas of attached revised Sheet C-3.5 |
| Item No. 2.10 | Reference Sheet C-3.6:                                   |
| 2.10.1        | Revise per clouded areas of attached revised Sheet C-3.6 |
| Item No. 2.11 | Reference Sheet C-3.7:                                   |
| 2.11.1        | Revise per clouded areas of attached revised Sheet C-3.7 |
| Item No. 2.12 | Reference Sheet C-3.8:                                   |
| 2.12.1        | Revise per clouded areas of attached revised Sheet C-3.8 |

**ATTACHMENTS**

<b>Exhibits</b>	01 A, 01 B
<b>Specifications</b>	12 24 00
<b>Sketches</b>	N/A
<b>Sheets</b>	C-3.5, C-3.6, C-3.7, C-3.8

**END OF ADDENDUM NO. 2**

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Roger Clarke, Principal  
#C-21340

**Attachment 1 - Bid Form**

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

Project: 20-08 PHS Modernization

Project Address: 1020 Pacific Street, San Bernardino, CA

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. F20-08 Pacific High School - Modernization**

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:

Addenda Number:	Addenda Number:	Addenda Number:	Addenda Number:	Addenda Number:
A (Inc. in Bid Set)				

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

a. Unit Cost per Square Foot: \$

4. Bidder shall provide Unit Cost per square foot for Flat Work:

a. Unit Cost per Square Foot: \$

5. Total Base Bid

A. Base Bid (\$\_\_\_\_\_)

B. Allowance (\$\_\_\_\_\_ \$500,000.00 \_\_\_\_\_)

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

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

\_\_\_\_\_  
\_\_\_\_\_ DOLLARS

(\$ \_\_\_\_\_)

6. Alternate Bids: N/A

~~[OPTIONAL] ALTERNATE BIDS: The following amounts shall be added to or deducted from the Base Bid at the District's option. Alternates are fully described in the Specifications.~~

Alternate No. 1: ADD/DEDUCT \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

Alternate No. 2: ADD/DEDUCT \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

Alternate No. 3: ADD/DEDUCT \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

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:

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(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

---

Date

---

Signatory Name & Title (Printed)

**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 blue ink**

## **SUPPLEMENTARY GENERAL CONDITIONS**

The following supplements modify the General Conditions. Where a portion of the General Conditions is modified and or deleted by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

### **ARTICLE 3 – THE CONTRACTOR**

#### **Move Management and Coordination:**

The General Contractor shall provide the following move management and coordination during the life of the project:

1. Provide staff to plan, manage and coordinate moves with school staff and Owner's Representative.
2. Provide all necessary movers, supplies, storage facilities (limit to (3) 50' containers), furniture breakdown and assembly, if needed, to move furnishings to and from various locations at Pacific High School.
3. The modernization of classroom buildings will be phased consisting of 3 wings/buildings to be modernized at a time, involving approximately 22 classrooms at each phase of modernization.
4. Each phase will be moved out, modernized per contract documents, then moved back. Upon occupancy, these buildings/wings/classrooms will be fully functioning classrooms/buildings.
5. Please refer to the Modernization Move Matrix in Exhibit #01 A & B
6. Refer to Supplemental Conditions for phasing plan and coordination with other Contractor(s).

### **ARTICLE 8 – TIME**

Article 8 Schedule Inclusion Requirements –The Baseline Schedule shall include the following Milestones in the Construction Schedule:

Refer to Exhibit “A” Phasing Plan of Site Utility Work and Demo of Breeze ways at Bldg.’s F and G	MOD contractor shall commence with modernization of Buildings F east and G east first in coordination of required site work by the CTE Contractor. Contractors are to coordinate this work for access and needs of the projects. Breezeways are to be demolished by the MOD contractor for Bldg.’s F and G for CTE site work and utility path constructed as identified in the exhibit.
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Schedule Milestone	The modernization of classroom buildings will be phased consisting of three (3) wings/buildings to be modernized at a time, involving approximately 22 classrooms at each phase of modernization.
Schedule Milestone	Per Spec Section 01 52 13: Construction Manager, District, Owner, Project Inspector, Architect and Engineer's office shall be provided by the Contractor 390 calendar days after NTP.

#### EXHIBIT "A" PHASING PLAN OF SITE WORK

#### ARTICLE 11 – INSURANCE AND BONDS

Article found. Performance and Payment Bonds – The number of executed copies of the Performance Bond and the Payment Bond required is three (3).

Division 1 Forms

**IMMEDIATE CONSTRUCTION CHANGE DIRECTIVE NO.**

PROJECT: \_\_\_\_\_

TO: \_\_\_\_\_

You are hereby directed to provide the extra work necessary to comply with this ICD.

DESCRIPTION OF CHANGE: \_\_\_\_\_

\_\_\_\_\_

COST (This cost shall not be exceeded): \_\_\_\_\_

TIME FOR COMPLETION: \_\_\_\_\_

NOTE:

Pursuant to Article **Error! Reference source not found.** An Immediate Change Directive is a written order to the CONTRACTOR prepared by the Architect and signed by the DISTRICT (and CM if there is a CM on the Project) and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The DISTRICT may by ICD, without invalidating the Contract, direct immediate changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted accordingly. CONTRACTOR SHALL PROCEED WITH WORK SET FORTH IN THIS ICD IMMEDIATELY UPON RECEIPT OR THE DISTRICT MAY EITHER HOLD THE CONTRACTOR IN EITHER PARTIAL DEFAULT PURSUANT TO ARTICLE **Error! Reference source not found.** OR TOTAL DEFAULT PURSUANT TO ARTICLE 14.

\_\_\_\_\_  
Architect

\_\_\_\_\_  
DISTRICT

## CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT: \_\_\_\_\_

TO: \_\_\_\_\_

As the Architect for the Project described above, the Project has reached Substantial Completion. Substantial Completion is not reached unless and until each of the following three (3) conditions have been met: (1) all contractually required items have been installed with the exception of only minor and Incomplete Punch Items (See Article **Error! Reference source not found.** of the General Conditions); (2) All Fire/Life Safety Systems have been installed, and are working and signed off on the DSA Form 152 Inspection Card, all building systems including mechanical, electrical and plumbing are all functioning; and (3) the Project is fit for occupancy and its intended use

I certify that the Project has reached Substantial Completion as defined above on the following date:  
\_\_\_\_\_.

\_\_\_\_\_  
Architect

Modernization Move Matrix - Exhibit #01 A

FROM	TO	Program
F1	D-4	Science
F2	M-3 or E10.5	Security
F3	Z-8	Program
F4	E-3A	Program/ Intervention
F5	I-7	Math
F6	Y-7 ?	Tutoring
F7	I-1	English
F8	I-2	English
F9	I-3	Math/Adiv
F10	I-8	Math/Sci
F11	I-5	Math
E3A	Z-9	English

FROM	TO	Program
G4	I-4	Spanish
G5	I-9	ELA/Social Studies
G6	Y-4	Social Studies
G7	Y-5	English
G8	Y-6	English
H5	I-6	Piano Lab
H6	Z-1	RSP
H7	Z-4	Math
H8	Z-5	Math
H9	Z-6	English

Modernization Moves: Phase 3 - No interim housing needs within the GYM. A need to find a space for PE Rain Days; potentially the auditorium.

Modernization Moves: Phase 4

E1	F2	English
E2	G7	Science
E3a	F11	Program/Intervention
E3b	?	Staff breakroom
E4	F10	Biomed
E5	Contex Box	Storage
E5.5	?	Combine w/ intervention lab
E6	F3 & F9	brand new furniture
E7	F5	History
E8	G6	History
E9	H6	History
E10	G4	Spanish
E10 .5	?	Gear Up

D1	H8	Science
D2	H9	Science
D3	G8	Science
D4	F1	
D5	H7	Math
D6	F6	MATH
D7	F8	English
D8	F9	Spanish
D9	G5	AVID
D10	F7	

H5 is open for discussion

This detailed site plan illustrates the layout of a school campus. The plan is bounded by Perris Hill Road to the west and Pacific Street to the south. Key features include:

- Buildings:** Numerous buildings are labeled, including Bldg A (Administration), Bldg B (West/East), Bldg C (West/East), Bldg D (West/East), Bldg E (West/East), Bldg F, Bldg G (West/East), Bldg H (West/East), Bldg I (West/East), Bldg J, Bldg K, Bldg L, Bldg M, Bldg N (Boys Locker), Bldg O (Girls Locker), Bldg P (Gym), Bldg Q (Cafeteria), Bldg R, Bldg S, Bldg T (Auditorium), Bldg U, Bldg V, Bldg W, Bldg X, Bldg Y (West/East), Bldg Z (West/East), Bldg AA, Bldg AB, Bldg AC, Bldg AD, Bldg AE, Bldg AF, Bldg AG, Bldg AH, Bldg AI, Bldg AJ, Bldg AK, Bldg AL, Bldg AM, Bldg AN, Bldg AO, Bldg AP, Bldg AQ, Bldg AR, Bldg AS, Bldg AT, Bldg AU, Bldg AV, Bldg AW, Bldg AX, Bldg AY, Bldg AZ, Bldg BA, Bldg BB, Bldg BC, Bldg BD, Bldg BE, Bldg BF, Bldg BG, Bldg BH, Bldg BI, Bldg BJ, Bldg BK, Bldg BL, Bldg BM, Bldg BN, Bldg BO, Bldg BP, Bldg BQ, Bldg BR, Bldg BS, Bldg BT, Bldg BU, Bldg BV, Bldg BW, Bldg BX, Bldg BY, Bldg BZ, Bldg CA, Bldg CB, Bldg CC, Bldg CD, Bldg CE, Bldg CF, Bldg CG, Bldg CH, Bldg CI, Bldg CJ, Bldg CK, Bldg CL, Bldg CM, Bldg CN, Bldg CO, Bldg CP, Bldg CQ, Bldg CR, Bldg CS, Bldg CT, Bldg CU, Bldg CV, Bldg CW, Bldg CX, Bldg CY, Bldg CZ, Bldg DA, Bldg DB, Bldg DC, Bldg DD, Bldg DE, Bldg DF, Bldg DG, Bldg DH, Bldg DI, Bldg DJ, Bldg DK, Bldg DL, Bldg DM, Bldg DN, Bldg DO, Bldg DP, Bldg DQ, Bldg DR, Bldg DS, Bldg DT, Bldg DU, Bldg DV, Bldg DW, Bldg DX, Bldg DY, Bldg DZ, Bldg EA, Bldg EB, Bldg EC, Bldg ED, Bldg EE, Bldg EF, Bldg EG, Bldg EH, Bldg EI, Bldg EJ, Bldg EK, Bldg EL, Bldg EM, Bldg EN, Bldg EO, Bldg EP, Bldg EQ, Bldg ER, Bldg ES, Bldg ET, Bldg EU, Bldg EV, Bldg EW, Bldg EX, Bldg EY, Bldg EZ, Bldg FA, Bldg FB, Bldg FC, Bldg FD, Bldg FE, Bldg FF, Bldg FG, Bldg FH, Bldg FI, Bldg FJ, Bldg FK, Bldg FL, Bldg FM, Bldg FN, Bldg FO, Bldg FP, Bldg FQ, Bldg FR, Bldg FS, Bldg FT, Bldg FU, Bldg FV, Bldg FW, Bldg FX, Bldg FY, Bldg FZ, Bldg GA, Bldg GB, Bldg GC, Bldg GD, Bldg GE, Bldg GF, Bldg GH, Bldg GI, Bldg GJ, Bldg GK, Bldg GL, Bldg GM, Bldg GN, Bldg GO, Bldg GP, Bldg GQ, Bldg GR, Bldg GS, Bldg GT, Bldg GU, Bldg GV, Bldg GW, Bldg GX, Bldg GY, Bldg GZ, Bldg HA, Bldg HB, Bldg HC, Bldg HD, Bldg HE, Bldg HF, Bldg HG, Bldg HH, Bldg HI, Bldg HJ, Bldg HK, Bldg HL, Bldg HM, Bldg HN, Bldg HO, Bldg HP, Bldg HQ, Bldg HR, Bldg HS, Bldg HT, Bldg HU, Bldg HV, Bldg HW, Bldg HX, Bldg HY, Bldg HZ, Bldg IA, Bldg IB, Bldg IC, Bldg ID, Bldg IE, Bldg IF, Bldg IG, Bldg IH, Bldg II, Bldg IJ, Bldg IK, Bldg IL, Bldg IM, Bldg IN, Bldg IO, Bldg IP, Bldg IQ, Bldg IR, Bldg IS, Bldg IT, Bldg IU, Bldg IV, Bldg IW, Bldg IX, Bldg IY, Bldg IZ, Bldg JA, Bldg JB, Bldg JC, Bldg JD, Bldg JE, Bldg JF, Bldg JG, Bldg JH, Bldg JI, Bldg JJ, Bldg JK, Bldg JL, Bldg JM, Bldg JN, Bldg JO, Bldg JP, Bldg JQ, Bldg JR, Bldg JS, Bldg JT, Bldg JU, Bldg JV, Bldg JW, Bldg JX, Bldg JY, Bldg JZ, Bldg KA, Bldg KB, Bldg KC, Bldg KD, Bldg KE, Bldg KF, Bldg KG, Bldg KH, Bldg KI, Bldg KJ, Bldg KK, Bldg KL, Bldg KM, Bldg KN, Bldg KO, Bldg KP, Bldg KQ, Bldg KR, Bldg KS, Bldg KT, Bldg KU, Bldg KV, Bldg KW, Bldg KX, Bldg KY, Bldg KZ, Bldg LA, Bldg LB, Bldg LC, Bldg LD, Bldg LE, Bldg LF, Bldg LG, Bldg LH, Bldg LI, Bldg LJ, Bldg LK, Bldg LL, Bldg LM, Bldg LN, Bldg LO, Bldg LP, Bldg LQ, Bldg LR, Bldg LS, Bldg LT, Bldg LU, Bldg LV, Bldg LW, Bldg LX, Bldg LY, Bldg LZ, Bldg MA, Bldg MB, Bldg MC, Bldg MD, Bldg ME, Bldg MF, Bldg MG, Bldg MH, Bldg MI, Bldg MJ, Bldg MK, Bldg ML, Bldg MN, Bldg MO, Bldg MP, Bldg MQ, Bldg MR, Bldg MS, Bldg MT, Bldg MU, Bldg MV, Bldg MW, Bldg MX, Bldg MY, Bldg MZ, Bldg NA, Bldg NB, Bldg NC, Bldg ND, Bldg NE, Bldg NF, Bldg NG, Bldg NH, Bldg NI, Bldg NJ, Bldg NK, Bldg NL, Bldg NM, Bldg NN, Bldg NO, Bldg NP, Bldg NQ, Bldg NR, Bldg NS, Bldg NT, Bldg NU, Bldg NV, Bldg NW, Bldg NX, Bldg NY, Bldg NZ, Bldg OA, Bldg OB, Bldg OC, Bldg OD, Bldg OE, Bldg OF, Bldg OG, Bldg OH, Bldg OI, Bldg OJ, Bldg OK, Bldg OL, Bldg OM, Bldg ON, Bldg OO, Bldg OP, Bldg OQ, Bldg OR, Bldg OS, Bldg OT, Bldg OU, Bldg OV, Bldg OW, Bldg OX, Bldg OY, Bldg OZ, Bldg PA, Bldg PB, Bldg PC, Bldg PD, Bldg PE, Bldg PF, Bldg PG, Bldg PH, Bldg PI, Bldg PJ, Bldg PK, Bldg PL, Bldg PM, Bldg PN, Bldg PO, Bldg PP, Bldg PQ, Bldg PR, Bldg PS, Bldg PT, Bldg PU, Bldg PV, Bldg PW, Bldg PX, Bldg PY, Bldg PZ, Bldg QA, Bldg QB, Bldg QC, Bldg QD, Bldg QE, Bldg QF, Bldg QG, Bldg QH, Bldg QI, Bldg QJ, Bldg QK, Bldg QL, Bldg QM, Bldg QN, Bldg QO, Bldg QP, Bldg QQ, Bldg QR, Bldg QS, Bldg QT, Bldg QU, Bldg QV, Bldg QW, Bldg QX, Bldg QY, Bldg QZ, Bldg RA, Bldg RB, Bldg RC, Bldg RD, Bldg RE, Bldg RF, Bldg RG, Bldg RH, Bldg RI, Bldg RJ, Bldg RK, Bldg RL, Bldg RM, Bldg RN, Bldg RO, Bldg RP, Bldg RQ, Bldg RR, Bldg RS, Bldg RT, Bldg RU, Bldg RV, Bldg RW, Bldg RX, Bldg RY, Bldg RZ, Bldg SA, Bldg SB, Bldg SC, Bldg SD, Bldg SE, Bldg SF, Bldg SG, Bldg SH, Bldg SI, Bldg SJ, Bldg SK, Bldg SL, Bldg SM, Bldg SN, Bldg SO, Bldg SP, Bldg SQ, Bldg SR, Bldg SS, Bldg ST, Bldg SU, Bldg SV, Bldg SW, Bldg SX, Bldg SY, Bldg SZ, Bldg TA, Bldg TB, Bldg TC, Bldg TD, Bldg TE, Bldg TF, Bldg TG, Bldg TH, Bldg TI, Bldg TJ, Bldg TK, Bldg TL, Bldg TM, Bldg TN, Bldg TO, Bldg TP, Bldg TQ, Bldg TR, Bldg TS, Bldg TU, Bldg TV, Bldg TW, Bldg TX, Bldg TY, Bldg TZ, Bldg UA, Bldg UB, Bldg UC, Bldg UD, Bldg UE, Bldg UF, Bldg UG, Bldg UH, Bldg UI, Bldg UJ, Bldg UK, Bldg UL, Bldg UM, Bldg UN, Bldg UO, Bldg UP, Bldg UQ, Bldg UR, Bldg US, Bldg UT, Bldg UY, Bldg UZ, Bldg VA, Bldg VB, Bldg VC, Bldg VD, Bldg VE, Bldg VF, Bldg VG, Bldg VH, Bldg VI, Bldg VJ, Bldg VK, Bldg VL, Bldg VM, Bldg VN, Bldg VO, Bldg VP, Bldg VQ, Bldg VR, Bldg VS, Bldg VT, Bldg VY, Bldg VZ, Bldg WA, Bldg WB, Bldg WC, Bldg WD, Bldg WE, Bldg WF, Bldg WG, Bldg WH, Bldg WI, Bldg WJ, Bldg WK, Bldg WL, Bldg WM, Bldg WN, Bldg WO, Bldg WP, Bldg WQ, Bldg WR, Bldg WS, Bldg WT, Bldg WY, Bldg WZ, Bldg XA, Bldg XB, Bldg XC, Bldg XD, Bldg XE, Bldg XF, Bldg XG, Bldg XH, Bldg XI, Bldg XJ, Bldg XK, Bldg XL, Bldg XM, Bldg XN, Bldg XO, Bldg XP, Bldg XQ, Bldg XR, Bldg XS, Bldg XT, Bldg XY, Bldg XZ, Bldg YA, Bldg YB, Bldg YC, Bldg YD, Bldg YE, Bldg YF, Bldg YG, Bldg YH, Bldg YI, Bldg YJ, Bldg YK, Bldg YL, Bldg YM, Bldg YN, Bldg YO, Bldg YP, Bldg YQ, Bldg YR, Bldg YS, Bldg YT, Bldg YZ, Bldg ZA, Bldg ZB, Bldg ZC, Bldg ZD, Bldg ZE, Bldg ZF, Bldg ZG, Bldg ZH, Bldg ZI, Bldg ZJ, Bldg ZK, Bldg ZL, Bldg ZM, Bldg ZN, Bldg ZO, Bldg ZP, Bldg ZQ, Bldg ZR, Bldg ZS, Bldg ZT, Bldg ZY, Bldg ZZ.
- Sports Facilities:** A large Sport Field is located on the right side, with Tennis Courts and Hand Ball courts adjacent to it. A Training Pool and Diving Pool are situated near the center-right.
- Other Features:** A Garage is located near the top right. A Refrigerator is located near the center-right. A Quad is located near the center.
- Roads:** Perris Hill Road runs along the west and south sides. Pacific Street runs along the south side.

**SECTION 01 11 00  
SUMMARY OF WORK**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Summary of the Work of these Contract Documents for the construction of:

**PROJECT:** Modernization at Pacific High School

Architect: Ruhnau Clarke Architects

Contact: Juan Cantoran

Email: bids@ruhnaucclarke.com

**1.02 GENERAL**

- A. Work under this Contract includes furnishing all labor, materials, services and transportation which is required for completion of the Project at F20-08 Pacific High School - Modernization in accordance with the Contract Documents.
- B. The Contract Time for completion shall be that shown in the Construction Progress Schedule.
- Once the CONTRACTOR has received a notice to proceed, the CONTRACTOR shall complete the work **within 780 Calendar Days** from the date listed on the Notice to Proceed. It is expressly understood that time is of the essence.
- C. At the F20-08 Pacific High School Modernization, some of the work may be performed within a portion of an active school campus. All work shall be conducted in a manner that does not impact the health and safety of school staff, students, site workers and project personnel, adjacent property owners, and/or the general public. Contractor shall at all times employ safety practices and environmental controls which take into consideration the fact that work is being performed on an active school campus. All work shall be performed in a manner which maximizes safety.
- D. Contract Drawings: The Drawings provided with and identified in the Project Manual are the Drawings referenced in the Agreement.
1. The location, extent and configuration of the required construction and improvements are shown and noted on Drawings.
    - a. The Drawings are referenced in the Agreement.
    - b. An index of Drawings is included in the set of Drawings.
  2. Drawings are arranged into series according to design discipline. Such organization and all references to trades, subcontractor, specialty contractor or supplier shall not control the Contractor in dividing the Work among subcontractors or in establishing the extent of the Work to be performed by any trade.

3. Where the terms "as shown", "as indicated", "as noted", "as detailed", "as scheduled", or terms of like meaning, are used in the Drawings or Specifications, it shall be understood that reference is being made to the Drawings referenced in the Agreement.
  4. Where reference to the word "plans" is made anywhere in Drawings, Specifications and related Contract Documents, it shall be understood to mean the Drawings referenced in the Agreement.
- E. Contractor's Safety Performance Requirement: SBCUSD places safety and safe work practices at a premium, especially in regard to operations on active District campuses.
- F. All work shall be performed in a manner that minimizes impact to the environment, minimizes waste and maximizes the amount of salvageable material recovered throughout the project(s).
- G. All work shall be performed in a manner that minimizes noise and vibration impacts to the adjacent classrooms, school operations and surrounding neighborhood. In some cases, loud or high vibration activities may have to be rescheduled to accommodate school instructional or testing activities. Such activities may require work on weekends, during holiday breaks, or other times when the campus is not occupied. Cost of rescheduling and of off hours' work shall be at Contractor's expense. Holiday break periods for the 2020-21 & 2021-22 school year are as follows:
- |                             |                   |
|-----------------------------|-------------------|
| • Winter Recess             | 12/21/20-1/08/21  |
| • Dr Martin Luther King Jr. | 1/18/21           |
| • Lincoln's Birthday        | 2/8/21            |
| • Washington's Birthday     | 2/15/21           |
| • Spring recess             | 3/22/21-4/2/21    |
| • Memorial Day              | 5/31/21           |
| • Summer Break              | 6/7/21 – 7/26/21  |
| • Independence Day          | 7/5/21            |
| • Labor Day                 | 9/6/21            |
| • Veterans Day              | 11/11/21          |
| • Thanksgiving              | 11/22/21-11/26/21 |
| • Winter Recess             | 12/20/21-1/7/22   |
| • Dr Martin Luther King Jr. | 1/17/22           |
| • Lincoln's Birthday        | 2/14/22           |
| • Washington's Birthday     | 2/21/22           |
| • Spring recess             | 3/2/22-4/1/22     |
| • Memorial Day              | 5/30/22           |
| • Summer break              | 6/2/22-TBD        |
- H. All work shall be performed in a manner that protects existing infrastructure, landscaping, furnishings, equipment, and other structures or items designated to remain.
- I. All work shall be performed in a manner that meets the District's expectation for safe work execution, as well as adherence to schedule and project budget.

### 1.03 SUMMARY SCOPE OF WORK

The complete Scope of Work shall be as detailed in project contract documents, exhibits and attachments, project General Conditions, RFP documents and attachments, project drawings and specifications. A brief summary of the Scope of Work is provided below:

**A. Site Work:**

Site work at the F20-08 Pacific High School - Modernization campus includes:

all new underground site utilities, hardscape, landscape, and other features indicated on the drawings & specifications.

**B. Buildings:**

Work on campus buildings includes The Scope of the work includes but is not limited to the modernization of eight (8) existing classroom buildings at the District's Pacific High School campus. These classroom buildings are Occupancy Type-Educational Group E, Construction Type V-B, with an Automatic Fire Sprinkler system at three (3) buildings and are primarily wood & steel construction. The classroom programs range from science, labs, math, English, history etc. Included is new building construction, interior improvements

**Move Management and Coordination:**

The General Contractor shall provide the following move management and coordination during the life of the project:

1. Provide staff to plan, manage and coordinate moves with school staff and Owner's Representative.
2. Provide all necessary movers, supplies, storage facilities (limit to three (3) 50' containers), furniture breakdown and assembly, if needed, to move furnishings to and from various locations at Pacific High School.
3. The modernization of classroom buildings will be phased consisting of 3 wings/buildings at a time, involving approximately 22 classrooms at each phase of modernization.
4. Each phase will be moved out, modernized per contract documents, then moved back. Upon occupancy, these buildings/wings/classrooms will be fully functioning classrooms/buildings.
5. Please refer to the Modernization Move Matrix in Exhibit #01 A & B
6. Refer to Supplemental Conditions for phasing plan and coordination with other Contractor(s).

**C. COVID-19 Safety**

All Contractor employees, subcontractors and visitors shall be required to comply with SBCUSD **COVID-19 Safety Plan** (see *RFP Division 00 Attachment 13 - COVID-19 Safety Plan*) prior to entering any SBCUSD campus, jobsite or work location

- D.** Per Spec Section 01 52 13: Construction Manager, District, Owner, Project Inspector, Architect and Engineer's office shall be provided by the Contractor approximately 390 calendar days after NTP.

### 1.04 BIDDER'S INVESTIGATIONS

**A. Bidder's Investigation:**

Bidder shall visit site and become familiar with site conditions at the project site.

1. Bidder may, at Bidder's own expense and prior to bidding, make soil surveys and investigations Bidder considers necessary, following written notification to and approval by the District representative.
2. Bidder assumes risk that soil and underground conditions may be other than that indicated in soil investigation data.

**B. Procedures:**

1. Obtain authorization from authorized District Representative prior to start of borings or subsurface investigations.
2. Immediately upon completion of Bidder's subsurface investigation, return site areas affected by investigations to condition existing prior to start of Bidder subsurface investigations as directed by District Representative.

**1.05 WORK COMPONENTS**

The following work components are required by the Contract, Technical Specifications and Bid Proposal Exhibits and text of this RFP:

**A. Activities Prior to Start of On-site Work:**

1. Obtain ALL permits necessary to perform the scope of work.
2. Prepare and file all required notifications, including but not limited to South Coast Air Quality Management District (SCAQMD) Rule 1403 required notifications. SCAQMD Notifications must be filed at least 10 days before the start of work.
3. Submit and fully adhere to Contractor's health and safety plan in full compliance with CalOSHA, SCAQMD, and project specifications. Site work may not proceed until this plan is delivered to and accepted by District.
4. District has contracted a survey of asbestos, lead-based paint and other hazardous wastes to confirm presence of these materials. (See survey reports – Attached in Specifications).
5. Identify and procure the services of licensed waste haulers and properly permitted Waste Disposal/Management Facilities for the transportation and disposal of all material generated during hazardous materials abatement and demolition activities.
6. Submit a detailed work schedule for the project for review and acceptance by District.

**B Hazardous Material Abatement and/or Mitigation:**

A recent hazardous materials survey was conducted at the Pacific High School campus by Converse Consultants. Findings are summarized in their report of date, 7/27/2018 and August 8, 2018, "**Hazardous Materials Survey Report.**"

Hazardous material abatement and/or mitigation activities are to include abatement of, but are not limited to, the following materials as listed in the report:

1. .Asbestos Containing Materials (ACMs): Asbestos was detected in the following locations identified in the report.
2. Lead-Based Paint (LBP) and Lead containing items: Lead was detected above concentrations greater than 1.0 mg/cm<sup>2</sup> in the report.
3. Other Hazardous Materials:
  - a. Any and all existing fluorescent light bulbs that will be impacted by demolition and or renovation activities should be removed, disposed of or recycled as Mercury containing waste. All such light tubes should be handled and containerized properly, in a manner to prevent breaking and potentially releasing mercury.
4. Contractor shall be responsible for the all required employee training, regulatory agency notifications, jobsite signage as well as proper removal and disposal of any/all hazardous materials designated to be removed or that are encountered in the course of the project(s).
5. Any/all hazardous materials abatement work completed while campus is occupied shall be completed between the hours of 4:00 p.m. and 7:00 a.m., or during holidays, weekends or other days when school is not in session.

### **C. Campus Systems to Remain Operational**

1. All campus systems and utilities shall remain operational throughout the project, including but not limited to:
  - a) Electrical service
  - b) Water
  - c) Irrigation
  - d) Storm drains
  - e) Sewer
  - f) Natural gas
  - g) Telephone
  - h) Data (Ethernet, Wi-Fi and or cable service)
  - i) Public Address System
  - j) Campus synchronized clocks & bells
  - k) Security system(s)
  - l) including cameras, sensors, and electronic strikes
2. Fire Alarm Systems shall remain operational.  
 In the event of any alarm condition, or if required for testing or fire drill procedures, Contractor shall allow District and/or fire personnel immediate access to fire alarm control panel(s).  

Contractor is responsible to provide fire watch if necessary.
3. Campus synchronized clock and bells system shall remain operational.

In the event that campus administration staff need to adjust clock or bell schedules, Contractor shall allow District personnel access to the bell system control panel(s).

4. The campus public address amplifier shall remain operational.
5. Data switches, equipment and data cabling from Electrical Room to other campus buildings shall remain operational throughout the duration of the project.

#### **D. Demolition**

1. All employees engaged in selective demolition activities shall be instructed regarding the contents of the Contractor's Health & Safety Plan(s).
2. Any/all demolition shall be performed in a manner that emphasizes and maximizes the safety of students, staff, area residents as well as project personnel and support staff.
3. Demolition shall be performed in a manner that does not encroach upon or cause damage to adjacent properties and structures.
4. Demolition shall be performed in a manner that facilitates safe and efficient handling and load out of materials for disposal.
5. The sequence of Demolition, material stockpiling, loadout, transport, and disposal shall be performed in a manner that promotes a smooth workflow to meet schedule milestones.
6. Contractor shall take measures to protect in place adjacent trees and landscaping designated to remain.

#### **E. Construction**

1. All employees engaged in construction activities shall be instructed regarding the contents of the Contractor's Health & Safety Plan(s).
2. Any/all construction shall be performed in a manner that emphasizes and maximizes the safety of students, staff, area residents as well as project personnel and support staff.
3. Any/all construction shall be performed in full compliance with project plans, specifications, and documents.
4. Any/all construction shall be performed in full compliance with regulatory requirements.

### **1.06 SEQUENCING OF WORK**

- A. Proper regulatory notifications must be filed and Health & Safety plans be submitted, and permits be secured prior to commencing site work. Proof of filing of regulatory agency notifications will be required prior to start of work.
- B. Installation of perimeter fencing and screening must be completed prior to initiation of other site activities.
- C. Hazardous Materials Abatement work must be completed, inspected and approved by the District representative and/or District consultant prior to the start of any demolition.

- D. The modernization of classroom buildings will be phased consisting of 3 wings/buildings at a time, involving approximately 22 classrooms at each phase of modernization.
- E. Contractor to provide adequate fencing to secure the construction area in phases and provide safe path of travel for students and staff.

## **1.07 PERMITS, LICENSES AND FEES**

### **A. Permits:**

1. For Work included in the Contract, Contractor shall obtain all permits from authorities having jurisdiction including but not limited to City of San Bernardino, serving utility companies and other state and local regulatory agencies.
2. District will reimburse Contractor for amount charged for such permits, without mark-up.

### **B. Licenses and certifications:**

1. Contractor shall obtain and pay all licenses and certifications associated with project demolition, abatement and construction activities, such as business licenses, contractors' licenses and vehicle and equipment licenses.
2. All costs for licenses shall be included in the Contract Sum.

### **C. Assessments:**

1. District will pay all assessments and utility service connection fees. Costs of assessments shall not be included in the Contract Sum.

### **D. Test and Inspection Fees:**

1. Contractor shall pay all fees charged by authorities having jurisdiction and from serving utility companies and agencies, for tests and inspections conducted by those authorities, companies and agencies.
2. District will reimburse Contractor for actual amount of such fees, without mark-up.

## **END OF SECTION**

## SECTION 12 24 00 WINDOW SHADES

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Window shades and accessories.
- B. ~~Contractor to provide concealed fascia integrated in finished ceilings, support backing for mounting, power, conduit, raceways and switchboxes.~~

#### 1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 - Rough Carpentry: Concealed wood blocking for attachment of headrail brackets.
- B. Section 08 43 13 - Aluminum Framed Storefronts: Substrate for window shade systems.
- C. Section 09 21 16 - Gypsum Board Assemblies: Substrate for window shade systems.
- D. Section 09 51 00 - ~~Suspended~~ Acoustical Ceilings: Shade Pockets, pocket closures and accessories.

#### 1.03 REFERENCE STANDARDS

- A. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi; 2015.
- B. CA Article 3.08, Title 19 - California Department of Toxic Substances Control - Clean Imported Fill Material; Current.
- C. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films; 2015.
- D. ~~UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions~~ WCMA A100.1 - Safety of Window Covering Products; 2018.

#### 1.04 ADMINISTRATIVE REQUIREMENTS

- A. ~~Coordination:~~
  - 1. ~~Where motorized shades are to be controlled by control systems provided under other sections, coordinate the work with other trades to provide compatible products.~~
  - 2. ~~Coordinate the work with other trades to provide rough-in of electrical wiring as required for installation of hardwired motorized shades.~~
- ~~B~~A. Preinstallation Meeting: Convene one week prior to commencing work related to products of this section; require attendance of all affected installers.
- ~~C~~B. Sequencing:
  - 1. Do not fabricate shades until field dimensions for each opening have been taken.
  - 2. Do not install shades until final surface finishes and painting are complete.

#### 1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

- B. Product Data: Provide manufacturer's standard catalog pages and data sheets including materials, finishes, fabrication details, dimensions, profiles, mounting requirements, and accessories.
- C. Shop Drawings: Include shade schedule indicating size, location and keys to details.
- ~~D. Certificates: Manufacturer's documentation that line voltage components are UL-listed or UL-recognized.~~
- ~~E~~D. Source Quality Control Submittals: Provide test reports indicating compliance with specified fabric properties.
- ~~F~~E. Verification Samples: Minimum size 6 inches square, representing actual materials, color and pattern.
- ~~G~~F. Manufacturer's Instructions: Include instructions for storage, handling, protection, examination, preparation, and installation of product.
- ~~H. Project Record Documents: Record actual locations of control systems and show interconnecting wiring.~~
- ~~I. Operation and Maintenance Data: List of all components with part numbers, sources of supply, and operation and maintenance instructions; include copy of shop drawings.~~
- ~~J~~G. Warranty: Submit sample of manufacturer's warranty and documentation of final executed warranty completed in District's name and registered with manufacturer.

#### **1.06 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than five years of documented experience.
- B. Installer Qualifications: Company specializing in performing work of this type with minimum three years of documented experience and approved by manufacturer.
  - 1. Factory training and demonstrated experience.

#### **1.07 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver shades in manufacturer's unopened packaging, labeled to identify each shade for each opening.
- B. Handle and store shades in accordance with manufacturer's recommendations.

#### **1.08 FIELD CONDITIONS**

- A. Do not install products under environmental conditions outside manufacturer's absolute limits.

#### **1.09 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Provide manufacturer's warranty from Date of Substantial Completion, covering the following:
  - 1. Shade Hardware: One year.
  - 2. Fabric: One year.
  - 3. Aluminum and Steel Coatings: One year.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Interior Manually Operated Roller Shades:
  - 1. Draper, Inc; Clutch Operated FlexShade: [www.draperinc.com](http://www.draperinc.com): Kathy Greenway (951) 304-9286.
  - 2. Hunter Douglas Architectural; RB500 Manual Roller Shades: [www.hunterdouglasarchitectural.com/#sle](http://www.hunterdouglasarchitectural.com/#sle).
  - 3. Mechoshade; Mecho/5 with fascia: [www.mechoshade.com](http://www.mechoshade.com): Carlos Herrera (626) 369-7777.
  - 4. SWFcontract, a division of Springs Window Fashions, LLC.: [www.swfcontract.com](http://www.swfcontract.com).
  - 5. Skyco Shading; [www.skycoshade.com](http://www.skycoshade.com): (714) 552-4064.
  - 6. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Source Limitations: Furnish products produced by a single manufacturer and obtained from a single supplier.

### **2.02 WINDOW SHADE APPLICATIONS**

- A. Interior Roller Shades: Privacy shades.
  - 1. Type: Roll down, closed position is at window sill.
  - 2. Fabric: As selected by Architect from manufacturer's full range.
  - 3. Color: As selected by Architect from manufacturer's full range of colors.
  - 4. Mounting: Inside and outside, where indicated on drawings.
  - 5. Operation: Manual.

### **2.03 ROLLER SHADES**

- A. Roller Shades: Fabric roller shades complete with mounting brackets, roller tubes, hembars, hardware and accessories.
  - 1. Drop: Regular roll.
  - 2. Size: As indicated on drawings.
- B. Fabric: Non-flammable, color-fast, impervious to heat and moisture, and able to retain its shape under normal operation.
  - 1. Privacy Shades: Soften the light yet still reveal some details to the outside; moderate privacy; Openness Factor approximately equal to 1 percent.
  - 2. Flammability: Pass NFPA 701 large and small tests. Comply with CA Article 3.08, Title 19.
  - 3. Fungal Resistance: No growth when tested according to ASTM G21.
- C. Roller Tubes: As required for type of operation.
  - 1. Material: Extruded aluminum or galvanized steel; as required for shade location.
  - 2. Size: Manufacturer's standard, selected for suitability for installation conditions, span, and weight of shades.

3. Fabric Attachment: Utilize extruded channel in tube to accept vinyl spline welded to fabric edge or double sided adhesive tape.
4. Finish: Clear anodized.
- D. Hembars: Designed for weight requirements and adaptation to uneven surfaces, to maintain bottom of shade straight and flat.
  1. Style: Half wrap fabric covered bottom bar, flat profile with closed ends.
  2. Finish: Painted.
  3. Color: As selected from manufacturer's standard colors.
- E. Manual Operation: Clutch operated continuous loop; beaded ball chain. Chain length shall extend below shade to 39 inches AFF.

## **2.04 ACCESSORIES**

- A. Fascias: Size as required to conceal shade mounting.
  1. Style: As selected by Architect from shade manufacturer's full selection.
  2. Material and Color: To match shade.
- B. Brackets and Mounting Hardware: As recommended by manufacturer for mounting configuration and span indicated.
- C. Number Plates: Number each opening and shade. Provide aluminum number plates for each shade unit and each opening. Fasten shade plate to the back of roller. Fasten opening plate on unexposed surface of the opening.
- D. Fasteners: Non-corrosive, and as recommended by shade manufacturer.

## **2.05 FABRICATION**

- A. Field measure finished openings prior to ordering or fabrication.
- B. Fabricate shades to fit openings within specified tolerances.
  1. Vertical Dimensions: Fill openings from head to sill with 1/2 inch space between bottom bar and window stool.
  2. Horizontal Dimensions - Inside Mounting: Fill openings from jamb to jamb.
  3. Horizontal Dimensions - Inside Mounting: Provide symmetrical light gaps on both sides of shade not to exceed 3/4 inch total.
  4. Horizontal Dimensions - Outside Mounting: Cover window frames, trim, and casings completely.
- C. Dimensional Tolerances: As recommended in writing by manufacturer.
- D. At openings requiring continuous multiple shade units with separate rollers, locate roller joints at window mullion centers; butt rollers end-to-end.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Examine finished openings for deficiencies that may preclude satisfactory installation.

- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Start of installation shall be considered acceptance of substrates.

### **3.02 PREPARATION**

- A. Prepare surfaces using methods recommended by manufacturer for achieving best result for substrate under the project conditions.
- B. Coordinate with window installation and placement of concealed blocking to support shades.

### **3.03 INSTALLATION**

- A. Install in accordance with manufacturer's instructions and approved shop drawings, using mounting devices as indicated.
- B. Installation Tolerances:
  - 1. Inside Mounting: Maximum space between shade and jamb when closed of 1/16 inch.
  - 2. Maximum Offset From Level: 1/16 inch.
- C. Replace shades that exceed specified dimensional tolerances at no extra cost to District.
- D. Adjust level, projection and shade centering from mounting bracket. Verify there is no telescoping of shade fabric. Ensure smooth shade operation.

### **3.04 CLEANING**

- A. Clean soiled shades and exposed components as recommended by manufacturer.
- B. Replace shades that cannot be cleaned to "like new" condition.
- C. See Section 01 74 19 - Construction Waste Management and Disposal for additional requirements.

### **3.05 CLOSEOUT ACTIVITIES**

- A. See Section 01 78 00 - Closeout Submittals, for closeout submittals.
- B. ~~Demonstration: Demonstrate operation and maintenance of window shade system to District's personnel.~~

### **3.06 PROTECTION**

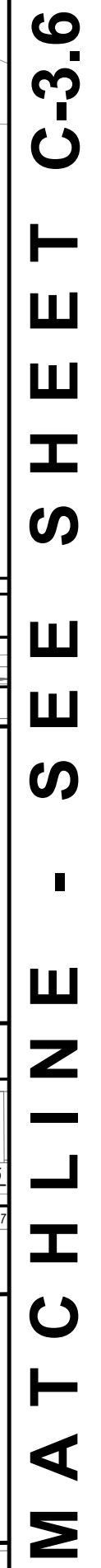
- A. Protect installed products from subsequent construction operations.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

### **3.07 MAINTENANCE**

- A. See Section 01 70 00 - Execution and Closeout Requirements, for additional requirements relating to maintenance service.

**END OF SECTION**





# UTILITY CONSTRUCTION NOTES

## DOMESTIC WATER

- (0) FURNISH AND INSTALL 1" REDUCED PRESSURE BACKFLOW DEVICE (FEBCO LFM60 OR APPROVED EQUAL) ON SHEET C-2
- (0) FURNISH & INSTALL 1" SCHEDULE 80 WATER LINE
- (0) FURNISH & INSTALL 1-1/2" SCHEDULE 80 WATER LINE
- (0) FURNISH & INSTALL 2" SCHEDULE 80 WATER LINE
- (0) FURNISH & INSTALL 2-1/2" SCHEDULE 80 WATER LINE
- (0) FURNISH & INSTALL 3" SCHEDULE 80 WATER LINE
- (0) FURNISH & INSTALL 4" CLASS 225 DR-18 C900 WATER LINE
- (0) FURNISH & INSTALL 6" CLASS 225 DR-18 C900 WATER LINE
- (0) CONNECT TO EXISTING WATER LINE
- (0) CUT AND CAP EXISTING WATER LINE
- (0) CONSTRUCT THRUST BLOCK PER DETAIL "N" ON SHEET C-5.1

## FIRE

- (0) FURNISH & INSTALL 4" CLASS 225 DR-18 C900 PVC WATER LINE
- (0) CONNECT TO EXISTING WATER LINE
- (0) FURNISH & INSTALL 1/2" CLASS 225 DR-18 C900 PVC WATER LINE
- (0) CONSTRUCT THRUST BLOCK PER DETAIL "N" ON SHEET C-5.1
- (0) FURNISH & INSTALL FIRE HYDRANT ASSEMBLY (JONES 400) 40" OR APPROVED EQUAL) ON SHEET C-5.2
- (0) FURNISH & INSTALL 6" GATE VALVE (MUELLER RESILIENT WEDGE 1/2" OR APPROVED EQUAL) ON SHEET C-5.2
- (0) FURNISH & INSTALL STANDOFF INLET PER DETAIL "N" ON SHEET C-5.1
- (0) FURNISH & INSTALL STANDOFF OUTLET PER DETAIL "O" ON SHEET C-5.1
- (0) FURNISH & INSTALL 4" PIV (MUELLER A-2000) OR APPROVED EQUAL) ON SHEET C-5.2
- (0) FURNISH AND INSTALL FIRE DEPARTMENT CONNECTION (CROWER 6510 OR CHA ENGINEER APPROVED EQUAL) FURNISH & INSTALL SILENT WAFER CHECK VALVE (CLA-VAL SERIES 380 OR APPROVED EQUAL) ON SHEET C-5.2

## SEWER

- (0) FURNISH & INSTALL 4" SDR 35 PVC SEWER LINE
- (0) FURNISH & INSTALL 5" SDR 35 PVC SEWER LINE
- (0) CONSTRUCT PVC SEWERS/STORM DRAIN CLEANOUT PER DETAIL "N" ON SHEET C-5.1
- (0) CONNECT TO EXISTING SEWER LINE. CONTRACTOR TO FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATION AND CONTACT EPC ENGINEERS WITH RESULTS FOR VERIFICATION TO PROCEED PRIOR TO ANY CONSTRUCTION
- (0) CONNECT TO EXISTING SEWER
- (0) CUT AND CAP EXISTING SEWER LINE

## STORM DRAIN

- (0) FURNISH & INSTALL 4" SDR 35 PVC STORM DRAIN PIPE
- (0) FURNISH & INSTALL 5" SDR 35 PVC STORM DRAIN PIPE
- (0) FURNISH & INSTALL 6" SDR 35 PVC STORM DRAIN PIPE
- (0) FURNISH & INSTALL 12" SDR 35 PVC STORM DRAIN PIPE
- (0) NOTE NOT USED
- (0) FURNISH & INSTALL 12" X 12" PREFABRICATED CATCH BASIN (JAR CB1212 OR APPROVED EQUAL) PER DETAIL "N" ON SHEET C-5.1
- (0) FURNISH & INSTALL 18" X 18" PREFABRICATED CATCH BASIN (JAR CB1818 OR APPROVED EQUAL) PER DETAIL "N" ON SHEET C-5.1
- (0) FURNISH & INSTALL 24" X 24" PREFABRICATED CATCH BASIN (JAR CB2424 OR APPROVED EQUAL) PER DETAIL "N" ON SHEET C-5.1
- (0) CONSTRUCT STORM DRAIN MANHOLE PER SPWCC 2009 ED. STD. PLAN 321-2 ON SHEET C-5.2
- (0) CONSTRUCT PVC SEWERS/STORM DRAIN CLEANOUT PER DETAIL "N" ON SHEET C-5.1
- (0) FURNISH & INSTALL 18" RCP STORM DRAIN PIPE
- (0) CUT AND CAP EXISTING STORM DRAIN LINE
- (0) CONSTRUCT RETAINING WALL SUBDRAIN PER DETAIL "O" ON SHEET C-5.1
- (0) CONNECT TO EXISTING STORM DRAIN

## MISC.

- (0) REMOVE/RELOCATE SPECIFIED ITEM PER APPROPRIATE CONSULTANT PLANS
- (0) REMOVE EXISTING SPECIFIED UTILITY LINE
- (0) REMOVE EXISTING SPECIFIED ITEM

## LEGEND

IE	INVERT (STORM DRAIN)		DIRECTION OF FLOW
INV	INVERT (SEWER)		EDGE OF PAVEMENT
POC	POINT OF CONNECTION		FLOWLINE
SD	STORM DRAIN		PROPOSED STORM DRAIN
SWR	SEWER		PROPOSED SEWER LINE
TG	TOP OF GRATE		PROPOSED WATER LINE
WTR	WATER		PROPOSED FIRE LINE
	FIRE HYDRANT		CHANGE IN WATER LINE
	MANHOLE		PROPOSED RETAINING WALL
	POWER POLE		EXISTING STORM DRAIN
	SIGN		EXISTING SEWER LINE
	TREE		EXISTING FIRE LINE
	CONTROL POINT		EXISTING WATER LINE
	RAIN BOX		EXISTING ELECTRIC LINE
	POST INDICATOR VALVE		EXISTING GAS LINE
	CLEANOUT		
	DOUBLE DETECTION CHECK		
	FIRE DEPARTMENT CONNECTION		

### UTILITY CONSTRUCTION NOTES

### **DOMESTIC WATER**

19	FURNISH AND INSTALL 6" REDUCED PRESSURE BACKFLOW DEVICE (FEBCO LF86 OR APPROVED EQUIV.) ON SHEET C-5.2
20	FURNISH & INSTALL 1" SCHEDULE 80 WATER LINE
21	FURNISH & INSTALL 1-1/2" SCHEDULE 80 WATER LINE
22	FURNISH & INSTALL 2" SCHEDULE 80 WATER LINE
23	FURNISH & INSTALL 2-1/2" SCHEDULE 80 WATER LINE
24	FURNISH & INSTALL 3" SCHEDULE 80 WATER LINE
25	FURNISH & INSTALL 4" CLASS 225 DR-18 C200 PVC WATER LINE
26	FURNISH & INSTALL 6" CLASS 225 DR-18 C200 PVC WATER LINE
27	CONNECT TO EXISTING WATER LINE
28	CUT AND CAP EXISTING WATER LINE
29	CONSTRUCT THRUST BLOCK PER DETAIL "Y" ON SHEET C-5.1

### **FIRE**

30	FURNISH & INSTALL 6" CLASS 225 DR-18 C200 PVC WATER LINE
31	CONNECT TO EXISTING WATER LINE
32	FURNISH & INSTALL 1/2" CLASS 225 DR-18 C200 PVC WATER LINE
33	CONSTRUCT THRUST BLOCK PER DETAIL "Y" ON SHEET C-5.1
34	FURNISH & INSTALL FIRE HYDRANT ASSEMBLY (JONES 4000 A OR APPROVED EQUIV.) ON SHEET C-5.2
35	FURNISH & INSTALL 6" GATE VALVE (MUELLER RESILIENT WEDGE IF OR APPROVED EQUIV.) ON SHEET C-5.2
36	FURNISH & INSTALL STANDOFF INLET PER DETAIL "N" ON SHEET C-5.1
37	FURNISH & INSTALL STANDOFF OUTLET PER DETAIL "N" ON SHEET C-5.1
38	FURNISH & INSTALL 1" PIV (MUELLER A-2000 OR APPROVED EQUIV.) ON SHEET C-5.2
39	FURNISH & INSTALL FIRE DEPARTMENT CONNECTION (ORDER OHIO CIV. ENG. ENGINEER APPROVED CLASS 4 FURNISH & INSTALL 1" SWEET CHECK VALVE (CLAW, SERIES 580) OR APPROVED

**SEWER**

(1) FURNISH & INSTALL 4" SDR 35 PVC SEWER LINE

(1) FURNISH & INSTALL 4" SDR 35 PVC SEWER LINE

(2) CONSTRUCT PVC SEWERS/STORM DRAIN CLEANOUT PER DETAIL "O" ON SHEET C-5.1

(2) CONNECT TO EXISTING SEWER LINE. CONTRACTOR TO FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATION AND CONTACT EPC ENGINEERS WITH RESULTS FOR INFORMATION TO PROCEED PRIOR TO ANY CONSTRUCTION

(2) CONNECT TO EXISTING SEWER

(2) CUT AND CAP EXISTING SEWER LINE

**STORM DRAIN**

(8) FURNISH & INSTALL 4" SDR 35 PVC STORM DRAIN PIPE

(8) FURNISH & INSTALL 4" SDR 35 PVC STORM DRAIN PIPE

(8) FURNISH & INSTALL 4" SDR 35 PVC STORM DRAIN PIPE

(8) FURNISH & INSTALL 4" SDR 35 PVC STORM DRAIN PIPE

(4) NOTE NOT USED

(2) FURNISH & INSTALL 12" X 12" PREFABRICATED CATCH BASIN (JAR CB1212 OR APPROVED EQUAL) PER DETAIL ON SHEET C-5.1

(2) FURNISH & INSTALL 18" X 18" PREFABRICATED CATCH BASIN (JAR CB1818 OR APPROVED EQUAL) PER DETAIL ON SHEET C-5.1

(7) FURNISH & INSTALL 24" X 24" PREFABRICATED CATCH BASIN (JAR CB2424 OR APPROVED EQUAL) PER DETAIL ON SHEET C-5.1

(8) CONSTRUCT STORM DRAIN MANHOLE PER SPWVC 2009 ED. STD. PLAN 321-2 ON SHEET C-5.2

(8) CONSTRUCT PVC SEWERS/STORM DRAIN CLEANOUT PER DETAIL "O" ON SHEET C-5.1

(8) FURNISH & INSTALL 18" RCP STORM DRAIN PIPE

(1) CUT AND CAP EXISTING STORM DRAIN LINE

(2) CONSTRUCT RETAINING WALL SUBDRRAIN PER DETAIL "O" ON SHEET C-5.1

(2) CONNECT TO EXISTING STORM DRAIN






















**MISC.**

(0) REMOVE/RELOCATE SPECIFIED ITEM PER APPROPRIATE CONSULTANTS PLAN

(0) REMOVE EXISTING SPECIFIED UTILITY LINE

(0) REMOVE EXISTING SPECIFIED ITEM

## **LEGEND**

IE	INVERT (STORM DRAIN)		DIRECTION OF SLOPE
INV	INVERT (SEWER)		EDGE OF PAVEMENT
POC	POINT OF CONNECTION		FLOWLINE
SD	STORM DRAIN		PROPOSED STORM DRAIN
SMR	SEWER		PROPOSED SEWER LINE
TG	TOP OF GRATE		PROPOSED WATER LINE
WTR	WATER		PROPOSED FIRE LINE
	FIRE HYDRANT		CHANGE IN A/CPC THE
	MANHOLE		PROPOSED RETAINING
	POWER POLE		EXISTING STORM DRAIN
	SIGN		EXISTING SEWER LINE
	TREE		EXISTING FIRE LINE
	CONTROL POINT		EXISTING WATER LINE
			EXISTING ELECTRIC LINE
			EXISTING GAS LINE

SEE SHEET C-3.6 FOR FIRE LINE DATA TABLES

SEE SHEET C-3.6 FOR WATER LINE DATA TABLES

SEE SHEET C-3.9 FOR STORM DRAIN LINE DATA TABLES

**DIGALERT**  
Call 2 Working Days  
Before You Dig!  
**811**

MATCHLINE - SEE SHEET C-3.5

MATCHLINE - SEE SHEET C-3.8

PACIFIC MOD FIRE LINE DATA TABLE		
NAME	BEARING	LENGTH
F1	S80° 00' 00"E	70.70
F2	N80° 00' 00"E	162.35
F3	S45° 00' 00"E	18.08
F4	S00° 00' 00"E	124.64
F5	N80° 00' 00"E	86.50
F6	N80° 00' 00"E	26.54
F7	S00° 25' 07"E	188.84
F8	S89° 46' 45"W	161.03
F9	N45° 13' 10"W	86.16
F10	S89° 46' 45"W	67.12
F11	N00° 00' 00"W	52.74
F12	S89° 46' 45"W	93.22
F13	N00° 13' 15"W	2.27
F14	S89° 46' 45"W	403.63
F15	N44° 46' 45"E	2.83
F16	N77° 53' 48"W	286.24
F17	S89° 57' 00"W	96.38
F18	S44° 57' 00"W	12.88
F19	N07° 53' 48"W	187.88
F20	N00° 11' 30"W	58.19
F21	N45° 11' 30"W	28.78
F22	N80° 00' 00"E	50.16
F23	S45° 00' 00"E	4.57
F24	N80° 00' 00"E	64.56
F25	S45° 00' 00"E	16.90
F26	N80° 00' 00"E	199.98
F27	N00° 00' 00"E	39.65
F28	N89° 47' 57"E	42.64
F29	S00° 12' 03"E	60.00
F30	N89° 47' 57"E	15.58
F31	S45° 12' 03"E	2.13
F32	N89° 47' 57"E	69.49
F33	S87° 42' 03"E	8.00
F34	N89° 47' 57"E	65.38
F35	N67° 17' 57"E	5.39
F36	N89° 47' 57"E	34.08
F37	N00° 12' 03"W	2.70
F38	N89° 47' 57"E	41.49
F39	S00° 12' 03"E	57.00
F40	N89° 47' 57"E	16.16
F41	S45° 12' 03"E	2.13
F42	N89° 47' 57"E	68.71
F43	S87° 42' 03"E	8.00
F44	N89° 47' 57"E	50.51
F45	S00° 12' 03"E	26.23
F46	N87° 42' 36"E	36.89
F47	N87° 42' 36"E	36.89
F48	N87° 42' 36"E	36.89
F49	S45° 00' 00"E	43.72
F50	N80° 00' 00"E	216.07

UTILITY CONSTRUCTION NOTES

DOMESTIC WATER

- (4) FURNISH AND INSTALL 6" REDUCED PRESSURE BACKFLOW DEVICE (FEBCO LF866 OR APPROVED EQUAL) ON SHEET C-3.2
- (5) FURNISH AND INSTALL 1" SCHEDULE 80 WATER LINE
- (6) FURNISH AND INSTALL 1-1/2" SCHEDULE 80 WATER LINE
- (7) FURNISH AND INSTALL 2" SCHEDULE 80 WATER LINE
- (8) FURNISH AND INSTALL 2-1/2" SCHEDULE 80 WATER LINE
- (9) FURNISH AND INSTALL 3" SCHEDULE 80 WATER LINE
- (10) FURNISH AND INSTALL 4" CLASS 235 DR-18 C900 PVC WATER LINE
- (11) FURNISH AND INSTALL 6" CLASS 235 DR-18 C900 WATER LINE
- (12) CONNECT TO EXISTING WATER LINE
- (13) CUT AND CAP EXISTING WATER LINE
- (14) CONSTRUCT THRUST BLOCK PER DETAIL "Y" ON SHEET C-5.1

FIRE

- (4) FURNISH AND INSTALL 6" CLASS 235 DR-18 C900 PVC WATER LINE
- (5) CONNECT TO EXISTING WATER LINE
- (6) FURNISH AND INSTALL 10" CLASS 235 DR-18 C900 PVC WATER LINE
- (7) CONSTRUCT THRUST BLOCK PER DETAIL "Y" ON SHEET C-5.1
- (8) FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY (JONES 4000 AR OR APPROVED EQUAL) ON SHEET C-5.2
- (9) FURNISH AND INSTALL 6" GATE VALVE (MUELLER RESILIENT WEDGE IFP OR APPROVED EQUAL) ON SHEET C-5.2
- (10) FURNISH AND INSTALL STANDPIPE INLET PER DETAIL "X" ON SHEET C-5.1
- (11) FURNISH AND INSTALL STANDPIPE OUTLET PER DETAIL "L" ON SHEET C-5.1
- (12) FURNISH AND INSTALL 6" PIV (MUELLER A-200X OR APPROVED EQUAL) ON SHEET C-5.2
- (13) FURNISH AND INSTALL FIRE DEPARTMENT CONNECTION (CROKER 6510 OR CIVIL ENGINEER APPROVED EQUAL) AND FURNISH AND INSTALL SILENT WATER CHECK VALVE (CLA-VAL SERIES 580 OR APPROVED EQUAL) ON SHEET C-5.2

SEWER

- (4) FURNISH AND INSTALL 4" SDR 35 PVC SEWER LINE
- (5) FURNISH AND INSTALL 6" SDR 35 PVC SEWER LINE
- (6) CONSTRUCT PVC SEWER/STORM DRAIN CLEANOUT PER DETAIL "Y" ON SHEET C-5.1
- (7) CONNECT TO EXISTING SEWER LINE. CONTRACTOR TO FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATION AND CONTACT EPIC ENGINEERS WITH RESULTS FOR VERIFICATION TO PROCEED PRIOR TO ANY CONSTRUCTION.
- (12) CONNECT TO EXISTING SEWER
- (13) CUT AND CAP EXISTING SEWER LINE

STORM DRAIN

- (4) FURNISH AND INSTALL 4" SDR 35 PVC STORM DRAIN PIPE
- (5) FURNISH AND INSTALL 6" SDR 35 PVC STORM DRAIN PIPE
- (6) FURNISH AND INSTALL 12" SDR 35 PVC STORM DRAIN PIPE
- (7) FURNISH AND INSTALL 12" SDR 35 PVC STORM DRAIN PIPE
- (8) NOTE NOT USED
- (9) FURNISH AND INSTALL 12" X 12" PREFABRICATED CATCH BASIN (JAR CB1212 OR APPROVED EQUAL) PER DETAIL "J" ON SHEET C-5.1
- (10) FURNISH AND INSTALL 18" X 18" PREFABRICATED CATCH BASIN (JAR CB1818 OR APPROVED EQUAL) PER DETAIL "J" ON SHEET C-5.1
- (11) FURNISH AND INSTALL 24" X 24" PREFABRICATED CATCH BASIN (JAR CB2424 OR APPROVED EQUAL) PER DETAIL "J" ON SHEET C-5.1
- (12) CONSTRUCT STORM DRAIN MANHOLE PER SPWAC 2009 ED. STD. PLAN 321-2 ON SHEET C-5.2
- (13) CONSTRUCT PVC SEWER/STORM DRAIN CLEANOUT PER DETAIL "Y" ON SHEET C-5.1
- (14) FURNISH AND INSTALL 18" RCP STORM DRAIN PIPE
- (15) CUT AND CAP EXISTING STORM DRAIN LINE
- (16) CONSTRUCT RETAINING WALL SUBDRAIN PER DETAIL "G" ON SHEET C-5.1
- (17) CONNECT TO EXISTING STORM DRAIN

MISC.

- (10) REMOVE/RELOCATE SPECIFIED ITEM PER APPROPRIATE CONSULTANTS PLAN
- (11) REMOVE EXISTING SPECIFIED UTILITY LINE
- (12) REMOVE EXISTING SPECIFIED ITEM

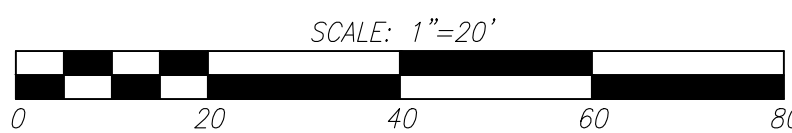
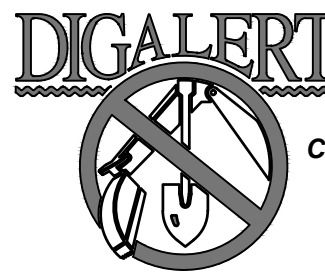
LEGEND

- IE INVERT (STORM DRAIN)
- INV INVERT (SEWER)
- POC POINT OF CONNECTION
- SD STORM DRAIN
- SWR SEWER
- TG TOP OF GRATE
- WTR WATER
- ⚡ FIRE HYDRANT
- ⊙ MANHOLE
- ⚡ POWER POLE
- ⚡ SIGN
- ⊙ TREE
- ⊕ CONTROL POINT
- ⊠ DRAIN BOX
- ⊕ POST INDICATOR VALVE
- ⊕ CLEANOUT
- ⊕ DOUBLE DETECTOR CHECK
- ⊕ FIRE DEPARTMENT CONNECTION
- DIRECTION OF SLOPE
- EDGE OF PAVEMENT
- FLOWLINE
- PROPOSED STORM DRAIN
- PROPOSED SEWER LINE
- PROPOSED WATER LINE
- PROPOSED FIRE LINE
- CHANGE IN ACPCC THICKNESS
- PROPOSED RETAINING WALL
- EXISTING STORM DRAIN
- EXISTING SEWER LINE
- EXISTING FIRE LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE
- EXISTING GAS LINE

SEE SHEET C-3.5 FOR SEWER LINE DATA TABLES

SEE SHEET C-3.7 FOR WATER LINE DATA TABLES

SEE SHEET C-3.9 FOR STORM DRAIN LINE DATA TABLES



PROJECT No. : 1-78-21

12/16/2020 4:18 PM

DRAWN BY: ADL

CHECKED BY: TWW

REVISION No. 1

REVISION No. 2

REVISION No. 3

RUHNAUCLARKE.COM

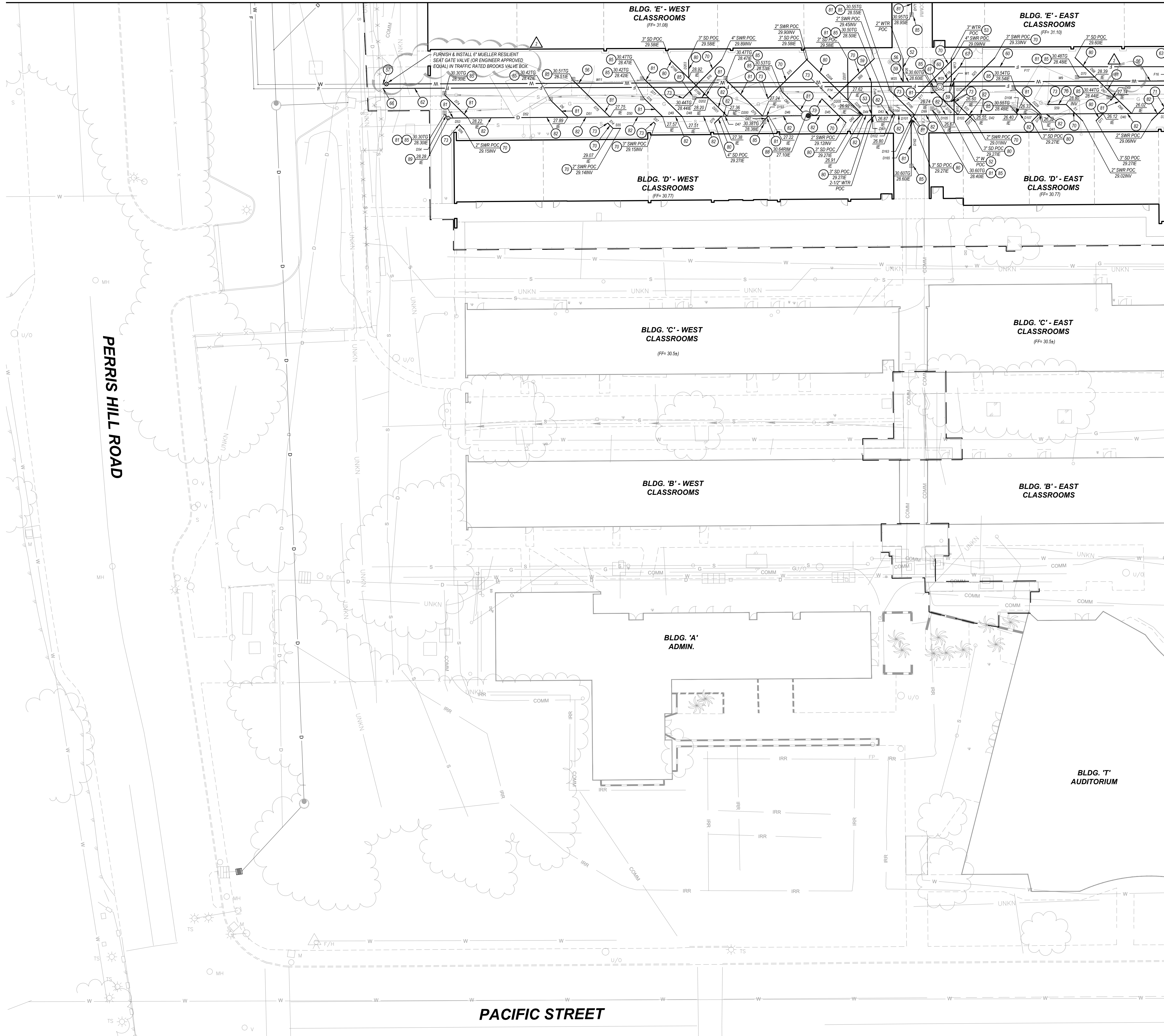
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 584-4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438-5899

PACIFIC HIGH SCHOOL  
MODERNIZATION  
1020 PACIFIC STREET SAN BERNARDINO, CA 92404  
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

COMPOSITE UTILITY PLAN

C-3.6

## MATCHLINE - SEE SHEET C-3.5



MATCHLINE - SEE SHEET C-3.8

PACIFIC MOD WATER LINE DATA TABLE		
NAME	BEARINGS	LENGTH
W1	S88° 46' 42"W	1.16
W2	S00° 00' 00"E	16.50
W3	S00° 00' 00"E	69.20
W4	N88° 00' 00"E	163.52
W5	S00° 00' 00"E	34.60
W6	N90° 00' 00"E	111.88
W7	S00° 22' 14"E	113.60
W8	S88° 46' 45"W	251.41
W9	S88° 46' 45"W	122.03
W10	S00° 24' 32"E	18.36
W11	S88° 46' 45"W	224.88
W12	S00° 22' 16"E	19.47
W13	N00° 11' 30"W	10.96
W14	S00° 12' 03"E	1.63
W15	S88° 47' 57"W	86.38
W16	S88° 47' 57"W	91.39
W17	S00° 12' 03"E	0.65
W18	S45° 00' 00"E	15.44
W19	S00° 00' 00"E	2.00
W20	N60° 00' 00"W	0.93
W21	S00° 24' 51"E	69.25
W22	S88° 34' 45"W	91.16
W23	N45° 23' 14"W	18.57
W24	N45° 13' 15"W	86.16
W25	S88° 46' 45"W	14.82
W26	N00° 13' 15"W	10.79
W27	N44° 46' 45"E	2.83
W28	N88° 46' 45"E	69.74
W29	S88° 46' 45"W	22.17
W30	N90° 00' 00"E	0.25
W31	S00° 00' 00"E	1.10
W32	S00° 12' 03"E	60.13
W33	S88° 46' 45"W	34.63
W34	S45° 00' 00"E	23.97
W35	N45° 00' 00"E	9.85
W36	S45° 00' 00"E	19.85
W37	S00° 00' 00"W	10.57
W38	N90° 00' 00"E	9.54
W39	N90° 00' 00"E	9.36
W40	S00° 00' 00"E	2.15
W41	S00° 00' 00"E	59.58
W42	S45° 12' 03"E	2.13
W43	N88° 47' 57"E	38.40
W44	S88° 47' 57"W	5.39
W45	S88° 47' 57"W	64.98
W46	N87° 42' 03"W	8.00
W47	S88° 47' 57"W	29.88
W48	N90° 00' 00"W	0.69
W49	N90° 00' 00"E	75.28
W50	N90° 00' 00"E	108.49
W51	N90° 00' 00"E	26.43
W52	N90° 00' 00"E	6.04
W53	S00° 00' 00"E	56.50
W54	N90° 00' 00"W	26.67
W55	S00° 00' 00"E	34.71
W56	N88° 46' 45"E	17.17
W57	S88° 34' 45"W	30.35
W58	S88° 34' 45"W	25.26
W59	N00° 22' 14"W	2.97

## UTILITY CONSTRUCTION NOTES

## DOMESTIC WATER

FURNISH AND INSTALL 6" REDUCED PRESSURE BACKFLOW DEVICE (FBCO LFR66 OR APPROVED EQUAL) ON SHEET C-3.2

FURNISH AND INSTALL 1-1/2" SCHEDULE 80 WATER LINE

FURNISH AND INSTALL 1-1/2" SCHEDULE 80 WATER LINE

FURNISH AND INSTALL 2" SCHEDULE 80 WATER LINE

FURNISH AND INSTALL 2-1/2" SCHEDULE 80 WATER LINE

FURNISH AND INSTALL 3" SCHEDULE 80 WATER LINE

FURNISH AND INSTALL 4" CLASS 225 OR 18 C900 WATER LINE

FURNISH AND INSTALL 6" CLASS 225 OR 18 C900 WATER LINE

CONNECT TO EXISTING WATER LINE

CUT AND CAP EXISTING WATER LINE

CONSTRUCT THRUST BLOCK PER DETAIL "Y" ON SHEET C-5.1

## FIRE

FURNISH AND INSTALL 6" CLASS 225 OR 18 C900 PVC WATER LINE

CONNECT TO EXISTING WATER LINE

FURNISH AND INSTALL 10" CLASS 225 OR 18 C900 PVC WATER LINE

CONSTRUCT THRUST BLOCK PER DETAIL "Y" ON SHEET C-5.1

FURNISH AND INSTALL FIRE HYDRANT ASSEMBLY (JONES 4060 AR OR APPROVED EQUAL) ON SHEET C-5.2

FURNISH AND INSTALL 6" GATE VALVE (MUELLER RESILIENT GATE IFP OR APPROVED EQUAL) ON SHEET C-5.2

FURNISH AND INSTALL STANDPIPE INLET PER DETAIL "X" ON SHEET C-5.1

FURNISH AND INSTALL STANDPIPE OUTLET PER DETAIL "X" ON SHEET C-5.1

FURNISH AND INSTALL 6" PIV (MUELLER 4-200X OR APPROVED EQUAL) ON SHEET C-5.2

FURNISH AND INSTALL FIRE DEPARTMENT CONNECTION (CROKER 6510 OR CIVIL ENGINEER APPROVED EQUAL) AND FURNISH AND INSTALL SILENT WAFER CHECK VALVE (CLA-VAL SERIES 580 OR APPROVED EQUAL) ON SHEET C-5.2

## SEWER

FURNISH AND INSTALL 4" SDR 35 PVC SEWER LINE

FURNISH AND INSTALL 6" SDR 35 PVC SEWER LINE

CONSTRUCT PVC SEWER/STORM DRAIN CLEANOUT PER DETAIL "Y" ON SHEET C-5.1

CONNECT TO EXISTING SEWER LINE. CONTRACTOR TO FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATION AND CONTACT EPIC ENGINEERS WITH RESULTS FOR VERIFICATION TO PROCEED PRIOR TO ANY CONSTRUCTION.

CONNECT TO EXISTING SEWER

CUT AND CAP EXISTING SEWER LINE

## STORM DRAIN

FURNISH AND INSTALL 4" SDR 35 PVC STORM DRAIN PIPE

FURNISH AND INSTALL 6" SDR 35 PVC STORM DRAIN PIPE

FURNISH AND INSTALL 8" SDR 35 PVC STORM DRAIN PIPE

FURNISH AND INSTALL 12" SDR 35 PVC STORM DRAIN PIPE

NOTE NOT USED

FURNISH AND INSTALL 12" X 12" PREFABRICATED CATCH BASIN (J&amp;R CB1212 OR APPROVED EQUAL) PER DETAIL "J" ON SHEET C-5.1

FURNISH AND INSTALL 18" X 18" PREFABRICATED CATCH BASIN (J&amp;R CB1818 OR APPROVED EQUAL) PER DETAIL "J" ON SHEET C-5.1

FURNISH AND INSTALL 24" X 24" PREFABRICATED CATCH BASIN (J&amp;R CB2424 OR APPROVED EQUAL) PER DETAIL "J" ON SHEET C-5.1

CONSTRUCT STORM DRAIN MANHOLE PER SPWAC 2009 ED. STD. PLAN 321-2 ON SHEET C-5.2

CONSTRUCT PVC SEWER/STORM DRAIN CLEANOUT PER DETAIL "Y" ON SHEET C-5.1

FURNISH AND INSTALL 18" RCP STORM DRAIN PIPE

CUT AND CAP EXISTING STORM DRAIN LINE

CONSTRUCT RETAINING WALL SUBDRAIN PER DETAIL "G" ON SHEET C-5.1

CONNECT TO EXISTING STORM DRAIN

## MISC.

REMOVE/RELOCATE SPECIFIED ITEM PER APPROPRIATE CONSULTANTS PLAN

REMOVE EXISTING SPECIFIED UTILITY LINE

REMOVE EXISTING SPECIFIED ITEM

## LEGEND

IE	INVERT (STORM DRAIN)	→	DIRECTION OF SLOPE
INV	INVERT (SEWER)	—	EDGE OF PAVEMENT
POC	POINT OF CONNECTION	—	FLOWLINE
SD	STORM DRAIN	—	PROPOSED STORM DRAIN
SWR	SEWER	—	PROPOSED SEWER LINE
TG	TOP OF GRATE	—	PROPOSED WATER LINE
WTR	WATER	—	PROPOSED FIRE LINE
⊗	FIRE HYDRANT	—	CHANGE IN ACP/PC THICKNESS
⊙	MANHOLE	—	PROPOSED RETAINING WALL
⊙	POWER POLE	—	EXISTING STORM DRAIN
⊙	SIGN	—	EXISTING SEWER LINE
⊙	TREE	—	EXISTING FIRE LINE
⊙	CONTROL POINT	—	EXISTING WATER LINE
⊙		—	EXISTING ELECTRIC LINE
⊙		—	EXISTING GAS LINE
⊙	DRAIN BOX		
⊙	POST INDICATOR VALVE		
⊙	CLEANOUT		
⊙	DOUBLE DETECTOR CHECK		
⊙	FIRE DEPARTMENT CONNECTION		

SEE SHEET C-3.5 FOR SEWER LINE DATA TABLES

SEE SHEET C-3.6 FOR FIRE LINE DATA TABLES

SEE SHEET C-3.9 FOR STORM DRAIN LINE DATA TABLES

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PROJECT No. : 1-78-21  
12/16/2020 4:18 PMDRAWN BY: ADL  
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DATE: 12/16/2020REVISION No. 1  
DATE: 12/16/2020  
DESCRIPTION: ADDENDUM #1  
REVISION No. 2  
DATE: 12/16/2020  
DESCRIPTION: ADDENDUM #2  
REVISION No. 3  
DATE: 12/16/2020  
DESCRIPTION: ADDENDUM #3

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PACIFIC HIGH SCHOOL  
MODERNIZATION  
1020 PACIFIC STREET SAN BERNARDINO, CA 92404  
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

COMPOSITE UTILITY PLAN

C-3.7

1-78-21

**MATCHLINE - SEE SHEET C-3.7**



## LEGEND

IE	INVERT (STORM DRAIN)		DIRECTION OF SLOPE
INV	INVERT (SEWER)		EDGE OF PAVEMENT
POC	POINT OF CONNECTION		FLOWLINE
SD	STORM DRAIN		PROPOSED STORM DRAIN
SWR	SEWER		PROPOSED SEWER LINE
TG	TOP OF GRATE		PROPOSED WATER LINE
WTR	WATER		PROPOSED FIRE LINE
	FIRE HYDRANT		CHANGE IN ACPCD TR
	MANHOLE		PROPOSED RETAINING WALL
	POWER POLE		EXISTING STORM DRAIN
	SIGN		EXISTING SEWER LINE
	TREE		EXISTING FIRE LINE
	CONTROL POINT		EXISTING WATER LINE
			EXISTING ELECTRICAL
			EXISTING GAS LINE

**DIGALERT**  
Call 2 Working Days  
Before You Dig!  
**811**

