NOTICE TO BIDDERS

INFORMAL BID PROCESS (CUPCCAA)

Notice is hereby given that Westside Union School District (hereinafter referred to as "Owner") will receive sealed bids prior to the date and time stated for the Bid Opening for:

Electrical Work Re- Bid Package
Relocation of (3) 24'x40' Modular Classroom Buildings to
Rancho Vista Elementary School*

as per drawings and specifications which may now be obtained in PDF format from the Architect

Flewelling & Moody, Inc. 1035 West Lancaster Blvd. Lancaster, CA 93534 661.949.0771

Bids will be received for Electrical Work Bid Package for "Relocation of (3) 24'x40' Modular Classroom Buildings to Rancho Vista Elementary School"

The lowest bid shall be determined:

On the amount of the base bid.

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

Public works projects shall be subject to compliance monitoring and enforcement by the Department of Industrial Relations. A contractor or subcontractor shall not be qualified to submit a bid or to be listed in a bid proposal subject to the requirements of Public Contract Code section 4104 unless currently registered and qualified under Labor Code section 1725.5 to perform public work as defined by Division 2, Part 7, Chapter 1 (§§1720 et seq.) of the Labor Code. A contractor or subcontractor shall not be qualified to enter into, or engage in the performance of, any contract of public work (as defined by Division 2, Part 7, Chapter 1 (§§1720 et seq.) of the Labor Code) unless currently registered and qualified under Labor Code section 1725.5 to perform public work.

Time of completion for the Project shall be forty-seven (47) calendar days from the start date established in the Owner's notice to proceed letter/notification.

Bids will be sealed and filed in the Purchasing Department of the Owner

Westside Union School District 41914 North 50th Street West Quartz Hill, CA 93536

on June 3, 2021 before 2:00 pm on the clock designated by the Owner or its representative as

the bid clock. Facsimile (FAX) copies of the bid will not be accepted.

Bids will be opened on <u>June 3, 2021</u> at Westside Union School District Offices, 41914 North 50th Street West, Quartz Hill, CA 93536, at 2:15 pm, as calculated by the clock designated by the Owner or its representative as the bid clock.

Mandatory pre-bid conference will be held on <u>May 28, 2021</u> at <u>8:00 am</u> at Rancho Vista Elementary School, 40641 Peonza Lane, Palmdale, CA 93551. Bidders not attending the conference will be disqualified.

Bidders must be prequalified through QualityBidders.com as CUPCCAA vendors with Westside Union School District by 11:59 P.M. on May 27, 2021 to bid on this project.

Bids must be accompanied by an executed Fingerprinting Notice and Acknowledgment.

Owner, or its designee, may determine that certain materials, services, products or things designated by specific brand or trade name shall not be subject to Public Contract Code section 3400(a) in order that a field test or experiment may be made to determine the product's suitability for future use and in order to match other materials, services, products or things in use on a particular Owner public improvement either completed or in the course of completion. If applicable, these specific materials, services, products or things are identified in project specifications.

Pursuant to the Contract Documents, the successful bidder will be required to furnish a Payment (Labor and Material) Bond in the amount of one hundred percent (100%) of the Contract Sum, and a Faithful Performance Bond in the amount of one hundred percent (100%) of the Contract Sum, said bonds to be secured from Admitted Surety insurers (an insurance organization authorized by the Insurance Commissioner to transact business of insurance in the State of California during this calendar year). The surety insurers must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bonds, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurers selected by the successful bidder and to require the successful bidder to obtain bonds from surety insurers satisfactory to the Owner. The bidder will be required to furnish insurance as set forth in the Contract Documents.

The successful bidder will be allowed to substitute securities or establish an escrow in lieu of retainage, pursuant to Public Contract Code Section 22300, and as described in the Agreement Between Owner and Contractor and General Conditions.

The Owner will not consider or accept any bids from contractors who are not licensed to do business in the State of California, in accordance with the California Public Contract Code, providing for the licensing of contractors. In accordance with Section 3300 of said Code, the-bidder shall have a Class "B" and/or "C-10" license as required for the bid package being submitted and shall maintain that license in good standing through Project completion and all applicable warranty periods. Bidder shall state the California contractor license number on the Designation of Subcontractors form for all subcontractors doing more than one-half of one percent (0.5%) of the bidder's total bid. An inadvertent error in listing a California contractor's license number shall not be grounds for filing a bid protest or for considering the bid nonresponsive if the bidder submits the corrected contractor's license number to the Owner within 24 hours after the bid opening, or any continuation thereof, so long as the corrected contractor's license number corresponds to the submitted name and location for that subcontractor.

Subcontractors shall maintain their licenses in good standing through Project completion and all applicable warranty periods. Owner reserves the right to reject any bid as nonresponsive if bidder or any subcontractor is not licensed in good standing from the time the bid is submitted to Owner up to award of the Contract, whether or not the bidder listed the subcontractor inadvertently, or if a listed subcontractor's license is suspended or expires prior to award of the Contract. Owner also reserves the right to reject any bid as non responsive if a listed subcontractor's license is not in good standing to perform the work for which it is listed from the time of submission of the bidder's bid to award of the Contract.

The Director of Industrial Relations of the State of California, in the manner provided by law, has ascertained the general prevailing rate of per diem wages and rate for legal holidays and overtime work. The Contractor must pay for any labor therein described or classified in an amount not less than the rates specified. Copies of the required rates are on file at the Owner's business office and are available to any interested party on request.

The Owner reserves the right to waive any irregularity and to reject any or all bids.

Unless otherwise required by law, no bidder may withdraw its bid for a period of sixty (60) days after the date set for the opening thereof or any authorized postponement thereof. The Owner reserves the right to take more than sixty (60) days to make a decision regarding the rejection of bids or the award of the Contract.

PROJECT MANUAL

for

(Electrical Work Re-Bid Package)

Relocation of (3) 24'x40' Modular Classroom Buildings to Rancho Vista Elementary School

WESTSIDE UNION SCHOOL DISTRICT

41914 North 50th Street West Quartz Hill, CA 93536

Prepared by:

FLEWELLING & MOODY, INC.

1035 West Lancaster Blvd. Lancaster, CA 93534

Job No. 2869 (DSA A#03-120742) Job No. 2913 (DSA A#03-121031)

BID NOTE

The scope of work under this contract shall include the complete and fully combined scope of work included in the contract documents for:

Electrical work as indicated in the following contract project documents to provide power to the three classrooms.

FM#2869 – "Relocation of (1) 24'x40' Modular Classroom Building to Rancho Vista Elementary School" (DSA A#03-120742)

FM#2913 – "Relocation of (2) 24'x40' Modular Classroom Buildings to Rancho Vista Elementary School" (DSA A#03-121031)

All documentation required by DSA shall be submitted to DSA specific to each individual application/approval.

The work under this contract shall also include all conduit, boxes, pull strings, etc. to provide the low voltage system pathways to the thee classrooms.

Fire alarm system installation and wiring for low voltage systems are not a part of this contract and are to be under separate contract by District.

Bid Clarifications

The following changes and/or clarifications shall be made to the drawings and specifications and all other conditions shall remain the same. All changes and/or clarifications provided shall be included in the scope of contracted work.

- 1. On detail 4/E-2, the concrete foundations, reinforcement, formwork, etc., for light poles will be responsibility of the concrete contractor under separate contract with District. Electrical contractor to coordinate work with concrete contractor.
- Contractor shall meet and coordinate with District to obtain any available plans of existing irrigation before trenching. District will repair irrigation if broken during trenching. District shall repair all turf removed due to trenching
- 3. Contractor shall backfill and compact all trenches to meet required subgrade elevations. Trench back fill shall be clean dirt, no concrete slurry or encasement is required. Trace wire shall be installed during backfill.

DIRECTORY

OWNER	WESTSIDE UNION SCHOOL DISTRICT 41914 North 50 th Street West Quartz Hill, CA 93536 661.722.0716
SITE	RANCHO VISTA ELEMENTARY SCHOOL 40641 Peonza Lane Palmdale, CA 93551
ARCHITECT	FLEWELLING & MOODY, INC. 1035 West Lancaster Blvd. Lancaster, CA 93534 661.949.0771
ELECTRICAL ENGINEER	PJK ENGINEERING 7050 Chimineas Avenue Reseda, CA 91335 818.344.8272

PROFESSIONAL SIGNATURE PAGE

for

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL

for the

WESTSIDE UNION SCHOOL DISTRICT 41914 North 50th Street West Quartz Hill, CA 93536 661.722.0716

Prepared By

FLEWELLING & MOODY, INC. 1035 West Lancaster Blvd. Lancaster, CA 93534 661.949.0771

	<u> </u>
Matt Buchanan, Architect	Paul Kass, Electrical Engineer

TABLE OF CONTENTS

000001	Project Title Page	
000002	Bid Note	
000003	Project Directory	
000004	Professional Signature Page	
000005	Table of Contents	2
DIVISION 0	PROCUREMENT AND CONTRACTING REQUIREMENTS	
000101	Nation To Contractors	2
000101	Notice To Contractors	
000102	Instructions To Bidders	
	Bid Form	
000104	Designation of Subcontractors	
000105	Non-Collusion Declaration	
000106	Agreement Between Owner and Contractor	
000107	Payment Bond	
000108	Performance Bond	
000109	Workers' Compensation Certificate	
000110	Fingerprinting Notice and Acknowledgment	
000111	Escrow Agreement for Security Deposits in Lieu of Retention	
000112	Drug-Free Workplace Certification	
000113 000114	Sufficient Funds Declaration	
000114	General Conditions	40
DIVISION 01	I GENERAL REQUIREMENTS	
011000	Summary of Work	4
011030	Project Procedures	
011045	Cutting and Patching	
011060	Regulatory Requirements	
013100	Project Management and Coordination	
013216	Construction Schedule	
013300	Submittal Procedures	10
014200	References	14
014300	Quality Control	9
014529	Testing and Inspection	
015000	Temporary Facilities and Control	9
015813	Temporary Project Signage	
016020	Storage and Protection	2
017700	Closeout Procedures	7
017701	Project Closeout	
017740	Warranties	1
017823	Operation and Maintenance Manuals	5

DIVISION 03 CONCRETE

033000	Cast-In-Place Concrete	12
DIVISION	26 ELECTRICAL	
260000	General Requirements for Electrical Work	29
260050	Integrated Communication Systems	10
260533	Raceway and Boxes	

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Pursuant to the Contract Documents, the successful bidder will be required to furnish a Payment (Labor and Material) Bond in the amount of one hundred percent (100%) of the Contract Sum, and a Faithful Performance Bond in the amount of one hundred percent (100%) of the Contract Sum, said bonds to be secured from Admitted Surety insurers (an insurance organization authorized by the Insurance Commissioner to transact business of insurance in the State of California during this calendar year). The surety insurers must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bonds, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurers selected by the successful bidder and to require the successful bidder to obtain bonds from surety insurers satisfactory to the Owner. The bidder will be required to furnish insurance as set forth in the Contract Documents.

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INSTRUCTIONS TO BIDDERS

SECURING DOCUMENTS: Drawings and Specifications are available at Flewelling & Moody, Inc., 1035 West Lancaster Blvd., Lancaster, CA 93534.

DEPOSIT: \$0 for PDF file

BID FORMAT: Lump Sum

REGISTRATION:

The Owner shall not accept any bid or enter into any contract without proof of the bidder's current registration to perform public work under Labor Code section 1725.5.

The bidder shall not accept any subbid or enter into any subcontract without proof of the subcontractor's current registration to perform public work under Labor Code section 1725.5.

BIDS:

Bids to receive consideration shall be made in accordance with the following instructions:

- 1. Bids shall be made on a form therefor, obtained from the Architect or Owner. Bids not made on the proper form shall be disregarded. Numbers must be stated in words and figures, and the signatures of all individuals must be in longhand.
- 2. No bid will be considered which makes exceptions, changes, or in any manner makes reservations to the terms of the drawings or specifications.
- 3. Questions regarding documents, discrepancies, omissions, or doubt as to meanings shall be referred immediately to the Architect who will send written instructions clarifying such questions to each bidder. Oral responses will not be binding on the Owner or Architect or any Construction Manager.
- 4. Each bid must give the full business address of the bidder and be signed by bidder with bidder's usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Bids by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.

- 5. Pursuant to the provisions of Sections 4100 to 4114, inclusive, of the Public Contract Code of the State of California, which are hereby incorporated and made a part hereof and these Instructions to Bidders, every bidder shall set forth in its bid:
 - A. The name and location of the place of business and the California contractor's license number of each subcontractor who will perform work or labor or render service to the bidder in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the bidder, specially fabricates and installs a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half (½) of one percent (1%) of the bidder's total bid. An inadvertent error in listing a California contractor's license number shall not be grounds for filing a bid protest or for considering the bid nonresponsive if the bidder submits the corrected contractor's license number to the Owner within 24 hours after the bid opening, or any continuation thereof, so long as the corrected contractor's license number corresponds to the submitted name and location for that subcontractor.
 - B. The portion of the Work which will be done by each such subcontractor. If the bidder fails to specify a subcontractor for any portion of the Work to be performed under the Contract in excess of one-half (½) of one percent (1%) of the bidder's total bid, the bidder agrees to perform that portion itself. The successful bidder shall not, without the consent of the Owner:
 - 1) Substitute any person as subcontractor in place of the subcontractor designated in the original bid.
 - 2) Permit any subcontract to be assigned or transferred or allow it to be performed by anyone other than the original subcontractor listed in the bid.
 - Sublet or subcontract any portion of the Work in excess of one-half ($\frac{1}{2}$) of one percent (1%) of the total bid as to which the original bid did not designate a subcontractor.
- 6. The Director of Industrial Relations of the State of California, in the manner provided by law, has ascertained the general prevailing rate of per diem wages and the rate for legal holidays and overtime work. The Contractor must pay for any labor therein described or classified in an amount not less than the rates specified. Copies of the required rates are on file at the Owner's business office and are available to any interested party on request.
- 7. All bids must be accompanied by a completed Noncollusion Declaration and Sufficient Funds Declaration (Labor Code § 2810). All bids must be accompanied by an executed Fingerprinting Notice and Acknowledgment.

- 8. Bids shall be sealed and filed as indicated in the Notice to Bidders. Irrespective of how a bidder chooses to deliver the bid and other documents to the Owner, the bidder is responsible for ensuring that the bid and other documents are actually received at the location designated in the Contract Documents for receipt of the bid and other documents prior to the time for the bid opening. Bids and other documents for any reason not actually received at the designated location prior to the time for the bid opening shall not be opened or considered.
- 9. THIS CONTRACT IS NOT SUBJECT TO THE DVBE REQUIREMENTS OF EDUCATION CODE SECTION 17076.11.

WITHDRAWAL OF BIDS:

Bids may be withdrawn by bidders prior to the time fixed for the submittal of bids or any authorized postponement thereof. A successful bidder shall not be relieved of the bid unless by consent of the Owner or bidder's recourse to Public Contract Code §5100 et seq.

OPENING OF BIDS:

Opening of bids shall be as soon after the hour set as will be possible; opening and declaration to be as set forth in the Notice to Bidders. Any and all bidders will be permitted to attend.

EXAMINATION OF CONTRACT DOCUMENTS AND SITE:

Before submitting a bid, bidders shall examine the drawings, read the specifications, the form of Agreement between Contractor and Owner, and the other Contract Documents. Bidders shall visit the site of the proposed Work, examine the building, or buildings, if any, and any work that may have been done thereon. Bidders shall fully inform themselves of all conditions, in, at, and about the site, the building or buildings, if any, and any work that may have been done thereon.

Pursuant to Public Contract Code section 1104: 1) bidders shall not be required to assume responsibility for the completeness and accuracy of architectural or engineering plans and specifications, except on clearly designated design build projects; 2) however, bidders shall be required to review architectural or engineering plans and specifications prior to submission of their bids and to report any errors and omissions to the Architect or Owner; and 3) the review shall be confined to the bidder's capacity as a bidder and not as a licensed design professional.

FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR:

The form of Agreement between Owner and Contractor which the successful bidder will be required to execute, if awarded the Work, is a part of this Bid Package.

ADDENDA OR BULLETINS:

Any addenda or bulletins, issued during the time of bidding, shall form a part of the drawings and specifications loaned to the bidder for the preparation of its bid, shall be covered in the bid, and shall be made a part of the Contract Documents. All addenda or bulletins shall be signed by the Architect and approved by the Division of State Architect.

EVIDENCE OF RESPONSIBILITY:

Upon the request of Owner, a bidder shall submit promptly to the Owner or its designee satisfactory evidence showing the bidder's financial resources, the bidder's experience in the type of work required by the Owner, the bidder's organization available for the performance of the Contract, and any other required evidence of the bidder's or its subcontractor's qualifications to perform the proposed Contract. The Owner may consider such evidence before making its decision awarding the proposed Contract. Failure to submit evidence of the bidder's or its subcontractors' responsibility to perform the proposed Contract may result in rejection of the bid.

AWARD OF CONTRACT:

Rejection of any or all bids, to contract work with whomever and in whatever manner, to abandon work entirely, and/or to waive any informality in receiving of bids is reserved as the right of the Owner. Before the Contract is awarded, the Owner may at its sole discretion, require from the proposed Contractor on the Project further evidence of the reasonable qualifications of such contractor to faithfully, capably, and reasonably perform such proposed Contract and may consider such evidence before making its decision on the award of such proposed Contract.

The Contract shall be awarded to the lowest responsible and responsive bidder as interpreted by the Owner under California law and as specified herein and shall be entered into by the successful bidder within ten (10) days after mailing, faxing or delivery of the Notice of Award of Contract. Owner reserves the right, without any liability, to cancel the award of any bid for any reason at any time before the full execution of the Agreement between Owner and Contractor.

EXECUTION OF AGREEMENT BETWEEN OWNER AND CONTRACTOR:

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

CONTRACT BONDS:

As required by the Contract Documents, two bonds, as itemized below and in the forms presented in these Contract Documents, shall be furnished by the successful bidder on the Project at the time of entering into the Contract and filed with the Owner before the successful bidder commences any work on the Project. They shall be in the form of surety bonds issued by Admitted Surety insurers (an insurance organization authorized by the Insurance Commissioner to transact business of insurance in the State of California during this calendar year). The surety insurers must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bond, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurers selected by Contractor and to require Contractor to obtain bonds from surety insurers satisfactory to the Owner.

Performance Bond in the amount of one hundred percent (100%) of the Contract Sum to insure Owner during construction, and for one year after completion and during any warranty or guaranty period, against faulty or improper materials or workmanship and to assure Owner of full and prompt performance of the Contract.

Payment Bond (Labor and Material) in the amount of one hundred percent (100%) of the Contract Sum in accordance with the laws of the State of California to secure payment of any and all claims for labor and materials used or consumed in performance of this Contract.

SUBSTITUTION OF MATERIALS:

The Contractor must ensure that the proposed substitutions by the Contractor or its subcontractors are submitted to the Architect's office a minimum of fourteen (14) calendar days prior to the Bid Opening for review and possible approval of any equipment or materials thought to be equal to or better than those specified in the drawings or specifications. An addendum will be issued seven (7) calendar days prior to Bid Opening, including all equipment and materials deemed equivalent to those specified and approved by the Architect. Submittals shall include comparative spec-data of the specified equipment or material and the proposed substitution as set forth in the Contract Documents. Submittals without this information will be automatically rejected. No substitutions shall be allowed for the Siplast "Street Bond" pavement coatings, nor for the artificial turf "Fescue Xtreme" (ELFX), as manufactured by Challenger Industries.

PAYMENTS:

Payments to the Contractor on account of the Contract shall be made in accordance with the terms of the Contract Documents.

TAXES:

The Owner is generally exempt from payment of Federal Excise Tax on materials. The Owner will furnish exemption certificates to the Contractor to be used to obtain materials ordinarily subject to Federal Excise Tax without payment of the tax. Bidder shall deduct Federal Excise Taxes from their bid prices before submitting bids, so that such taxes will not be included in the Contract Sum.

EARLY TERMINATION:

Notwithstanding any provision herein to the contrary, if for any fiscal year of this Contract the governing body of the Owner fails to appropriate or allocate funds for future periodic payments under the Contract after exercising reasonable efforts to do so, the Owner may upon thirty (30) days' notice, order work on the Project to cease. The Owner will remain obligated to pay for the work already performed but shall not be obligated to pay the balance remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and for which the work has not been done.

TIME OF COMPLETION AND LIQUIDATED DAMAGES:

Time of completion for the Project shall be forty-seven (47) calendar days from June 7, 2021 through July 23, 2021, with work hours being from 7:00am until dark.

Liquidated damages will accrue and may be assessed as provided in the Contract Documents. Should said Work not be completed within the time limit as may be extended as herein provided, damages will be sustained by the Owner. It is understood and agreed that it is and will be impracticable or extremely difficult to determine the actual amount of damages which the Owner will sustain in the event of and by reason of such delay, and it is therefore agreed that the Contractor will pay the Owner the sum of one thousand (\$1,000.00) per calendar day for each and every day's delay beyond the time specified as and for liquidated damages, during or as a result of each calendar day by which completion of the Project is delayed beyond the completion date; in case the Contractor fails to make such payment, the Owner may deduct the amount thereof from any money due or that may become due the Contractor under the Contract. Should such money not be sufficient, the Owner shall have the right to recover the balance from the Contractor or its sureties.

W-9 form shall be submitted by successful bidder at the same time as contract forms are submitted.

BID FORM

(Electrical Work Bid Package

, CA
(ENTER SPECIFIC ADDRESS & ROOM LOCATION)
, CA
Dear Board Members:
The undersigned doing business under the firm name of:
nereby propose and agree to enter into a Contract, to furnish any and all labor, materials, applicable taxes, equipment and services for the completion of Work described hereinafter and n the Contract Documents:
Electrical Work Bid Package Relocation of (3) 24'x40' Modular Classroom Buildings to Rancho Vista Elementary School 40641 Peonza Lane Palmdale, CA 93551
prepared by:
Flewelling & Moody, Inc. 1035 West Lancaster Blvd. Lancaster, CA 93534 661.949.0771
TOTAL BASE BID – ELECTRICAL WORK BID PACKAGE:
dollars (\$)

For projects not solely funded through revenue bonds, if Owner desires earthquake insurance for earthquakes over 3.5 on the Richter Scale and/or tidal wave insurance add the following as appropriate:

If written notice of the Award of Contract is mailed, faxed, or delivered to the undersigned at any time before this bid is withdrawn, the undersigned shall, within ten (10) days after the date of such mailing, faxing, or delivering of such notice, execute and deliver an agreement in the form of agreement present in these Contract Documents and give Performance and Payment Bonds in accordance with the specifications and bid as accepted.

The undersigned he may be mailed, faxe	, ,	ne office to which such N	lotice of Award of Contract
Our Public Liability a	and Property Damage	Insurance is placed wit	h:
	ensation Insurance is	placed with:	
	etins, addenda, etc., b	•	ions or issued during the time , they are to become a part
The receipt of the fo	llowing addenda to th	e specifications is ackno	owledged:
Addendum No	Date	Addendum No	Date
Addendum No	Date	Addendum No	Date
Addendum No	Date	Addendum No	Date
This bid may be with authorized postpone		ior to the scheduled time	e for the opening of bids or any
		bidder's California cont piration date and class a	ractor's license number are stated, and the bid contains

a statement that the representations made therein are made under penalty of perjury. Any bid submitted by a contractor who is not licensed pursuant to Business and Professions Code section 7028.15 shall be considered nonresponsive and shall be rejected. Any bid not containing the above information may be considered nonresponsive and may be rejected.

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL WESTSIDE UNION SCHOOL DISTRICT FLEWELLING & MOODY PROJECT NO. 2869 & 2913

NOTE:

Each bid must give the full business address of the bidder and be signed by bidder with bidder's usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Bids by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.

The undersigned declares under penalty of perjury under the laws of the State of California that the representations made in this bid are true and correct.

	Print or Type Name :
	Title:
	Name of Company as Licensed:
	Business Address:
	Telephone Number:
	California Contractor License No.:
	Class and Expiration Date:
	State of Incorporation, if Applicable:
	() Evidence of authority to bind corporation is attached.
Dated:	
Signed	! :

DESIGNATION OF SUBCONTRACTORS

Each bidder shall set forth below the name and the location of the place of business of each subcontractor and the California contractor license number of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the Work or improvement, or to a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent (0.5%) of the bidder's total bid, and the portion of the Work which will be done by each subcontractor. An inadvertent error in listing a California contractor's license number shall not be grounds for filing a bid protest or for considering the bid nonresponsive if the bidder submits the corrected contractor's license number to the Owner within 24 hours after the bid opening, or any continuation thereof, so long as the corrected contractor's license number corresponds to the submitted name and location for that subcontractor.

If the Contractor fails to specify a subcontractor for any portion of the Work to be performed under the Contract in excess of one-half of 1 percent (0.5%) of the Contractor's total bid, the Contractor shall be deemed to have agreed to perform such portion itself, and shall not be permitted to subcontract that portion of the Work except under the conditions hereinafter set forth.

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

For any bid proposal submitted and for any contract for public work entered into, an inadvertent error in listing a subcontractor who is not registered under Labor Code section 1725.5 shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that either: the subcontractor is registered prior to the bid opening; or the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5(a)(2)(E), if applicable, within 24 hours after the bid opening; or the subcontractor is replaced by another registered subcontractor under Public Contract Code section 4107. Failure of a listed subcontractor to be registered shall be grounds under Public Contract Code section 4107 for the Contractor, with the Owner's consent, to substitute a registered subcontractor for the unregistered subcontractor.

Failure to provide this information in a legible manner may result in the rejection of an otherwise acceptable bid.

NOTE: Reproduce page two of this section for additional listings needed beyond the length of this form.

Portion of Work	Name of Subcontractor & Phone No.	Subcontractor	California Contractor License Number
I am the authorize Subcontractors and I dec contractor license in good subcontractor is listed.	lare that each subcontr		and current
I declare under per foregoing is true and corr 2021 at	ect and that this declara		

Signature:

Print Name: _____

Title: _____

NON-COLLUSION DECLARATION

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

Owner: Westside Union School District
Project: <u>Relocation of (3) 24'x40' Modular Classroom Buildings to Rancho Vista</u> <u>Elementary School</u>
The undersigned declares:
I am the of , the party making the foregoing bid.
The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.
Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.
I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on, 2021, at [city], [state].
Signature
Print Name

AGREEMENT BETWEEN OWNER AND CONTRACTOR

and the "	Agreement between Owner and Contractor (the "Agreement") effective
1.	SCOPE OF WORK. The Contractor agrees to furnish all labor, equipment and materials, including tools, implements, and appliances required, and to perform all the work in a good and workmanlike manner, free from any and all liens and claims from mechanics, material suppliers, subcontractors, artisans, machinists, teamsters, freight carriers, and laborers required for:
	Relocation of (3) 24'x40' Modular Classroom Buildings to Rancho Vista Elementary School 40641 Peonza Lane Palmdale, CA 93551
	all in strict compliance with the plans, drawings and specifications therefore prepared by:
	Flewelling & Moody, Inc. 1035 West Lancaster Blvd. Lancaster, CA 93534 661.949.0771
	and other contract documents relating thereto.
2.	CONTRACT DOCUMENTS. The Contractor and the Owner agree that all of the documents listed in Article 1.1.1 of the General Conditions form the Contract Documents which form the Contract.

TIME TO COMPLETE AND LIQUIDATED DAMAGES. Time is of the essence in this

Time of completion for the Project shall be forty-seven (47) calendar days from the start

date established in the Owner's notice to proceed letter/notification.

3.

contract.

Failure to complete the Project within the time and in the manner provided for by the Contract Documents shall subject the Contractor to liquidated damages. For purposes of liquidated damages, the concept of substantial completion shall not constitute completion and is not part of the Contract Documents. The actual occurrence of damages and the actual amount of the damages which the Owner would suffer if the Project were not completed within the specified times set forth are dependent upon many circumstances and conditions which could prevail in various combinations and, from the nature of the case, it is impracticable and extremely difficult to fix the actual damages. Damages which the Owner would suffer in the event of delay include, but are not limited to, loss of the use of the Project, disruption of activities, costs of administration, supervision and the incalculable inconvenience and loss suffered by the public. Accordingly, the parties agree that the amount set forth above shall be the amount of damages which the Owner shall directly incur upon failure of the Contractor to complete the Project within the time specified: \$1,000.00 for each calendar day by which completion of the Project is delayed beyond the completion date as adjusted by change orders.

If the Contractor becomes liable under this section, the Owner, in addition to all other remedies provided by law, shall have the right to withhold any and all retained percentages of payments and/or progress payments, and to collect the interest thereon, which would otherwise be or become due the Contractor until the liability of the Contractor under this section has been finally determined. If the retained percentages and withheld progress payments appear insufficient to discharge all liabilities of the Contractor incurred under this Article, the Contractor and its sureties shall continue to remain liable to the Owner for such liabilities until all such liabilities are satisfied in full.

If the Owner accepts any work or makes any payment under this Agreement after a default by reason of delays, the payment or payments shall in no respect constitute a waiver or modification of any Agreement provisions regarding time of completion and liquidated damages.

4.	PAYMENT. The Owner agrees to pay the Contractor in current funds			
	dollars (\$			
	for work satisfactorily performed after receipt of properly documented and submitted			
	Applications for Payment and to make payments on account thereof, as provided in the			
	General Conditions.			

- **5. CHANGES.** Changes in this Agreement or in the Work to be done under this Agreement shall be made as provided in the General Conditions.
- **6. TERMINATION.** The Owner and Contractor may terminate the Contract as provided in the General Conditions.

7. **PREVAILING WAGES.** The Project is a public work, the Work shall be performed as a public work and pursuant to the provisions of Section 1770 et seg. of the Labor Code of the State of California, which are hereby incorporated by reference and made a part hereof, the Director of Industrial Relations has determined the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which the work is to be performed, for each craft, classification or type of worker needed to execute this Contract. Per diem wages shall be deemed to include employer payments for health and welfare, pension, vacation, apprenticeship or other training programs, and similar purposes. Copies of the rates are on file at the Owner's principal office. The rate of prevailing wage for any craft, classification or type of workmanship to be employed on this Project is the rate established by the applicable collective bargaining agreement which rate so provided is hereby adopted by reference and shall be effective for the life of this Agreement or until the Director of the Department of Industrial Relations determines that another rate be adopted. It shall be mandatory upon the Contractor and on any subcontractor to pay not less than the said specified rates to all workers employed in the execution of this Agreement.

The Contractor and any subcontractor under the Contractor as a penalty to the Owner shall forfeit not more than Two Hundred Dollars (\$200.00) for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed. The difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

The Contractor and each Subcontractor shall keep or cause to be kept an accurate record for work on this Project showing the names, addresses, social security numbers, work classification, straight time and overtime hours worked and occupations of all laborers, workers and mechanics employed by them in connection with the performance of this Contract or any subcontract thereunder, and showing also the actual per diem wage paid to each of such workers, which records shall be open at all reasonable hours to inspection by the Owner, its officers and agents and to the representatives of the Division of Labor Law Enforcement of the State Department of Industrial Relations. Contractor and Subcontractor shall comply with Labor Code section 1776.

The Contractor and each subcontractor shall furnish a certified copy of all payroll records directly to the Labor Commissioner weekly.

Public works projects shall be subject to compliance monitoring and enforcement by the Department of Industrial Relations. A contractor or subcontractor shall not be qualified to submit a bid or to be listed in a bid proposal subject to the requirements of Public Contract Code section 4104 unless currently registered and qualified under Labor Code section 1725.5 to perform public work as defined by Division 2, Part 7, Chapter 1 (§§1720 et seq.) of the Labor Code. A contractor or subcontractor shall not be qualified to enter into, or engage in the performance of, any contract of public work (as defined by Division 2, Part 7, Chapter 1 (§§1720 et seq.) of the Labor Code) unless currently registered and qualified under Labor Code section 1725.5 to perform public work.

- WORKING HOURS. In accordance with the provisions of Sections 1810 to 1815, 8. inclusive, of the Labor Code of the State of California, which are hereby incorporated and made a part hereof, the time of service of any worker employed by the Contractor or a Subcontractor doing or contracting to do any part of the Work contemplated by this Agreement is limited and restricted to eight hours during any one calendar day and forty hours during any one calendar week, provided, that work may be performed by such employee in excess of said eight hours per day or forty hours per week provided that compensation for all hours worked in excess of eight hours per day, and forty hours per week, is paid at a rate not less than one and one-half (1½) times the basic rate of pay. The Contractor and every Subcontractor shall keep an accurate record showing the name of and the actual hours worked each calendar day and each calendar week by each worker employed by them in connection with the Work. The records shall be kept open at all reasonable hours to inspection by representatives of the Owner and the Division of Labor Law Enforcement. The Contractor shall as a penalty to the Owner forfeit Twentyfive Dollars (\$25.00) for each worker employed in the execution of this Agreement by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day, and forty hours in any one calendar week, except as herein provided.
- 9. APPRENTICES. The Contractor agrees to comply with Chapter 1, Part 7, Division 2, Sections 1777.5 and 1777.6 of the California Labor Code, which are hereby incorporated and made a part hereof. These sections require that contractors and subcontractors employ apprentices in apprenticeable occupations in a ratio of not less than one hour of apprentice's work for each five hours of work performed by a journeyman (unless an exemption is granted in accordance with Section 1777.5) and that contractors and subcontractors shall not discriminate among otherwise qualified employees as indentured apprentices on any public works solely on the ground of sex, race, religious creed, national origin, ancestry or color. Only apprentices as defined in Labor Code Section 3077, who are in training under apprenticeship standards and who have signed written apprentice agreements, will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the Contractor for all apprenticeable occupations.
- 10. DSA OVERSIGHT PROCESS. The Contractor must comply with the applicable requirements of the Division of State Architect ("DSA") Construction Oversight Process ("DSA Oversight Process"), including but not limited to (a) notifying the Owner's Inspector of Record/Project Inspector ("IOR") upon commencement and completion of each aspect of the work as required under DSA Form 156; (b) coordinating the Work with the IOR's inspection duties and requirements; (c) submitting verified reports under DSA Form 6-C; and (d) coordinating with the Owner, Owner's Architect, any Construction Manager, any laboratories, and the IOR to meet the DSA Oversight Process requirements without delay or added costs to the Project.

Contractor shall be responsible for any additional DSA fees related to review of proposed changes to the DSA-approved construction documents, to the extent the proposed changes were caused by Contractor's wrongful act or omissions. If inspected work is found to be in non-compliance with the DSA-approved construction documents or the DSA-approved testing and inspection program, then it must be removed and corrected. Any construction that covers unapproved or uninspected work is subject to removal and correction, at Contractor's expense, in order to permit inspection and approval of the covered work in accordance with the DSA Oversight Process.

11. **INDEMNIFICATION AND INSURANCE.** The Contractor will defend, indemnify and hold harmless the Owner, its governing board, officers, agents, trustees, employees and others as provided in the General Conditions.

By this statement the Contractor represents that it has secured the payment of Workers' Compensation in compliance with the provisions of the Labor Code of the State of California and during the performance of the work contemplated herein will continue so to comply with said provisions of said Code. The Contractor shall supply the Owner with certificates of insurance evidencing that Workers' Compensation Insurance is in effect and providing that the Owner will receive thirty (30) days' notice of cancellation.

Contractor shall provide the insurance set forth in the General Conditions. The amount of general liability insurance shall be \$1,000,000.00 per occurrence for bodily injury, personal injury and property damage and the amount of automobile liability insurance shall be \$1,000,000.00 per accident for bodily injury and property damage combined single limit.

- 12. ENTIRE AGREEMENT. The Contract constitutes the entire agreement between the parties relating to the Project, and supersedes any prior or contemporaneous agreement between the parties, oral or written, including the Owner's award of the Project to Contractor, unless such agreement is expressly incorporated herein. The Owner makes no representations or warranties, express or implied, not specified in the Contract. The Contract is intended as the complete and exclusive statement of the parties' agreement pursuant to California Code of Civil Procedure section 1856.
- 13. **EXECUTION OF OTHER DOCUMENTS.** The parties to this Agreement shall cooperate fully in the execution of any and all other documents and in the completion of any additional actions that may be necessary or appropriate to give full force and effect to the terms and intent of the Contract.
- **14. EXECUTION IN COUNTERPARTS.** This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy, or an original, with all signatures appended together, shall be deemed a fully executed Agreement.
- 15. BINDING EFFECT. Contractor, by execution of this Agreement, acknowledges that Contractor has read this Agreement and the other Contract Documents, understands them, and agrees to be bound by their terms and conditions. The Contract shall inure to the benefit of and shall be binding upon the Contractor and the Owner and their respective successors and assigns.

- 16. SEVERABILITY; GOVERNING LAW; CHOICE OF FORUM. If any provision of the Contract shall be held invalid or unenforceable by a court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof. The Contract shall be governed by the laws of the State of California. Any action or proceeding seeking any relief under or with respect to this Agreement shall be brought solely in the Superior Court of the State of California for the County of Los Angeles, subject to transfer of venue under applicable State law, provided that nothing in this Agreement shall constitute a waiver of immunity to suit by Owner.
- **17. AMENDMENTS.** The terms of the Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except by written agreement signed by the parties and approved or ratified by the Governing Board.
- **18. ASSIGNMENT OF CONTRACT.** The Contractor shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of the surety on the payment bond, the surety on the performance bond and the Owner.
- 19. WRITTEN NOTICE. Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified or overnight mail to the last business address known to the person who gives the notice.

(CONTRACTOR)	(OWNER)	
SIGNED BY (Contractor)		
CONTRACTOR'S LICENSE NO.		
LICENSE EXPIRATION DATE		

NOTE: Contractor must give the full business address of the Contractor and sign with Contractor's usual signature. Partnerships must furnish the full name of all partners and the Agreement must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Corporations must sign with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.



KNOW ALL MEN BY THESE PRESENTS:

That WHEREAS, Westside Union School District (the "Owner" of the public works project described below) and
hereinafter designated as the "Principal," have entered into a Contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to construct:
Relocation of (3) 24'x40' Modular Classroom Buildings to Rancho Vista Elementary School 40641 Peonza Lane Palmdale, CA 93551
Which said agreement dated,, and all of the Contract Documents are hereby referred to and made a part hereof;
and
WHEREAS, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by whom the Contract is awarded to secure the claims arising under said agreement.
NOW, THEREFORE, THESE PRESENTS WITNESSETH:
That the said Principal and the undersigned ("Surety") are held and firmly bound unto all laborers, material men, and other persons, and bound for all amounts due, referred to in Civil Code section 9554, subdivision (b), in the sum of Dollars (\$) which sum well and truly be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns,
jointly and severally, by these presents.
The condition of this obligation is that if the said Principal or any of its subcontractors, or the heirs, executors, administrators, successors, or assigns of any, all, or either of them, shall fail to pay any of the persons named in Civil Code section 9100, or any of the amounts due, as specified in Civil Code section 9554, subdivision (b), that said Surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay costs and reasonable attorney's fees to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered.
It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims so as to give a right of action to

them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

And the said Surety, for value received, thereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of said contract or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

IN WITNESS WHEREOF, th this day of		n duly executed by the I	^P rincipal and Surety
(To be signed by (Principal and Surety, (and acknowledged and (Notarial Seal attached)))		
Principal			
Surety			
By: Attorney-in-Fact			
The above bond is accepted	and approved this	day of	, 2021.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we,	
	as Principal and
	as Surety, are held and
firmly bound unto, in the County of	,
State of California, hereinafter called the "Owner", in the sur	
which sum well and truly made, we bind ourselves, our heirs and successors, jointly and severally, to the Owner for the fucontract with the Owner, the terms of which are incorporated, 2020, for construction of:	ıll performance of a certain
Relocation of (3) 24'x40' Modular Classroom Rancho Vista Elementary Scho 40641 Peonza Lane Palmdale, CA 93551	
The condition of this obligation is such that, if the Pripperform and fulfill all the undertakings, covenants, terms, co said Contract during the original term of said Contract and a may be granted by the Owner, with or without notice to the Stime specified in the Contract after completion for correction materials and workmanship and during the life of any guarar under the Contract, and shall also well and truly perform and covenants, terms, conditions and agreement of any and all of said Contract that may hereafter be made, then this obligato remain in full force and virtue.	nditions, and agreements of ny extensions thereof that Surety, and for the period of of faulty or improper nty or warranty required If fulfill all the undertakings, duly authorized modifications
And the said Surety, for value received, hereby stipu change, extension of time, alteration or addition to the terms Work to be performed thereunder or the specifications according way affect its obligation on this bond, and it does hereby change, extension of time, alteration or addition to the terms Work, or to the specifications.	of the Contract or to the mpanying the same, shall in waive notice of any such
No further agreement between Surety and Owner sh prerequisite to the Surety performing its obligations under the	
IN WITNESS WHEREOF, the above-bounden partie instrument under their several seals this day of hereto affixed and these presents duly signed by its undersign pursuant to authority of its governing body.	, 2021

(To be signed by (Principal and Surety, (and acknowledged and (Notarial Seal attached)))
(Affix Corporate Seal)	
	(Individual Principal)
	(Business Address)
(Affix Corporate Seal)	
	(Corporate Principal)
	(Business Address)
(Affix Corporate Seal)	
	(Corporate Surety)
	(Business Address)
	Ву:
The rate of premium on this bond is	per thousand.
The total amount of premium charged is	
The above must be filled in by Corporate Su	

WORKERS' COMPENSATION CERTIFICATE

Labor Code Section 3700, in relevant part, provides:

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer or as one employer in a group of employers. Said certificate may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees, ..."

I am aware of the provisions of the Labor Code Section 3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract. I shall supply the Owner with certificates of insurance evidencing that Workers' Compensation Insurance is in effect and providing that the Owner will receive thirty (30) days' notice of cancellation.

Name of Contractor	
Signature	
Print Name	Date

(In accordance with Article 5 (commencing at Section 1860], Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under the contract.)

FINGERPRINTING NOTICE AND ACKNOWLEDGMENT

(Education Code Section 45125.2(a))

This document must be executed and submitted with the bid.

Business entities entering into contracts with the Owner for the construction, reconstruction, rehabilitation or repair of a facility must comply with Education Code sections 45125.1 and 45125.2. Such entities are responsible for ensuring full compliance with the law and should therefore review all applicable statutes and regulations. The following information is provided simply to assist such entities with compliance with the law.

- 1. If the Owner determines your employee(s) will have more than limited contact with students, then you must take one or more of the following steps:
 - a. Install a physical barrier at the worksite to limit contact with pupils.
 - b. Have an employee, who the Department of Justice has ascertained has not been convicted of a violent or serious felony, continually monitor and supervise employees. The entity shall verify in the Independent Contractor Student Contact Form to the Owner that the employee charged with monitoring and supervising its employees has no such convictions. (See attached.)
 - c. Arrange, with Owner's approval, for surveillance by Owner's personnel.

If one or more of these steps is taken, you are not required to comply with Education Code section 45125.1.

2. If you are providing the services in an emergency or exceptional situation, you are not required to comply with Education Code section 45125.2. An "emergency or exceptional" situation is one in which pupil health or safety is endangered or when repairs are needed to make a facility safe and habitable. Owner shall determine whether an emergency or exceptional situation exists.

I have read the foregoing and agree to comply with the requirements of Education Code §§ 45125.1 and 45125.2 as applicable.

Dated:		
	Signature	
Name:	Title:	

ATTACHMENT

Under Education Code section 45125.1, no employee of a contractor or subcontractor who has been convicted of or has criminal proceedings pending for a violent or serious felony may come into contact with any student. A violent felony is any felony listed in subdivision (c) of Section 667.5 of the Penal Code. Those felonies are presently defined as:

- (1) Murder or voluntary manslaughter.
- (2) Mayhem.
- (3) Rape as defined in paragraph (2) or (6) of subdivision (a) of Section 261 or paragraph (1) or (4) of subdivision (a) of Section 262.
- (4) Sodomy as defined in subdivision (c) or (d) of Section 286.
- (5) Oral copulation as defined in subdivision (c) or (d) of Section 288a.
- (6) Lewd or lascivious act as defined in subdivision (a) or (b) of Section 288.
- (7) Any felony punishable by death or imprisonment in the state prison for life.
- (8) Any felony in which the defendant inflicts great bodily injury on any person other than an accomplice which has been charged and proved as provided for in Section 12022.7, 12022.8, or 12022.9 on or after July 1, 1977, or as specified prior to July 1, 1977, in Sections 213, 264, and 461, or any felony in which the defendant uses a firearm which use has been charged and proved as provided in subdivision (a) of Section 12022.3, or Section 12022.5 or 12022.55.
- (9) Any robbery.
- (10) Arson, in violation of subdivision (a) or (b) of Section 451.
- (11) Sexual penetration as defined in subdivision (a) or (j) of Section 289.
- (12) Attempted murder.
- (13) A violation of Section 18745, 18750, or 18755.
- (14) Kidnapping.
- (15) Assault with the intent to commit a specified felony, in violation of Section 220.
- (16) Continuous sexual abuse of a child, in violation of Section 288.5.
- (17) Carjacking, as defined in subdivision (a) of Section 215.
- (18) Rape, spousal rape, or sexual penetration, in concert, in violation of Section 264.1.

- (19) Extortion, as defined in Section 518, which would constitute a felony violation of Section 186.22 of the Penal Code.
- (20) Threats to victims or witnesses, as defined in Section 136.1, which would constitute a felony violation of Section 186.22 of the Penal Code.
- (21) Any burglary of the first degree, as defined in subdivision (a) of Section 460, wherein it is charged and proved that another person, other than an accomplice, was present in the residence during the commission of the burglary.
- (22) Any violation of Section 12022.53.
- (23) A violation of subdivision (b) or (c) of Section 11418.

A serious felony is any felony listed in subdivision (c) Section 1192.7 of the Penal Code. Those felonies are presently defined as:

(1) Murder or voluntary manslaughter; (2) Mayhem; (3) Rape; (4) Sodomy by force, violence, duress, menace, threat of great bodily injury, or fear of immediate and unlawful bodily injury on the victim or another person; (5) Oral copulation by force, violence, duress, menace, threat of great bodily injury, or fear of immediate and unlawful bodily injury on the victim or another person; (6) Lewd or lascivious act on a child under the age of 14 years; (7) Any felony punishable by death or imprisonment in the state prison for life; (8) Any felony in which the defendant personally inflicts great bodily injury on any person, other than an accomplice, or any felony in which the defendant personally uses a firearm; (9) Attempted murder; (10) Assault with intent to commit rape, or robbery; (11) Assault with a deadly weapon or instrument on a peace officer; (12) Assault by a life prisoner on a non-inmate; (13) Assault with a deadly weapon by an inmate; (14) Arson; (15) Exploding a destructive device or any explosive with intent to injure; (16) Exploding a destructive device or any explosive causing bodily injury, great bodily injury, or mayhem; (17) Exploding a destructive device or any explosive with intent to murder; (18) Any burglary of the first degree; (19) Robbery or bank robbery; (20) Kidnapping; (21) Holding of a hostage by a person confined in a state prison; (22) Attempt to commit a felony punishable by death or imprisonment in the state prison for life; (23) Any felony in which the defendant personally used a dangerous or deadly weapon; (24) Selling, furnishing, administering, giving, or offering to sell, furnish, administer, or give to a minor any heroin, cocaine, phencyclidine (PCP), or any methamphetamine-related drug, as described in paragraph (2) of subdivision (d) of Section 11055 of the Health and Safety Code, or any of the precursors of methamphetamines, as described in subparagraph (A) of paragraph (1) of subdivision (f) of Section 11055 or subdivision (a) of Section 11100 of the Health and Safety Code; (25) Any violation of subdivision (a) of Section 289 where the act is accomplished against the victim's will by force, violence, duress, menace, or fear of immediate and unlawful bodily injury on the victim or another person;

(26) Grand theft involving a firearm; (27) carjacking; (28) any felony offense, which would also constitute a felony violation of Section 186.22; (29) assault with the intent to commit mayhem, rape, sodomy, or oral copulation, in violation of Section 220; (30) throwing acid or flammable substances, in violation of Section 244: (31) assault with a deadly weapon, firearm, machine gun, assault weapon, or semiautomatic firearm or assault on a peace officer or firefighter, in violation of Section 245; (32) assault with a deadly weapon against a public transit employee, custodial officer, or school employee, in violation of Sections 245.2, 245.3, or 245.5; (33) discharge of a firearm at an inhabited dwelling, vehicle, or aircraft, in violation of Section 246; (34) commission of rape or sexual penetration in concert with another person, in violation of Section 264.1; (35) continuous sexual abuse of a child, in violation of Section 288.5; (36) shooting from a vehicle, in violation of subdivision (c) or (d) of Section 26100: (37) intimidation of victims or witnesses, in violation of Section 136.1; (38) criminal threats, in violation of Section 422; (39) any attempt to commit a crime listed in this subdivision other than an assault; (40) any violation of Section 12022.53; (41) a violation of subdivision (b) or (c) of Section 11418; and (42) any conspiracy to commit an offense described in this subdivision.

INDEPENDENT CONTRACTOR STUDENT CONTACT FORM

Contra	actor Na	me:
Super	visor/Fo	reman Name:
Start [Date:	
Comp	letion Da	ate:
Locati	on of W	ork:
Hours	of Work	<u></u>
Length	n of Time	e on Grounds:
Numb	er of Em	ployees on the Job:
Yes []	No []	Employees will have more than limited contact with students as determined by Owner, or if by Contractor, please explain:
If yes,	the follo	owing steps will be taken to ensure student safety (check):
	[]	A physical barrier will be installed at the worksite to limit contact with pupils.
	[]	Employees will be continually monitored and supervised by an employee who has not been convicted of a violent or serious felony.
		Name of Supervising Employee:
		Date of Department of Justice verification that supervising employee has not been convicted of a violent or serious felony:
		Name of employee who is the custodian of the Department of Justice verification information:
	[]	Owner agrees: Employees will be surveilled by Owner's personnel.
l decla knowle		r penalty of perjury that the foregoing is true and correct to the best of my
Dated	:	
		Signature
		Typed Name:
		Title:

Note: This document must be executed and submitted with the executed Agreement between Owner and Contractor.

This is a fiduciary account created by statute, Public Contract Code section 22300. The funds deposited in this account shall not be released to Contractor or any other person or entity, other than Owner, including pursuant to any purported lien or writ of attachment or execution, without the prior written, express approval of Owner.

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

	This Escrow Agreement is made and entered into by and between the Owner, whose address is
-	(hereinafter called "Owner"),
-	whose address is
	(hereinafter called "Contractor"); and
	, a state or federally chartered bank in California whose
addres	ss is (hereinafter
called	"Escrow Agent").
	For the consideration hereinafter set forth, the Owner, Contractor, and Escrow
Agent	agree as follows:
I.	Pursuant to section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by the Owner pursuant to the Contract entered into between the Owner and Contractor in the amount of Dollars (\$), and
	dated
2.	Thereafter, Owner shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

- 3. Pursuant to Public Contract Code section 22300, as an alternative to the procedures set forth above, Contractor may request in writing that the Owner pay retention amounts directly to Escrow Agent. When the Owner makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for benefit of the Contractor until such time as the escrow created under this Escrow Agreement is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.
- 4. The Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor and Escrow Agent.
- 5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.
- 6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.
- 7. The Owner shall have the right to draw upon the securities or any amount paid directly to Escrow Agent in the event of default by the Contractor. Upon seven (7) days written notice to the Escrow Agent from the Owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash, including any amounts paid directly to Escrow Agent pursuant to Section 3 above, as instructed by Owner. Escrow Agent shall not be concerned with the validity of any notice of default given by Owner pursuant to this paragraph, and shall promptly comply with Owner's instructions to pay over said escrowed assets. Escrow Agent further agrees to not interplead the escrowed assets in response to a conflicting demand and hereby waives any present or future opportunity of interpleader.
- 8. Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payment of fees and charges.

- 9. Escrow Agent shall rely on the written notifications from the Owner and Contractor pursuant to Sections (4), (5), (6), (7) and (8) of this Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.
- 10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner, the Contractor and the Escrow Agent in connection with the foregoing, and exemplars of their respective signatures are as follows:

ON BEHALF OF OWNER:
Signature
Typewritten Name
Title
ON BEHALF OF CONTRACTOR:
Signature
Typewritten Name
Title
ON BEHALF OF ESCROW AGENT:
Signature
Typewritten Name
Title

IN WITNESS WHEREOF , the officers on the date first set for	parties have executed this Agreement by their proper th above.
OWNER:	
Signature	
Typewritten Name	
Title	
CONTRACTOR:	
Signature	_
Typewritten Name	_
Title	_
ESCROW AGENT:	
Signature	_
Typewritten Name	_
Title	_
	nt is opened, the Owner and Contractor shall deliver to the counterpart of this Agreement.

DRUG-FREE WORKPLACE CERTIFICATION

This Drug-Free Workplace Certification is required pursuant to Government Code Sections 8350 *et seq.*, the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for the procurement of any property or services from any State agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract awarded by a State agency may be subject to suspension of payments or termination of the contract, or both, and the contractor may be subject to debarment from future contracting if the state agency determines that specified acts have occurred.

Pursuant to Government Code Section 8355, every person or organization awarded a contract or grant from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the person's or organization's workplace and specifying actions which will be taken against employees for violations of the prohibition;
- (b) Establishing a drug-free awareness program to inform employees about all of the following:
- (1) The dangers of drug abuse in the workplace;
- (2) The person's or organization's policy of maintaining a drug-free workplace;
- (3) The availability of drug counseling, rehabilitation and employee-assistance programs;
- (4) The penalties that may be imposed upon employees for drug abuse Violations;
- (c) Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by subdivision (a) and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.
- I, the undersigned, agree to fulfill the terms and requirements of Government Code Section 8355 listed above and will publish a statement notifying employees concerning (a) the prohibition of controlled substance at the workplace, (b) establishing a drug-free awareness program, and (c) requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by Section 8355(a) and requiring that the employee agree to abide by the terms of that statement.

I also understand that if the Owner determines that I have either (a) made a false certification herein, or (b) violated this certification by failing to carry out the requirements of Section 8355, that the contract or grant awarded herein is subject to suspension of payments, termination, or both. I further understand that should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of Section 8350 *et seq*.

I acknowledge that I am aware of the provisions of Government Code Section 8350 *et seq*. and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

Name of Contractor	
Signature	
Print Name	Date

Sufficient Funds Declaration

(Labor Code section 2810)
To Be Executed by Bidder and Submitted with Bid

Owner: Westside Union School D	strict	
Project: Relocation of (3) 24'x40' Elementary School	Modular Classroom Buildings to Rar	ncho Vista
Ι,	, declare tl	hat I am the
of _		,
the entity making and submitting t	he bid for the above Project that acc	companies this
Declaration, and that such bid incl	udes sufficient funds to permit	
[insert name of entity] to comply w	rith all local, state or federal labor lav	ws or regulations
during the Project, including paym	ent of prevailing wage, and that	
	[the entity] will comply with the	he provisions of
Labor Code section 2810(d) if awa	arded the Contract.	
I declare under penalty of	perjury under the laws of the State o	f California that
the foregoing is true and correct a	nd executed on	2021,
at	_[city],[state].	
Date:		
	Signature	
Print Name:		
Print Title		

GENERAL CONDITIONS

for

CONTRACT OF CONSTRUCTION

for

Relocation of (3) 24'x40' Modular Classroom Buildings to Rancho Vista Elementary School

Westside Union School District

April 2021

SUMMARY OF CONTENTS

ARTICLE 1:	GENERAL CONDITIONS	1-2
ARTICLE 2:	OWNER	3-4
ARTICLE 3:	THE CONTRACTOR	5-11
ARTICLE 4:	ADMINISTRATION OF THE CONTRACT	12-15
ARTICLE 5:	SUBCONTRACTORS	16
ARTICLE 6:	CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS	17
ARTICLE 7:	CHANGES IN THE WORK	18-20
ARTICLE 8:	TIME	21-23
ARTICLE 9:	PAYMENTS AND COMPLETION	23-25
ARTICLE 10:	PROTECTION OF PERSONS AND PROPERTY	25-26
ARTICLE 11:	INSURANCE AND BONDS	27-29
ARTICLE 12:	UNCOVERING AND CORRECTION OF WORK	29-30
ARTICLE 13:	MISCELLANEOUS PROVISIONS	30-32
ARTICLE 14:	TERMINATION OR SUSPENSION OF THE CONTRACT	33-35

TABLE OF CONTENTS

	CLE 1 - GENERAL CONDITIONS1	3.11	SHOP DRAWINGS, PRODUCT DATA,
1.1	BASIC DEFINITIONS1		AND SAMPLES
1.1.1	The Contract Documents1	3.11.1	Shop Drawings7
1.1.2	The Contract1	3.11.2	Samples7
1.1.3	The Work1	3.11.3	Contractor's Responsibility8
1.1.4	The Project1	3.11.4	Extent of Review8
1.1.5	The Drawings1	3.11.5	Substitution8
1.1.6	The Specifications2	3.12	CLEANING UP 8
1.1.7	The Project Manual2	3.13	ACCESS TO WORK8
1.1.8	Or2	3.14	ROYALTIES AND PATENTS9
1.1.9	Completion2	3.15	INDEMNIFICATION9
1.2	EXECUTION, CORRELATION	3.15.1	Scope: Contractor9
	AND INTENT	3.15.2	Scope: Subcontractors10
1.3	OWNERSHIP AND USE OF ARCHIT-	3.15.2.1	
	ECT'S DRAWINGS, SPECIFICA-	3.15.2.2	•
	TIONS AND OTHER DOCUMENTS2	3.15.3	No Limitation10
		3.16	NOTICE OF EXCUSE FOR
ARTIC	CLE 2 - OWNER3	0.10	NONPERFORMANCE10
2.1	DEFINITION 3		TOTAL DATA OR THE TOTAL OR THE
2.2	EXISTING UTILITY LINES;	ADTIC	CLE 4 - ADMINISTRATION OF THE
,	SITE SURVEY; CONTRACTOR	ANIIC	CONTRACT12
	RELIANCE3	4.1	ARCHITECT12
2.3	OWNER'S RIGHT TO STOP THE	4.2	ARCHITECT'S ADMINISTRATION
	WORK4	4.4	OF THE CONTRACT12
2.4	OWNER'S RIGHT TO CARRY OUT	4.2.1	Status
2.7	THE WORK4	4.2.1	
	THE WORK	4.2.2	Limitations of Construction
ARTIC	CLE 3 - THE CONTRACTOR5	422	Responsibility
3.1	DEFINITION5	4.2.3	Communications Facilitating Contract
3.2	SUPERVISION AND CONSTRUCTION	404	Administration
3.2	PROCEDURES5	4.2.4	Rejection of Work
2 2 1		4.3	INSPECTOR OF RECORD12
3.2.1	Contractor Bornovihility 5	4.4	RESPONSIBILITY FOR
3.2.2	Contractor Responsibility		ADDITIONAL CHARGES
3.2.3	Obligations not Changed by Architect's		INCURRED BY THE OWNER FOR
2.2.4	Actions5		PROFESSIONAL SERVICES 13
3.2.4	Contractor Responsibility for Readiness	4.5	CLAIMS 13
	for Work5	4.5.1	General13
3.3	SUPERINTENDENT6	4.5.2	Claims for Concealed or Unknown
3.4	LABOR AND MATERIALS6		Conditions14
3.5	WARRANTY 6	4.5.2.1	Trenches or Excavations Less Than
3.6	TAXES6		Four Feet below the Surface14
3.7	PERMITS, FEES AND NOTICES6	4.5.2.2	Trenches or Excavations Greater Than
3.8	ALLOWANCES6		Four Feet Below the Surface14
3.9	CONTRACTOR'S CONSTRUCTION	4.6	CLAIMS OF \$375,000 OR LESS 15
	SCHEDULES7	4.7	CLAIMS IN EXCESS OF \$375,000 15
3.10	DOCUMENTS AND SAMPLES AT		•
	THE SITE 7		

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL WESTSIDE UNION SCHOOL DISTRICT FLEWELLING & MOODY PROJECT NO. 2869 & 2913

ARTI	CLE 5 - SUBCONTRACTORS16	8.3	PROGRESS AND COMPLETION	22
5.1	DEFINITIONS 16	8.4	EXTENSIONS OF TIME -	
5.1.1	Subcontractor16		LIQUIDATED DAMAGES	22
5.1.2	Sub-Subcontractor16	8.4.1	Excusable Delay	22
5.2	AWARD OF SUBCONTRACTS AND	8.4.2	Notice by Contractor Required	22
	OTHER CONTRACTS FOR POR-	8.4.3	Conditions for Extension of Time	22
	TIONS OF THE WORK 16	8.4.4	Early Completion	22
5.3	SUBCONTRACTUAL RELATIONS16	8.4.5	Liquidated Damages	23
5.4	CONTINGENT ASSIGNMENT OF	8.5	GOVERNMENT APPROVALS	
	SUBCONTRACTS 16			
		ARTIC	CLE 9 - PAYMENTS AND	
ARTI	CLE 6 - CONSTRUCTION BY OWNER		COMPLETION	23
	OR BY SEPARATE CONTRACTORS 17	9.1	CONTRACT SUM	23
6.1	OWNER'S RIGHT TO PERFORM	9.2	COST BREAKDOWN	23
	CONSTRUCTION AND TO AWARD	9.3	APPLICATIONS FOR PAYMENT	23
	SEPARATE CONTRACTS17	9.4	REVIEW OF PROGRESS PAYMEN'	
6.1.1	Owner's Rights17	9.5	DECISIONS TO WITHHOLD	
6.1.2	Contractor's Duties17		PAYMENT	24
6.1.3	Owner Obligations17	9.6	PROGRESS PAYMENTS	
6.2	MUTUAL RESPONSIBILITY17	9.7	COMPLETION OF THE WORK	24
6.2.1	Delivery and Storage17	9.8	PARTIAL OCCUPANCY OR USE	24
6.2.2	Notice by Contractor17	9.9	ACCEPTANCE, NOTICE OF	
			COMPLETION, AND FINAL	
ARTI	CLE 7 - CHANGES IN THE WORK18		PAYMENT	24
7.1	CHANGES18	9.10	SUBSTITUTION OF SECURITIES	
7.1.1	No Changes Without Authorization18			
7.1.2	Architect Authority18	ARTIC	CLE 10 - PROTECTION OF PERSON	S
7.2	CHANGE ORDERS ("CO")18		AND PROPERTY	
7.3	CONSTRUCTION CHANGE	10.1	SAFETY PRECAUTIONS AND	
	DIRECTIVES ("CCD")18	1011	PROGRAMS	25
7.4	REQUEST FOR INFORMATION	10.2	SAFETY OF PERSONS AND	
	(" RFI ")	10.2	PROPERTY	25
7.5	REQUEST FOR PROPOSAL ("RFP") 19	10.3	PROTECTION OF WORK AND	25
7.6	CHANGE ORDER REQUEST	1015	PROPERTY	26
7.0	("COR")19	10.4	EMERGENCIES	
7.7	COST OF CHANGE ORDERS19	10.5	HAZARDOUS MATERIALS	
7.7.1	Scope	10.5		20
7.7.2	Determination of Cost20	ARTI	CLE 11 - INSURANCE AND BONDS	27
7.7.3	Accounting Records20	11.1	CONTRACTOR'S LIABILITY	
7.7.4	Notice Required	11.1	INSURANCE	27
7.7.4	Notice Required20	11 1 1	Liability Insurance Requirements	
ADTI	CLE 8 - TIME21		Additional Insured Endorsement	4 1
8.1	DEFINITIONS21	11.1.2		27
		11 1 2	Requirements	27
8.1.1	Contract Time 21		Workers' Compensation Insurance	
8.1.2	Notice to Proceed		Builder's Risk/"All Risk" Insurance	
8.1.3	Days21		Fire Insurance	
8.2	HOURS OF WORK21		Other Insurance	
8.2.1	Sufficient Forces		Proof of Carriage of Insurance	
8.2.2	Performance During Working Hours21	11.1.8	Compliance	28
8.2.3	Labor Code Application21			

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL WESTSIDE UNION SCHOOL DISTRICT FLEWELLING & MOODY PROJECT NO. 2869 & 2913

11.2	PERFORMANCE AND PAYMENT
	BONDS29
ARTIC	CLE 12 - UNCOVERING AND
	CORRECTION OF WORK29
12.1	UNCOVERING OF WORK
12.2	CORRECTION OF WORK;
12.2	
	WARRANTY
ARTIC	LE 13 - MISCELLANEOUS
	PROVISIONS30
13.1	GOVERNING LAW 30
13.2	SUCCESSORS AND ASSIGNS30
13.3	RIGHTS AND REMEDIES;
	NO WAIVER 30
13.4	TESTS AND INSPECTIONS30
13.4.1	Independent Testing Laboratory30
13.4.2	Advance Notice to Inspector
13.7.2	of Record31
12 4 2	
13.4.3	Testing Off-Site31
13.4.4	Additional Testing or Inspection31
13.4.5	Costs for Retesting31
13.4.6	Costs for Premature Test31
13.4.7	Tests or Inspections not to Delay Work 31
13.5	TRENCH EXCAVATION32
13.6	DEBARMENT 32
13.7	ASSIGNMENT OF ANTITRUST
	CLAIMS 32
13.8	AUDIT 32
13.9	STORM WATER DISCHARGE
10.7	PERMIT32
	1 EXVIII
A DTIC	NE 14 TERMINATION OR
ARTIC	CLE 14 - TERMINATION OR
	SUSPENSION OF THE CONTRACT33
14.1	TERMINATION BY THE
	CONTRACTOR FOR CAUSE33
14.2	TERMINATION BY THE OWNER
	FOR CAUSE 33
14.2.1	Grounds for Termination33
14.2.2	Notification of Termination34
14.2.3	Payments Withheld34
14.2.4	Payments Upon Completion34
14.2.5	Inclusion of Termination for Convenience34
	SUSPENSION OR TERMINATION BY
14.3	
1401	THE OWNER FOR CONVENIENCE34
14.3.1	Suspension by Owner34
14.3.1.	
14.3.1.	
14.3.2	Termination by the Owner
	for Convenience35
14.4	NOT A WAIVER 35

14.5	MUTUAL TERMINATION FOR		
	CONVENIENCE	35	
14.6	EARLY TERMINATION	35	

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL WESTSIDE UNION SCHOOL DISTRICT FLEWELLING & MOODY PROJECT NO. 2869 & 2913

ARTICLE 1 GENERAL CONDITIONS

1.1 BASIC DEFINITIONS

- 1.1.1 The Contract Documents. The "Contract Documents" consist of the Agreement between Owner and Contractor (hereinafter the Agreement), Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, addenda issued prior to bid, Instructions to Bidders, Notice to Bidders, the Bid Form, Payment Bond, Performance Bond, required insurance certificates, additional insured endorsement and declarations page, Designation of Subcontractors, Noncollusion Declaration, Roof Project Certification (where applicable), Sufficient Funds Declaration (Labor Code section 2810) and the Fingerprinting Notice and Acknowledgment and Independent Contractor Student Contact Form, other documents referred to in the Agreement, and Modifications issued after execution of the Agreement. A Modification is a written amendment to the Contract signed by both parties, a Change Order, a Construction Change Directive, or a written order for a minor change in the Work issued by the Owner. The Contract Documents are complementary, and each obligation of the Contractor, Subcontractors, material or equipment suppliers in any one shall be binding as if specified in all.
- 1.1.2 The Contract. The Contract Documents form the Contract. The "Contract" represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a written Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Architect and Contractor, between the Owner and any Subcontractor or Sub-subcontractor, or between any persons or entities other than the Owner and the Contractor. The terms of the Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except by written agreement signed by the parties and approved or ratified by the Governing Board.
- **1.1.3 The Work.** The "Work" shall include all labor, materials, services, manuals, training, as-builts, and equipment necessary for the Contractor to fulfill all of its obligations pursuant to the Contract Documents, including, but not limited to, punch list items. The Work shall constitute a "work of improvement" under Civil Code section 8050 and Public Contract Code section 7107.
- **1.1.4 The Project.** The "Project" is the total construction of the Work performed in accordance with the Contract Documents in whole or in part and which may include construction by the Owner or by separate contractors.
- **1.1.5 The Drawings.** The "Drawings" are graphic and pictorial portions of the Contract Documents prepared for the Project and approved changes thereto, wherever located and whenever issued, showing the design, location, and scope of the Work, generally including plans, elevations, sections, details, schedules, and diagrams as drawn or approved by the Architect.

- **1.1.6 The Specifications.** The "Specifications" are that portion of the Contract Documents consisting of the written requirements for material, equipment, construction systems, instructions, quality assurance standards, workmanship, and performance of related services.
- **1.1.7 The Project Manual.** The "Project Manual" is the volume usually assembled for the Work which may include, without limitation, the bidding requirements, sample forms, Agreement, Conditions of the Contract, and Specifications.
- **1.1.8** OR. "Or" shall include "and/or."
- 1.1.9 COMPLETION. Statutory definitions of "completion" and "complete" shall apply for those statutory purposes. For accrual of liquidated damages, Claim and warranty purposes, "completion" and "complete" mean the point in the Project where (1) Contractor has fully and correctly performed all Work in all parts and requirements, including corrective and punch list work, and (2) Owner's representatives have conducted a final inspection that confirmed this performance. Substantial or any other form of partial or non-compliant, performance of the Work shall not constitute "completion" or "complete" under the Contract Documents.
- 1.2 **EXECUTION, CORRELATION AND INTENT** - The Contract Documents are complementary and are intended to include all items required for the proper execution and completion of the Work. Any item of work mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be provided by Contractor as if shown or mentioned in both. Without limiting Contractor's obligation to identify conflicts for resolution by the Owner, it is intended that the more stringent, higher quality, and greater quantity of Work shall apply. Each and every provision of law required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon application of either party the Contract shall be amended in writing to make such insertion or correction. Where requirements of the Contract Documents exceed those of the applicable building codes and ordinances, the Contract Documents shall govern. Contractor shall comply with all applicable Federal, State and local laws.
- 1.3 OWNERSHIP AND USE OF ARCHITECT'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS The Drawings, Specifications, and other documents prepared on behalf of the Owner are instruments of the services of the Architect and its consultants and are the property of the Owner. The Contractor may retain one contract record set.

ARTICLE 2 OWNER

- 2.1 **DEFINITION** The term "Owner" means the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Owner" means the Owner or the Owner's authorized representatives, including, but not limited to, architects and construction managers. To the extent the Contract Documents indicate that Owner has assigned duties to particular representatives of the Owner (such as the architect, or any construction manager), Owner reserves the right at all times to reassign such duties to different Owner representatives.
- 2.2 **EXISTING UTILITY LINES; SITE SURVEY: CONTRACTOR RELIANCE** – Pursuant to Government Code section 4215, the Owner assumes the responsibility for removal. relocation, and protection of utilities located on the Site at the time of commencement of construction under this Contract with respect to any such utility facilities which are not identified in the drawings and specifications made part of the invitation to bid. The Contractor shall not be assessed for liquidated damages for delay in completion of the Project caused by failure of the Owner to provide for removal or relocation of such utility facilities. Owner shall compensate the Contractor for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, removing or relocating such utility facilities, and for equipment necessarily idle during such work. When required by the scope of the Project, the Owner will furnish, at its expense, a legal description or a land survey of the site, giving, as applicable, grades and lines of streets, alleys, pavements, adjoining property, rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries, and contours of the site. Surveys to determine locations of construction, grading, and site work shall be provided by the Contractor.

Any test borings and soils reports for the Project have been made for the Owner to indicate the subsurface materials that might be encountered at particular locations on the Project. The Owner has made these documents available to the Contractor and the Contractor has studied the results of such test borings and information that it has as to the subsurface conditions and Site geology as set forth in the test borings and soils reports. The Owner does not assume any responsibility whatsoever with respect to the sufficiency or accuracy of the borings made, or of the logs of the test borings, or of other investigations, or of the soils reports furnished pursuant hereto, or of the interpretations to be made beyond the location or depth of the borings. There is no warranty or guarantee, either express or implied that the conditions indicated by such investigations, borings, logs, soil reports or other information are representative of those existing throughout the site of the Project, or any part thereof, or that unforeseen developments may not occur. At the Owner's request, the Contractor shall make available to the Owner the results of any Site investigation, test borings, analyses, studies or other tests conducted by or in the possession of the Contractor of any of its agents. Nothing herein contained shall be deemed a waiver by the Contractor to pursue any available legal right or remedy it may have at any time against any third party who may have prepared any report and/or test relied upon by the Contractor.

The Contractor may rely upon the accuracy of any utility services or site survey information that the District may provide, except that the Contractor may not rely upon and must question in writing to the Owner and the Architect any information which appears incorrect based upon Contractor's Site inspection, knowledge of the Project, and prior experience with similar projects, unless specifically stated in writing that the Contractor may rely upon the designated information.

- 2.3 OWNER'S RIGHT TO STOP THE WORK If the Contractor fails to correct Work, which is not in accordance with the requirements of the Contract Documents as required by paragraph 12.2, or persistently fails to carry out Work in accordance with the Contract Documents, the Owner, after providing Notice pursuant to paragraph 2.4, may order the Contractor to stop the Work or any portion thereof, until the Contractor corrects the deficiencies.
- 2.4 OWNER'S RIGHT TO CARRY OUT THE WORK - If the Contractor fails or refuses to carry out the Work in accordance with the Contract Documents, the Owner may correct such deficiencies by whatever reasonable method the Owner may deem expedient without prejudice to other remedies the Owner may have, including but not limited to having another contractor perform some or all of the Work without terminating the Contract. Owner shall first provide written notice to Contractor of Contractor's failure or refusal to perform. The notice will provide the time period within which Contractor must begin correction of the failure or refusal to perform. If the Contractor fails to begin correction within the stated time, or fails to continue correction, the Owner may proceed to correct the deficiencies. In the event the Owner bids the work, Contractor shall not be eligible for the award of the contract. The Contractor may be invoiced the cost to Owner of the work, including compensation for additional professional and internally generated services and expenses made necessary by Contractor's failure or refusal to perform. Owner may withhold that amount from the retention, or progress payments due the Contractor, pursuant to Section 9.5. If retention and payments withheld then or thereafter due the Contractor are not sufficient to cover that amount, the Contractor shall pay the difference to the Owner.

ARTICLE 3 THE CONTRACTOR

3.1 **DEFINITION** - The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representatives. To the extent that any portion of the Work is provided with the Contractor's own forces, any reference to Subcontractors shall be equally applicable to the Contractor. The Contractor shall post at appropriate conspicuous points on the Site, a schedule showing all determined minimum wage rates and all authorized deductions, if any, from unpaid wages actually earned and all other required job site notices as prescribed by regulation.

3.2 SUPERVISION AND CONSTRUCTION PROCEDURES

- 3.2.1 Contractor. The Contractor shall supervise and direct the Work using the Contractor's best skill and attention, which shall meet or exceed the standards in the industry. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, procedures, and coordinating all portions of the Work under the Contract, unless Contract Documents give other specific instructions concerning these matters. If any of the Work is performed by contractors retained directly by the Owner, Contractor shall be responsible for the coordination and sequencing of the Work of those other contractors so as to avoid any impact on the Project Schedule.
- **3.2.2 Contractor Responsibility.** The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors, material and equipment suppliers, and their agents, employees, invitees, and other persons performing portions of the Work under direct or indirect contract with the Contractor or any of its Subcontractors.
- 3.2.3 Obligations not Changed by Architect's Actions. The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents by the activities or duties of the Owner's representatives, including but not limited to, any construction manager, the Architect or Inspector of Record, or by tests, inspections, or approvals required or performed by persons other than the Contractor.
- 3.2.4 Contractor Responsibility for Readiness for Work. The Contractor shall be responsible for inspection of Work already performed under the Contract Documents to determine that such portions are in proper condition to receive subsequent work.

- 3.3 SUPERINTENDENT The Contractor shall provide a competent superintendent and assistants as necessary, all of whom shall be reasonably proficient in speaking, reading and writing English and, who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. The Contractor and each Subcontractor shall: furnish a competent and adequate staff as necessary for the proper administration, coordination, supervision, and superintendence of its portion of the Work; organize the procurement of all materials and equipment so that the materials and equipment will be available at the time they are needed for the Work; and keep an adequate force of skilled workers on the job to complete the Work in accordance with all requirements of the Contract Documents. Owner shall have the right, but not the obligation, to require the removal from the Project of any superintendent, staff member, agent, or employee of any Contractor, Subcontractor, material or equipment supplier, etc., for cause.
- 3.4 LABOR AND MATERIALS Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, material, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.
- 3.5 WARRANTY For the period of one (1) year after completion of the Work, the Contractor warrants to the Owner that material and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents, per Section 12.2.
- **TAXES -** Contractor will pay all applicable Federal, State, and local taxes on all materials, labor, or services furnished by it, and all taxes arising out of its operations under the Contract Documents. Owner is exempt from Federal Excise Tax, and a Certificate of Exemption shall be provided upon request.
- 3.7 PERMITS, FEES AND NOTICES The Contractor shall secure and pay for all permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and are legally required by any authority having jurisdiction over the Project, except those required by the Division of the State Architect (DSA). Owner shall be responsible for all testing and inspection as required by the DSA on-Site or within the distance limitations set forth in paragraph 13.4.1, unless a different mileage range is specified in the Contract Documents.
- 3.8 **ALLOWANCES** The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities against whom the Contractor makes reasonable and timely objection.

- 3.9 CONTRACTOR'S CONSTRUCTION SCHEDULES - The Contractor, promptly after executing the Contract, shall prepare and submit for the Owner's and any construction manager's information the construction schedule for the Work, which shall conform to the Contract Documents requirements. The schedule shall not exceed time limits current under the Contract Documents and shall comply with all of the scheduling as required by the Contract Documents (including these General Conditions and Division 1 of the Specifications) and the standards of the industry. The construction schedule shall be in the form of a tabulation, chart, or graph and shall be in sufficient detail to show the chronological relationship of all activities of the project including, but not limited to, estimated starting and completion dates of various activities, (including early and late dates and reasonable float for each activity), procurement of materials, the critical path, and scheduling of equipment. In connection with the DSA Construction Oversight Process, which includes inspection cards and review of changes to the DSA-approved construction documents, the Contractor must (a) include specific tasks in its baseline schedule to take into account these procedures since they are critical path issues; and (b) include a reasonable amount of float in the baseline schedule to accommodate the additional time required by these DSA procedures. Failure of the Contractor to provide proper schedules as required by this paragraph may, at the sole discretion of Owner, constitute either grounds to withhold, in whole or in part, progress payments to the Contractor, or a breach of contract allowing Owner to terminate the Contract.
- 3.10 DOCUMENTS AND SAMPLES AT THE SITE The Contractor shall maintain at the Site for the Owner one applicable copy of Titles 19 and 24 and record copy of the Drawings, Specifications, Addenda, Change Orders, and other Modifications, in good order and marked currently to record changes and selections made during construction. In addition, the Contractor shall maintain at the Site approved Shop Drawings, Product Data, Samples, and similar required submittals.

3.11 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

- 3.11.1 Shop Drawings. The term "shop drawings" as used herein means drawings, diagrams, schedules, and other data, which are prepared by Contractor, Subcontractors, manufacturers, suppliers, or distributors illustrating some portion of the Work. The Contractor shall obtain and submit with the shop drawings all seismic and other calculations and all product data from equipment manufacturers. Shop drawings shall: establish the actual detail of all manufactured or fabricated items, indicate proper relation to adjoining work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.
- **3.11.2 Samples.** The term "samples" as used herein are physical examples furnished by Contractor to illustrate materials, equipment, or quality. All Work shall be in accordance with the approved samples.

- 3.11.3 Contractor's Responsibility. Contractor shall obtain and shall submit to Architect all required shop drawings and samples in accordance with Contractor's "Schedule for Submission of Shop Drawings and Samples" as required in Division 1 of the Specifications with such promptness as to cause no delay in its own Work or in that of any other contractor, Owner or subcontractor but in no event later than ninety (90) days after the execution of the Agreement. Review by Owner and Architect shall not relieve the Contractor or any Subcontractor from its responsibility in preparing and submitting proper shop drawings, product data and samples in accordance with the Contract Documents. Any submission, which in Architect's opinion is incomplete, contains numerous errors, or has been checked only superficially by Contractor will be returned unreviewed by the Architect for resubmission by the Contractor. Contractor shall not commence any portion of the Work requiring a shop drawing or sample submission until the Architect has approved the submission.
- 3.11.4 Extent of Review. In reviewing shop drawings, the Owner will not verify dimensions and field conditions. The Architect will review and approve shop drawings, product data, and samples for aesthetics and for conformance with the design concept of the Work and the information given in the Contract Documents. The Architect's review shall not relieve the Contractor from responsibility for any deviations from the requirements of the Contract Documents unless the Architect has given specific written approval. Contractor and Subcontractors shall be solely responsible for determining any quantities, whether or not shown on the shop drawings.
- **3.11.5 Substitution.** Unless the Specifications state that no substitution is permitted, whenever in the Contract Documents any specific brand or trade name is specified such specification shall be deemed to be followed by the words "or equal." The Owner may consider an untimely substitution request if the product specified is no longer commercially available.
- 3.12 CLEANING UP The Contractor shall keep the Site and surrounding area free from accumulation of waste material or rubbish caused by operations under the Contract. The Site shall be maintained in a safe, neat and orderly condition. If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so, without prior notice to the Contractor and the cost thereof shall be invoiced to the Contractor and withheld from progress payments and/or retention. When directed by the Owner or the Architect, Contractor and Subcontractor shall dismantle temporary structures, if any, and remove from the Site all construction and installation equipment, fences, scaffolding, surplus materials, rubbish, and supplies belonging to Contractor or Subcontractor.
- **3.13 ACCESS TO WORK** The Contractor shall provide the Owner, the Architect, and the Inspector of Record, access to the Work in preparation and progress wherever located.

3.14 ROYALTIES AND PATENTS - The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims of infringement of patent rights and shall hold the Owner and the Architect harmless and indemnify them from loss on account thereof, to the extent not caused by the Owner's active negligence, sole negligence or willful misconduct, and shall not be responsible for such defense or loss when a particular design, process, or product of a particular manufacturer is required by the Contract Documents, unless Contractor has reason to believe it is an infringement of a patent and does not inform Architect.

3.15 INDEMNIFICATION

3.15.1 Scope: Contractor. To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the Owner, the construction manager, Architect, Architect's consultants, the Inspector of Record, the State of California, and their respective agents, employees, officers, volunteers. Boards of Trustees. members of the Boards of Trustees, and directors ("Indemnitees"), from and against claims, actions, damages, liabilities, losses (including but not limited to injury or death of persons, property damage, and compensation owed to other parties), and expenses (including but not limited to attorneys' fees and costs including fees of consultants) alleged by third parties against Indemnitees arising out of or resulting from the following: Contractor's, its Subcontractors', or its suppliers' performance of the Work, including but not limited to the Contractor's or its Subcontractors' use of the Site; the Contractor's or its Subcontractors' construction of the Project, or failure to construct the Project, or any portion thereof; the use, misuse, erection, maintenance, operation, or failure of any machinery or equipment including, but not limited to, scaffolds, derricks, ladders, hoists, and rigging supports, whether or not such machinery or equipment was furnished, rented, or loaned by any of the Indemnitees; or any act, omission, negligence, or willful misconduct of the Contractor or its Subcontractors or their respective agents, employees, material or equipment suppliers, invitees, or licensees but only to the extent caused in whole or in part by the acts or omissions of the Contractor, its Subcontractors, its suppliers, anyone directly or indirectly employed by any of them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity, which would otherwise exist as to a party, person, or entity described in this paragraph. The obligation to defend, indemnify and hold harmless includes any claims or actions by third parties arising out of or resulting from Labor Code section 2810. Contractor shall have no obligation to defend or indemnify the Indemnitees against claims, actions, damages, liabilities, losses, and expenses caused by the active negligence, sole negligence or willful misconduct of Indemnitees. This indemnification shall apply to all liability, as provided for above, regardless of whether any insurance policies are applicable, and insurance policy limits do not act as a limitation upon the amount of the indemnification to be provided by the Contractor.

3.15.2 Scope: Subcontractors.

- **3.15.2.1** *Indemnity.* The Subcontractors shall defend, indemnify, and hold harmless the Indemnitees from and against claims, actions, damages. liabilities, and losses (including but not limited to injury or death of persons, property damage, and compensation owed to other parties), and expenses (including but not limited to attorneys' fees and costs including fees of consultants) alleged by third parties against Indemnitees arising out of or resulting from the following: Subcontractors' performance of the Work, including but not limited to the Subcontractors' use of the Site; the Subcontractors' construction of the Project or failure to construct the Project or any portion thereof; the use, misuse, erection, maintenance, operation, or failure of any machinery or equipment, including, but not limited to, scaffolds, derricks, ladders, hoists, and rigging supports. whether or not such machinery or equipment was furnished, rented, or loaned by any of the Indemnitees; or any act, omission, negligence, or willful misconduct of the Subcontractors or their respective agents. employees, material or equipment suppliers, invitees, or licensees but only to the extent caused in whole or in part by the acts or omissions of the Subcontractors, anyone directly or indirectly employed by any of them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate. abridge, or reduce other rights or obligations of indemnity, which would otherwise exist as to a party, person, or entity described in this paragraph. This obligation to defend, indemnify and hold harmless includes any claims or actions by third parties arising out of or resulting from Labor Code section 2810. Subcontractors shall have no obligation to defend or indemnify the Indemnitees against claims, actions, damages, liabilities, losses, and expenses caused by the active negligence, sole negligence or willful misconduct of Indemnitees. This indemnification shall apply to all liability, as provided for above, regardless of whether any insurance policies are applicable, and insurance policy limits do not act as a limitation upon the amount of the indemnification to be provided by the Subcontractors.
- 3.15.2.2 Joint and Several Liability. In the event more than one Subcontractor is connected with an accident or occurrence covered by this indemnification, then all such Subcontractors shall be jointly and severally responsible to each of the Indemnitees for indemnification, and the ultimate responsibility among such indemnifying Subcontractors for the loss and expense of any such indemnification shall be resolved without jeopardy to any Indemnitee. The provisions of the indemnity provided for herein shall not be construed to indemnify any Indemnitee for its own negligence if not permitted by law or to eliminate or reduce any other indemnification or right which any Indemnitee has by law or equity.

- 3.15.3 No Limitation. The Contractor's and the Subcontractor's obligation to indemnify and defend the Indemnitees hereunder shall include, without limitation, any and all claims, damages, and costs: for injury to persons and property (including loss of use), and sickness, disease or death of any person; for breach of any warranty, express or implied; for failure of the Contractor or the Subcontractor to comply with any applicable governmental law, rule, regulation, or other requirement; and for products installed in or used in connection with the Work.
- 3.16 NOTICE OF EXCUSE FOR NONPERFORMANCE If Contractor believes that acts or omissions of Owner (including, but not limited to, Owner-caused delay) have prevented Contractor from performing the Work as required by the Contract Documents and Contractor intends to rely on Owner's acts or omissions and Civil Code section 1511(1) as reasons to excuse Contractor's nonperformance or to support, among other things, Contractor's requests for time extensions under these General Conditions, Contractor shall provide written notice of the excuse within five (5) days of the Owner's acts or omissions. If Contractor fails to timely submit the written notice, Contractor shall have waived any right to later rely on the acts or omissions as a defense to Contractor's nonperformance or as the basis for a time extension, regardless of the merits of the defense or time extension. Contractor will not have satisfied a condition precedent or exhausted administrative remedies. Contractor acknowledges that these written notices are of critical importance to the Owner's Project management and the mitigation of Project costs and delays.

ARTICLE 4 ADMINISTRATION OF THE CONTRACT

4.1 ARCHITECT - The term "Architect" means the Architect or the Architect's authorized representative, shall also refer to all consultants under the Architect's direction and control, and is referred to as if singular in number. The Architect will have authority to act on behalf of the Owner only to the extent set forth in the Owner/Architect agreement.

4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

- **4.2.1 Status**. The Architect may provide administration of the Contract as described in the Contract Documents and may be one of several Owners' representatives during construction.
- **4.2.2 Limitations of Construction Responsibility**. The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect, or by tests, inspections, or approvals required or performed by persons other than the Contractor.
- **4.2.3 Communications Facilitating Contract Administration**. Except as otherwise provided in the Contract Documents or when direct communications are warranted by special circumstances, the Owner and the Contractor shall communicate through the Architect, unless there is a construction manager for the Project or the Owner directs otherwise.
- **4.2.4 Rejection of Work**. In addition to the rights, duties, and obligations of the Inspector of Record under this Article, the Architect may recommend to the Owner that the Owner reject Work which does not conform to the Contract Documents.
- 4.3 **INSPECTOR OF RECORD** - One or more Project inspectors ("Inspector of Record") employed by the Owner and approved by the Division of the State Architect will be assigned to the Work in accordance with the requirements of Title 24 of the California Code of Regulations. The Inspector of Record's duties will be as specifically defined in Title 24. All Work shall be under the observation of or with the knowledge of the Inspector of Record. The Inspector of Record shall have free access to any or all parts of the Work at any time. The Contractor shall furnish the Inspector of Record such information as may be necessary to keep the Inspector of Record fully informed regarding progress and manner of work and character of materials. Such observations shall not, in any way, relieve the Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Contractor's responsibility for providing efficient and capable superintendence. The Inspector of Record is not authorized to make changes in the drawings or specifications. The Inspector of Record shall have the authority to reject work that does not comply with the provisions of the Contract Documents. In addition, the Inspector of Record may stop any Work which poses a probable risk of harm to persons or property.

4.4 RESPONSIBILITY FOR ADDITIONAL CHARGES INCURRED BY THE OWNER FOR PROFESSIONAL SERVICES - If at any time prior to the completion of the requirements under the Contract Documents, through no fault of its own, the Owner is required to provide or secure additional professional services for any reason by any act or omission of the Contractor, the Contractor shall be invoiced by the Owner for any actual costs incurred for any such additional services, which costs may, among other remedies, be withheld from the progress payments and/or retention.

4.5 CLAIMS

4.5.1 General. A "Claim" is a separate demand by the Contractor for (a) a time extension, (b) payment of money or damages arising from work done by, or on behalf of, the Contractor, payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (c) an amount the payment of which is disputed by the local agency. A Claim includes any dispute Contractor may have with the Owner, including one regarding an alleged breach of contract by the Owner. The responsibility to substantiate Claims shall rest with the Contractor.

Claims, including those alleging an error or omission by the Architect, shall be submitted to the Architect and Owner. If Contractor intends to rely on Owner's acts or omissions in support of a request for a time extension, then Contractor must also provide the notice set forth in section 3.16, above. A timely decision by the Owner shall be provided. Claims must be made by written notice prior to the final progress payment. An additional Claim made after the initial Claim has been implemented by Change Order will not be considered. The failure of the Contractor to make a Claim within the specified time shall constitute an express waiver of any right to assert such Claim, whether affirmatively or defensively. Despite submission or rejection of a Claim, the Contractor shall proceed diligently with performance of the Contract, and the Owner shall continue to make any undisputed payments in accordance with the Contract. When any excavation or trenching extends greater than four feet below the surface, Public Contract Code section 7104 shall control.

The Contractor s	shall certify, at th	e time of submission of a Claim, as follows:
(Contractor), dec California, and d the attached Cla contents, and sa accurate and co adjustment for w I am familiar with further know and	clare under pena lo personally cer im for additional aid Claim is made mplete; that the a hich the Contrac n California Pena d understand tha	(Must be an officer) of
By:		

Contractor understands and agrees that any Claim submitted without this certification does not meet the terms of the Contract Documents, that Owner, or Owner's representatives, may reject the Claim on that basis and that unless Contractor properly and timely files the Claim with the certification, Contractor cannot further pursue the Claim in any forum. A condition precedent will not have been satisfied.

4.5.2 Claims for Concealed or Unknown Conditions

- 4.5.2.1 Trenches or Excavations Less Than Four Feet below the Surface. If Contractor encounters conditions at the Site which are subsurface or otherwise concealed physical conditions, which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the Contractor shall be given to the Owner promptly before conditions are disturbed and in no event later than ten (10) days after first observance of the conditions. If Contractor believes that such conditions differ materially and will cause an increase in the Contractor's cost of, time required for, or performance of any part of the Work, Contractor must comply with the provisions above for Claims.
- 4.5.2.2 Trenches or Excavations Greater Than Four Feet below the Surface.

 Pursuant to Public Contract Code section 7104, when any excavation or trenching extends greater than four feet below the surface:
 - 4.5.2.2.1 The Contractor shall promptly, and before the following conditions are disturbed, notify the public entity, in writing, of any:
 - (1) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, which is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law.
 - (2) Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids.
 - (3) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.
 - 4.5.2.2.2 The public entity shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required or, performance of any part of the work shall issue a change order under the procedures described in the Contract.

- 4.5.2.2.3 In the event that a dispute arises between the public entity and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties.
- 4.6 CLAIMS OF \$375,000 OR LESS Notwithstanding any other provision herein, claims of \$375,000 or less shall be handled pursuant to the procedures set forth in Public Contract Code sections 20104.2, including claim, response, informal meet and confer conference, non-binding mediation if a claim of over \$100,000 remains in dispute after the meet and confer conference, and Government Code claim. As a precedent to initiation of any litigation against the Owner, Contractor must observe and comply with the Government Code claim procedures in Government Code sections 901 et seq. after completion of the contractual claim procedures above, including but not limited to timely presentation of a Government Code claim. The claim procedures described herein do not supersede or replace the requirement of a Government Code claim, and the two claim procedures shall be sequential.
- 4.7 CLAIMS IN EXCESS OF \$375,000 - Claims over \$375,000 shall be handled by Contractor and Owner pursuant to Section 4.6, above, except as follows: (a) Procedures in Public Contract Code section 20104.2(b) shall not be applicable; (b) Owner shall respond in writing to all written Claims within 90 days of receipt of the Claim, or may request, in writing, within 45 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the Claim the Owner may have against the Contractor; (c) Owner shall respond within 45 days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or documentation, whichever is greater; and (d) following any meet and confer conference pursuant to Public Contract Code section 20104.2(d), if the Claim or any portion of it remains in dispute and Contractor wishes to pursue it, Contractor must demand in writing within fifteen (15) days that the parties mediate, and such requirement for mediation shall not toll or supersede the requirement for submission of a Government Code claim, as specifically required in Section 4.6 above. If Contractor fails to timely notify the Owner in writing that it wishes to mediate pursuant to this paragraph, then Contractor will have waived all rights to further pursue the Claim. The parties shall reasonably cooperate to schedule and attend mediation as soon as reasonably possible.

ARTICLE 5 SUBCONTRACTORS

5.1 **DEFINITIONS**

- 5.1.1 Subcontractor. A Subcontractor is a person or entity, who has a contract with the Contractor to perform a portion of the Work at the Site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor. To the extent that the term Trade Contractor is utilized in the Contract Documents, it shall have the same meaning as the term "Subcontractor."
- **5.1.2 Sub-Subcontractor**. A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the Site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.
- 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK Subcontractors shall be listed by Contractor pursuant to Public Contract Code section 4104. Subcontractor substitution shall be handled in accordance with Public Contract Code sections 4107 and 4107.5. Any substitutions of Subcontractors shall not result in any increase in the Contract Sum or the granting of any extension of time for the completion of the Project.
- 5.3 SUBCONTRACTUAL RELATIONS By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all obligations and responsibilities, which the Contractor, by the Contract Documents, assumes toward the Owner.
- **5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS** Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner provided that:
 - A. Assignment is effective only after termination of the Contract with the Contractor by the Owner for cause pursuant to Article 14 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor in writing; and
 - B. Assignment is subject to the prior rights of the surety, if any, obligated under any bond relating to the Contract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

- 6.1.1 Owner's Rights. The Owner reserves the right to perform work related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the Site under Conditions of the Contract identical or substantially similar to these, including those portions related to insurance. Upon the election to perform work with its own forces or by separate contracts, the Owner shall notify the Contractor. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall proceed pursuant to the Contract Documents.
- 6.1.2 Contractor's Duties. The Contractor shall have overall responsibility for coordination and scheduling of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors, and the Owner until subsequently revised.
- **6.1.3 Owner Obligations**. Unless otherwise provided in the Contract Documents, when the Owner performs work related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations, and to have the same rights, which apply to the Contractor under the General Conditions.

6.2 MUTUAL RESPONSIBILITY

- **6.2.1 Delivery and Storage**. The Contractor shall afford the Owner and separate contractors reasonable opportunity for delivery and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the separate contractors' construction and operations with theirs as required by the Contract Documents.
- 6.2.2 Notice by Contractor. If part of the Contractor's Work depends upon proper execution or results from work by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Owner patent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acknowledgment that the Owner's or separate contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

ARTICLE 7 CHANGES IN THE WORK

7.1 CHANGES

- 7.1.1 No Changes without Authorization. The Owner reserves the right to change the Work by making such alterations, deviations, additions to, or deletions from the plans and specifications, as may be deemed by the Owner to be necessary or advisable for the proper completion or construction of the Work contemplated, and the Owner reserves the right to require Contractor to perform such work. There shall be no change whatsoever in the drawings, specifications, or in the Work without an executed Change Order, Construction Change Directive, or order by the Owner for a minor change in the Work as herein provided. Owner shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications unless the same shall have been authorized by and the cost thereof approved in writing by Change Order or Construction Change Directive. No extension of time for performance of the Work shall be allowed hereunder unless claim for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order.
- 7.1.2 Architect Authority. The Owner will have authority to order minor changes in the Work not involving any adjustment in the Contract Sum, an extension of the Contract Time, or a change which is inconsistent with the intent of the Contract Documents. Such changes shall be effected by written Change Order and shall be binding on the Owner and the Contractor. The Contractor shall carry out such written orders promptly.
- 7.2 CHANGE ORDERS ("CO") A CO is a written instrument prepared by the Architect and signed by the Owner, the Contractor, the Architect, and the DSA, stating their agreement upon all of the following: (A) A change in the Work; (B) the amount of the adjustment in the Contract Sum, if any; and (C) the extent of the adjustment in the Contract Time, if any.
- 7.3 CONSTRUCTION CHANGE DIRECTIVES ("CCD") A CCD is a written unilateral order prepared by the Architect and signed by the Owner, and if necessary by 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 Owner may by CCD, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions the Contract Sum and Contract Time being adjusted accordingly. A CCD shall be used in the absence of agreement on the terms of a CO. If Contractor disagrees with the terms of a CCD, it shall nevertheless perform the work directed by the CCD, but it may pursue the notice, COR and claim procedures if Contractor believes it is entitled to changes in the Contract Sum or Contract Time.

- 7.4 REQUEST FOR INFORMATION ("RFI") - An RFI is a written request prepared by the Contractor asking the Owner to provide additional information necessary to clarify an item which the Contractor feels is not clearly shown or called for in the drawings or specifications, or to address problems which have arisen under field conditions. The RFI shall reference all the applicable Contract Documents including specification section, detail, page numbers, drawing numbers, and sheet numbers, etc. The Contractor shall make suggestions and/or interpretations of the issue raised by the RFI. An RFI cannot modify the Contract Sum, Contract Time, or the Contract Documents. The Owner and Contractor agree that an adequate time period for the Architect to respond to an RFI is generally fourteen (14) calendar days after the Architect's receipt of an RFI, unless the Owner and Contractor agree otherwise in writing. However, in all cases, the Architect shall take such time, whether more or less than 14 days, as is necessary in the Architect's professional judgment to permit adequate review and evaluation of the RFI. If Contractor informs the Architect that it needs a response to an RFI expedited to avoid delay to the critical path, the Architect shall provide a response as quickly as reasonably possible. The Contractor shall be invoiced by the Owner for any costs incurred for professional services, which shall be withheld from progress payments or retention, if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request.
- 7.5 REQUEST FOR PROPOSAL ("RFP") An RFP is a written request prepared by the Architect asking the Contractor to submit to the Owner and the Architect an estimate of the effect of a proposed change on the Contract Sum and the Contract Time. An RFP shall contain adequate information, including any necessary drawings and specifications, to enable Contractor to provide the cost breakdowns required by section 7.7. The Contractor shall not be entitled to any Additional Compensation for preparing a response to an RFP, whether ultimately accepted or not.
- 7.6 CHANGE ORDER REQUEST ("COR") A COR is a written request prepared by the Contractor asking the Owner and the Architect to incorporate a proposed change called for in an RFP or a notice of claim into a CO. A COR shall include breakdowns to validate any change in Contract Sum due to proposed change or claim. A COR shall also include any additional time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule as defined in section 3.9 and Division 1 of the Specifications.

7.7 COST OF CHANGE ORDERS

7.7.1 Scope. Within ten (10) days or such lesser period of time as may be required by Owner after a request is made for a change that impacts the Contract Sum or the Contract Time, the Contractor shall provide to the Owner and the Architect in writing an estimate of the effect of the proposed CO upon the Contract Sum and the actual cost of construction, which shall include a complete itemized cost breakdown of all labor and material showing actual quantities, hours, unit prices, wage rates, required for the change, and the effect upon the Contract Time of such CO. Changes may be made by Owner by an appropriate written CO, or, at the Owner's option, such changes shall be implemented immediately upon the Contractor's receipt of an appropriate written CCD.

- 7.7.2 Determination of Cost. The amount of the increase or decrease in the Contract Sum resulting from a CO, if any, shall be determined in one or more of the following ways as applicable to a specific situation: (A) Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation; (B) unit prices stated in the Contractor's original bid, the Contract Documents, or subsequently agreed upon between the Owner and the Contractor; (C) cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or (D) by cost of material and labor and percentage of overhead and profit. Contractor and Subcontractors may mark up their own work by 15% for overhead, bond and insurance premiums, and profit. Contractor may mark up a Subcontractor's total costs by 5%.
- **7.7.3** Accounting Records. With respect to portions of the Work performed by COs and CCDs on a time-and-materials, unit-cost, or similar basis, the Contractor shall keep and maintain cost-accounting records satisfactory to the Owner, which shall be available to the Owner on the same terms as any other books and records the Contractor is required to maintain under the Contract Documents.
- 7.7.4 Notice Required. If the Contractor desires an increase in the Contract Sum, or any extension in the Contract Time for completion, it shall give the Owner and the Architect written notice of the potential change within five (5) days after the occurrence of the event giving rise to the claim, together with detailed estimates of the impact on the Contract Sum and/or the Contract Time. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property, in which case the Contractor shall proceed in accordance with paragraph 10.4 hereof. No notice shall be considered unless made in accordance with this Subparagraph; however, the mere presentation of such claim shall not establish the validity of the cause giving rise to such claim, or of the extension of the Contract Time, and/or the increase in the Contract Sum. Contractor shall proceed to execute the Work even though the adjustment has not been agreed upon. Any change in the Contract Sum or extension of the Contract Time resulting from such claim shall be authorized by a CO.

ARTICLE 8 TIME

8.1 **DEFINITIONS**

- **8.1.1 Contract Time**. Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Completion of the Work.
- **8.1.2 Notice to Proceed**. The date of commencement of the Work is the date established in the Notice to Proceed. The date shall not be postponed by the failure to act of the Contractor or of persons or entities for which the Contractor is responsible.
- **8.1.3 Days**. The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

8.2 HOURS OF WORK

- **8.2.1 Sufficient Force**. Contractors and Subcontractors shall furnish sufficient forces to ensure the prosecution of the Work in accordance with the Construction Schedule.
- **8.2.2 Performance during Working Hours**. Work shall be performed during regular working hours except that in the event of an emergency or when required to complete the Work in accordance with job progress, work may be performed outside of regular working hours with the advance written consent of the Owner.
- 8.2.3 Labor Code Application. As provided in Article 3 (commencing at § 1810), Chapter 1, Part 7, Division 2 of the Labor Code, eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by the Contractor or by any Subcontractor on any subcontract under this Contract, upon the work or upon any part of the work contemplated by this Contract, is limited and restricted to eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except as hereinafter provided. Notwithstanding the provision hereinabove set forth, work performed by employees of Contractors in excess of eight (8) hours per day and forty (40) hours during any one week shall be permitted upon this public work with compensation provided for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay.

Contractor or subcontractor shall pay to the Owner a penalty of Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Contract by the Contractor, or by any Subcontractor, for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and forty (40) hours in any one (1) calendar week, in violation of the provisions of Article 3 (commencing at § 1810), Chapter 1, Part 7, Division 2 of the Labor Code, unless compensation for the workers so employed by Contractor is not less than one and one-half (1-1/2) times the basic rate of pay for all hours worked in excess of eight (8) hours per day.

8.3 PROGRESS AND COMPLETION - Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work. The Contractor shall not knowingly, except by agreement or instruction of the Owner, in writing, commence operations on the Site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor. The date of commencement of the Work shall not be changed by the effective date of such insurance. The Contractor shall proceed expeditiously with adequate forces, labor, materials, equipment and management, and shall achieve Completion within the Contract Time.

8.4 EXTENSIONS OF TIME - LIQUIDATED DAMAGES

- **8.4.1 Excusable Delay**. The Contractor shall not be charged for liquidated damages, as set forth in the Agreement, because of any delays in completion of the Work due to acts of God, acts of public enemy, acts of Government, acts of the Owner or anyone employed by it, acts of another contractor in performance of a contract (other than this Contract) with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, or delays of subcontractors due to such causes.
- 8.4.2 Notice by Contractor Required. The Contractor shall within ten (10) calendar days of beginning of any such delay (unless Owner grants in writing a further period of time to file such notice prior to the date of final payment under the Contract) notify the Owner in writing of causes of delay. Owner will then ascertain the facts and extent of the delay and grant an extension of time for completing the Work when, in its judgment, the findings of fact justify such an extension. The Owner's findings of fact thereon shall be final and conclusive on the parties. Extensions of time shall apply only to that portion of the Work affected by the delay and shall not apply to other portions of the Work not so affected. The sole remedy of Contractor for extensions of time under paragraph 8.4.1 shall be an extension of the Contract Time at no cost to the Owner.
- 8.4.3 Conditions for Extension of Time. If the Contractor is delayed at any time in progress of the Work by an act or neglect of the Owner, the Architect, an employee of either, or of a separate contractor employed by the Owner, by changes ordered in the Work, by labor disputes, fire, unusual delay in deliveries, or unavoidable casualties, by delay authorized by the Owner pending arbitration, or by other causes which the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.
- **8.4.4 Early Completion**. Regardless of the cause therefore, the Contractor may not maintain any Claim or cause of action against the Owner for damages incurred as a result of its failure or inability to complete its work on the Project in a shorter period than established in the Contract Documents.

- **8.4.5** Liquidated Damages. Failure to complete the Project within the time and in the manner provided for by the Contract Documents shall subject the Contractor to liquidated damages, as described in the Agreement. For purposes of liquidated damages, the concept of substantial completion shall not constitute completion and is not part of this agreement.
- **8.5 GOVERNMENT APPROVALS** Owner shall not be liable for any delays or damages related to the time required to obtain government approvals.

ARTICLE 9 PAYMENTS AND COMPLETION

- **9.1 CONTRACT SUM** The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.
- **9.2 COST BREAKDOWN** On forms approved by the Owner within ten (10) days of the execution of the Agreement, the Contractor shall furnish a schedule of values and a list of all subcontractors and suppliers. The Owner shall review all submissions received in a timely manner. All submissions must be accepted by the Owner before becoming the basis of any payment.
- 9.3 APPLICATIONS FOR PAYMENT On or before the fifth (5th) day of each calendar month during the progress of the portion of the Work for which payment is being requested, the Contractor shall submit to the Owner an itemized Application for Payment for operations completed in accordance with the Schedule of Values through the end of the previous calendar month. As the Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from Owner, to assure that there will be no delays, payment by the Owner for stored material shall be made only in unusual circumstances where the Owner specifically approves the payment in writing. The Contractor warrants that title to all work covered by an Application for Payment will pass to the Owner no later than the time of payment.
- 9.4 REVIEW OF PROGRESS PAYMENT The Owner will, within seven (7) days after receipt of the Contractor's Application for Payment, either accept such payment or notify the Contractor in writing of the Owner's reasons for withholding acceptance in whole or in part. The review of the Contractor's Application for Payment by the Owner is based on the Owner's observations at the Site and the data comprising the Application for Payment whether the Work has progressed to the point indicated and whether, to the best of the Owner's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents.

- 9.5 DECISIONS TO WITHHOLD PAYMENT The Owner may decide to withhold a progress or retention payment in whole, or in part, to the extent reasonably necessary to protect the Owner. In addition, the Owner may withhold payment, in whole, or in part, to such extent as may be necessary to protect the Owner from loss because of any acts or omissions by Contractor, including any rights to withhold mentioned in the Contract Documents or based on stop payment notices.
- **9.6 PROGRESS PAYMENTS -** Progress payments shall be made in accordance with Public Contract Code sections 7201, 9203, and 20104.50. Owner shall retain five percent (5%) of any approved progress payment, except it may retain more if it makes special findings pursuant to Public Contract Code section 7201.
- 9.7 COMPLETION OF THE WORK Upon receipt of the Contractor's request for final inspection, the Owner will make an inspection to determine whether the Work, or designated portion thereof, is complete. If the Owner's inspection discloses any item which is not completed in accordance with the requirements of the Contract Documents, the Contractor shall, before Owner's issuance of the Notice of Completion, diligently complete or correct such item.
- 9.8 PARTIAL OCCUPANCY OR USE Owner may occupy or use any completed or partially completed portion of the Work at any stage without accepting that work and without waiving rights to claim damages as to that work. The Owner and the Contractor shall agree in writing to the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents.
- 9.9 ACCEPTANCE, NOTICE OF COMPLETION, AND FINAL PAYMENT If the Owner's representatives find the Work fully performed under the Contract Documents, they shall so notify Contractor, who shall then submit to the Owner its final application for progress payment. After the Owner's representatives find the Work fully performed, the Owner's governing body should accept the Work as fully complete. After completion, the Owner may record a Notice of Completion with the County Recorder in accordance with Civil Code section 8182. Contractor shall, upon receipt of final progress payment from Owner, pay the amounts due Subcontractors. Owner shall pay the retainage pursuant to Public Contract Code section 7107. Any application for final progress payment shall be accompanied by the same details required for monthly progress payments. Acceptance of final progress payment shall constitute a waiver of Claims except for those previously identified in writing and identified by that payee as unsettled at the time of final payment.

9.10 SUBSTITUTION OF SECURITIES - In accordance with section 22300 of the Public Contract Code, the Owner will permit the substitution of securities for any retention monies withheld by the Owner to ensure performance under the Contract. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the Owner, or with a state or federally chartered bank as the escrow agent, who shall then pay such retention monies to the Contractor. Upon completion of the Contract, the securities shall be returned to the Contractor if Owner has no basis to withhold under the Contract Documents. Securities eligible for investment under this section shall include those listed in Government Code section 16430, bank or savings and loan certificates of deposit, interest-bearing, demanddeposit accounts, standby letters of credit, or any other security mutually agreed to by the Contractor and the Owner. The Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon. Any escrow agreement used shall be substantially similar to the form set forth in Public Contract Code section 22300.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

- 10.1 SAFETY PRECAUTIONS AND PROGRAMS The Contractor shall have responsibility for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. Subcontractors have the responsibility for participating in, and enforcing, the safety and loss prevention programs established by the Contractor for the Project, which will cover all Work performed by the Contractor and its Subcontractors. Subcontractors shall promptly report in writing and by phone to the Contractor all accidents whatsoever arising out of, or in connection with, the performance of the Work, whether on or off the Site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. The Contractor will provide and maintain at the Site first-aid supplies for minor injuries.
- 10.2 SAFETY OF PERSONS AND PROPERTY The Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to: (A) Employees on the Work and other persons who may be affected thereby; (B) the Work, material, and equipment to be incorporated therein, whether in storage on or off the Site, under the care, custody, or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and (C) other property at the Site or adjacent thereto such as trees, shrubs, lawns, walks, pavement, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction. The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss.

The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent Sites and utilities.

When use or storage of explosives, other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Contractor shall notify the Owner any time that explosives or hazardous materials are expected to be stored on Site. Location of storage shall be coordinated with the Owner and local fire authorities.

At its own expense, Contractor shall comply with all fingerprinting requirements under law and Contract, including but not limited to the requirements of Education Code section 45125.2 and the Independent Contractor Student Contact Form which is part of the Contract. Contractor shall hold harmless, defend and indemnify the Owner under section 3.15 of these General Conditions, for any costs, including attorneys' fees, Owner incurs from Contractor's failure to comply.

10.3 PROTECTION OF WORK AND PROPERTY - The Contractor and Subcontractors shall continuously protect the Work, the Owner's property, and the property of others, from damage, injury, or loss until formal acceptance of the Work or completion of the Work if there is no formal acceptance of the Work. The Contractor and Subcontractors shall make good any such damage, injury, or loss, except such as may be solely due to, or caused by, agents or employees of the Owner.

The Contractor and the Subcontractors shall use only those ingress and egress routes designated by the Owner, observe the boundaries of the Site designated by the Owner, park only in those areas designated by the Owner, which areas may be on or off the Site, and comply with any parking control program established by the Owner such as furnishing license plate information and placing identifying stickers on vehicles.

- 10.4 EMERGENCIES In an emergency affecting the safety of persons or property, the Contractor shall take any action necessary, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 7. The Contractor shall promptly report in writing to the Owner all accidents arising out of or in connection with the Work, which caused death, personal injury, or property damage, giving full details and statements of any witnesses. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported immediately by telephone or messenger to the Owner.
- 10.5 HAZARDOUS MATERIALS In the event the Contractor encounters or suspects the presence on the Site material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by section 25249.5 of the California Health and Safety Code, which (a) has not been rendered harmless, and (b) the handling or removal of which is not within the scope of the Work, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and the Architect in writing, whether or not such material was generated by the Contractor or the Owner.

ARTICLE 11 INSURANCE AND BONDS

11.1. CONTRACTOR'S LIABILITY INSURANCE

11.1.1 Liability Insurance Requirements. By the earlier of the deadline set forth in the Instructions to Bidders or the commencement of the Work and within limits acceptable to the Owner, the Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in California as admitted carriers with a financial rating of at least A+, Class XII status as rated in the most recent edition of Best's Insurance Reports such commercial general liability insurance per occurrence for bodily injury, personal injury and property damage as set forth in the Agreement and automobile liability insurance per accident for bodily injury and property damage combined single limit as set forth in the Agreement, as will protect the Contractor from claims, which may arise out of or result from the Contractor's operations under the Contract and for which the Contractor may be legally liable, whether such operations are by the Contractor. by a Subcontractor, by Sub-subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. This insurance shall be subject to the approval of Owner, and Owner's approval shall not be unreasonably withheld. The Contractor shall require its Subcontractors and any Sub-subcontractors to take out and maintain similar public liability insurance and property damage insurance in like amounts.

Owner may partially or fully occupy and/or use the Project before acceptance of the entire Project by the Owner. All of contractor's required insurance must allow such occupancy and/or use without prior consent from insurer.

- **11.1.2 Additional Insured Endorsement Requirements**. The Contractor shall name, on any policy of insurance, the Owner and the Architect as additional insureds.
- 11.1.3 Workers' Compensation Insurance. During the term of this Contract, the Contractor shall provide workers' compensation insurance for all of the Contractor's employees engaged in Work under this Contract on or at the site of the Project and, in case any of the Contractor's work is sublet, the Contractor shall require the Subcontractor to provide workers' compensation insurance for all the Subcontractor's employees engaged in Work under the subcontract.

- 11.1.4 Builder's Risk / "All Risk" Insurance. Unless provided by the Owner at Owner's sole discretion, Contractor, during the progress of the Work and until final acceptance of the Work by Owner upon completion of the entire Contract, shall maintain Builder's Risk/Course-of-Construction insurance, issued on a completed value basis on all insurable Work included under the Contract Documents. This insurance shall be subject to the approval of Owner, and Owner's approval shall not be unreasonably withheld. This insurance shall insure against all risks, including but not limited to the following perils: vandalism, theft, malicious mischief, fire, sprinkler leakage, civil authority, sonic boom, explosion, collapse, flood, earthquake (for projects not solely funded through revenue bonds, limited to earthquakes equivalent to or under 3.5 on the Richter Scale in magnitude), wind, hail, lightning, smoke, riot or civil commotion, debris removal (including demolition) and reasonable compensation for the Architect's services and expenses required as a result of such insured loss. This insurance shall provide coverage in an amount not less than the full cost to repair, replace or reconstruct the Work. Such insurance shall include the Owner, the Architect, and any other person or entity with an insurable interest in the Work as an additional named insured.
- 11.1.5 Fire Insurance. Before the commencement of the Work, the Contractor shall procure, maintain, and cause to be maintained at the Contractor's expense, fire insurance on all Work included under the Contract Documents, insuring the full replacement value of such Work as well as the cost of any removal and demolition necessary to replace or repair all Work damaged by fire. The amount of fire insurance shall be subject to approval by the Owner and shall be sufficient to protect the Project against loss or damage in full until the Work is accepted by the Owner. Should the Work being constructed be damaged by fire or other causes during construction, it shall be replaced in accordance with the requirements of the drawings and specifications without additional expense to the Owner.
- **11.1.6 Other Insurance**. The Contractor shall provide all other insurance required to be maintained under applicable laws, ordinances, rules, and regulations. Such insurance shall be subject to the approval of Owner, and Owner's approval shall not be unreasonably withheld.
- 11.1.7 Proof of Carriage of Insurance. The Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under this Contract until all required insurance, certificates, and an Additional Insured Endorsement and Declarations Page have been obtained and delivered in duplicate to the Owner for approval, and such approval shall not be unreasonably withheld.
- **11.1.8 Compliance**. In the event of the failure of any contractor to furnish and maintain any insurance required by this Article, the Contractor shall be in default under the Contract.

11.2 PERFORMANCE AND PAYMENT BONDS - Unless otherwise specified in the Contract Documents, prior to commencing any portion of the Work, the Contractor shall apply for and furnish Owner separate payment and performance bonds for its portion of the Work which shall cover 100% faithful performance of and payment of all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the Work. Only bonds executed by admitted Surety insurers as defined in Code of Civil Procedure section 995.120 shall be accepted. The surety insurers must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bonds, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurers selected by Contractor and to require Contractor to obtain bonds from surety insurers satisfactory to the Owner.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

- **12.1 UNCOVERING OF WORK** If a portion of the Work is covered contrary to the Owner's request or to requirements specifically expressed in the Contract Documents, Contractor must, if required in writing by the Owner, uncover it for the Owner's observation and replace the removed work at the Contractor's expense without change in the Contract Sum or Time.
- 12.2 CORRECTION OF WORK; WARRANTY The Contractor shall promptly correct the Work rejected by the Owner for failing to conform to the requirements of the Contract Documents, until the statutes of limitation (or repose) and all warranties have run, as applicable, and whether or not fabricated, installed or completed. The Contractor shall bear costs of correcting the rejected Work, including additional testing, inspections, and compensation for the Owner's expenses and costs incurred.

If, within one (1) year after completion of the Work or within a longer time period for an applicable special warranty or guarantee required by the Contract Documents, any of the Work does not comply with the Contract Documents, the Contractor shall correct it after receipt of Owner's written notice to do so, unless the Owner has previously waived in writing such right to demand correction. Contractor shall correct the Work promptly, and passage of the applicable warranty period shall not release Contractor from its obligation to correct the Work if Owner provided the written notice within the applicable warranty period. Contractor's obligation to correct the warranty item continues until the correction is made. After the correction is made to Owner's satisfaction, a new warranty period of the same length as the original warranty period shall run on the corrected work. The obligations under this paragraph 12.2 shall survive acceptance of the Work under the Contract and termination of the Contract.

The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are not corrected by the Contractor or accepted by the Owner. If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with paragraph 2.4. The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or separate contractors, whether completed or partially completed, caused by the Contractor's correction or removal of the nonconforming Work. Nothing in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents.

ARTICLE 13 MISCELLANEOUS PROVISIONS

- **13.1 GOVERNING LAW** The Contract shall be governed by the law of the place where the Project is located.
- **13.2 SUCCESSORS AND ASSIGNS** Owner shall, at Contractor's cost, timely notify Contractor of Owner's receipt of any third party claims relating to the Contract.
- 13.3 RIGHTS AND REMEDIES; NO WAIVER Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law. No action or failure to act by the Inspector of Record, the Owner, or the Architect shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed to in a written amendment to the Contract.
- **13.4 TESTS AND INSPECTIONS** Tests, inspections, and approvals of portions of the Work required by the Contract Documents will comply with Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.
 - 13.4.1 Independent Testing Laboratory. The Owner will select and pay an independent testing laboratory to conduct all tests and inspections, including shipping or transportation costs or expenses (mileage and hours). Selection of the materials required to be tested shall be made by the laboratory or the Owner's representative and not by the Contractor. However, if Contractor requests that the Owner use a different testing laboratory and Owner chooses to approve such request, Contractor shall pay any additional shipping or transportation costs or expenses (mileage and hours). If Owner pays such additional costs or expenses instead of Contractor, then Owner may invoice such costs or expenses to the Contractor or withhold such costs or expenses from progress payments and/or retention.

- 13.4.2 Advance Notice to Inspector of Record. The Contractor shall notify the Inspector of Re-cord a sufficient time in advance of its readiness for required observation or inspection so that the Inspector of Record may arrange for same. The Contractor shall notify the Inspector of Record a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents which must, by terms of the Contract Documents, be tested in order that the Inspector of Record may arrange for the testing of the material at the source of supply.
- **13.4.3 Testing Off-Site**. Any material shipped by the Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Inspector of Record that such testing and inspection will not be required, shall not be incorporated in the Work.
- 13.4.4 Additional Testing or Inspection. If the Inspector of Record, the Architect, the Owner, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under section 13.4, the Inspector of Record will, upon written authorization from the Owner, make arrangements for such additional testing, inspection, or approval. The Owner shall bear such costs except as provided in section 13.4.5.
- 13.4.5 Costs for Retesting. If such procedures for testing, inspection, or approval under sections 13.4, 13.4.1, 13.4.2 and 13.4.4 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs arising from such failure, including those of retesting, re-inspection, or re-approval, including, but not limited to, compensation for the Architect's services and expenses. Any such costs shall be paid by the Owner, invoiced to the Contractor, and, among other remedies, can be withheld from progress payments and/or retention.
- 13.4.6 Costs for Premature Test. In the event the Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Contractor shall be invoiced by the Owner for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Architect's fees and expenses, and the amount of the invoice can among other remedies, be withheld from progress payments and/or retention.
- **13.4.7 Tests or Inspections not to Delay Work**. Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

- 13.5 TRENCH EXCAVATION Pursuant to Labor Code section 6705, if the Contract Sum exceeds \$25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, the Contractor shall, in advance of excavation, submit to the Owner or a registered civil or structural engineer employed by the Owner a detailed plan showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer, but in no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by the Owner or by the person to whom authority to accept has been delegated by the Owner. Pursuant to Labor Code section 6705, nothing in this Article shall impose tort liability upon the Owner or any of its employees.
- **13.6 DEBARMENT** Pursuant to Public Contract Code section 6109, no contractor or subcontractor may perform work on a public works project if ineligible to perform work on the project pursuant to section 1777.1 of the Labor Code.
- 13.7 ASSIGNMENT OF ANTITRUST CLAIMS Pursuant to Public Contract Code section 7103.5 and Government Code section 4552, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the Owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 [commencing with § 16700] of Part 2 of Division 7 of the Bus. & Prof. Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final progress payment to the Contractor, without further acknowledgment by the parties.
- **13.8 AUDIT** Contractor's Contract books, records and files shall be subject to audit and examination under Government Code section 8546.7 and any amendments thereto.
- **13.9 STORM WATER DISCHARGE PERMIT** If applicable, the Contractor shall file a Notice of Intent to comply with the terms of the general permit to discharge storm water associated with construction activity (WQ Order No. 920-08-DWQ) prior to the start of any construction activity.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

TERMINATION BY THE CONTRACTOR FOR CAUSE - Contractor may not terminate 14.1 for convenience. Contractor may only terminate for cause if the Work is stopped by others for a period of one hundred eighty (180) consecutive days through no act or fault of the Contractor, a Subcontractor of any tier, their agents or employees, or any other persons performing portions of the Work for whom the Contractor is contractually responsible, and the Work was stopped by others for one of the following reasons: (A) Issuance of an order of a court or other public authority having jurisdiction which requires Owner to stop all Work; or (B) an act of government, such as a declaration of national emergency, making material unavailable which requires Owner to stop all Work. If such grounds exist, the Contractor may serve written notice of such grounds on Owner and demand a meet-and-confer conference to negotiate a resolution in good faith within twenty (20) days of Owner's receipt of such notice. If such conference does not lead to resolution and the grounds for termination still exist, Contractor may terminate the Contract and recover from the Owner payment for Work executed and for reasonable verified costs with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages for the Work executed, but excluding overhead (field and home office) and profit for (i) Work not performed and (ii) the period of time that the Work was stopped.

14.2 TERMINATION BY THE OWNER FOR CAUSE

- **14.2.1 Grounds for Termination**. The Owner may terminate the Contract if the Contractor:
 - A. Refuses or fails to supply enough properly skilled workers or proper materials, or refuses or fails to take steps to adequately prosecute the work toward completion within the Contract Time;
 - B. Fails to make payment to Subcontractors for materials or labor in accordance with Public Contract Code section 10262 or Business and Professions Code section 7108.5, as applicable;
 - C. Violates Labor Code section1771.1(a), subject to the provisions of Labor Code section 1771.1(f);
 - D. Disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction; or
 - E. Otherwise is in breach of the Contract Documents.

- 14.2.2 Notification of Termination. When any of the above reasons exist, the Owner may, without prejudice to any other rights or remedies of the Owner, give notice to Contractor of the grounds for termination and demand cure of the grounds within seven (7) days (a "Notice of Intent to Terminate"). If Contractor fails to either (a) completely cure the grounds for termination within seven (7) days or (b) reasonably commence cure of the grounds for termination within seven (7) days and reasonably continue to cure the grounds for termination until such cure is complete, then Owner may terminate the Contract effective immediately upon service of written Notice of Termination and may, subject to any prior rights of Contractor's surety on the performance bond ("Surety"):
 - A. Take possession of the Site and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
 - B. Accept assignment of subcontracts pursuant to section 5.4; and
 - C. Complete the Work by whatever reasonable method the Owner may deem expedient.
- **14.2.3 Payments Withheld**. If the Owner terminates the Contract for one of the reasons stated in section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is complete.
- 14.2.4 Payments upon Completion. If the unpaid balance of the Contract Sum exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. This payment obligation shall survive completion of the Contract.
- 14.2.5 Inclusion of Termination for Convenience. Any purported termination by Owner for cause under this section 14.2, which is revoked or determined to not have been for cause, shall be deemed to have been a termination for convenience effective as of the same date as the purported termination for cause.

14.3 SUSPENSION OR TERMINATION BY THE OWNER FOR CONVENIENCE

- **14.3.1 Suspension by Owner**. The Owner may, without cause, order the Contractor in writing to suspend, delay, or interrupt the Work in whole or in part for such period of time as the Owner may determine.
 - **14.3.1.1** Adjustments. An adjustment shall be made for increases in the cost of performance of the Contract, including profit on the increased cost of performance caused by suspension, delay, or interruption. No adjustment shall be made to the extent:

- A. That performance is, was or would have been so suspended, delayed, or interrupted by another cause for which the Contractor is responsible; or
- B. That an equitable adjustment is made or denied under another provision of this Contract.
- **14.3.1.2** Adjustments for Fixed Cost. Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.
- 14.3.2 Termination by the Owner for Convenience.
 - **14.3.2.1** The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.
 - **14.3.2.2** Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall:
 - 1. Cease operations as directed by the Owner in the notice;
 - 2. Take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
 - 3. Except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
 - **14.3.2.3** In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination.
- **14.4 NOT A WAIVER** Any suspension or termination by Owner for convenience or cause under this Article 14 shall not act as a waiver of any claims by Owner against Contractor or others for damages based on breach of contract, negligence or other grounds.
- **14.5 MUTUAL TERMINATION FOR CONVENIENCE** The Contractor and the Owner may mutually agree in writing to terminate this Contract for convenience. The Contractor shall receive payment for all Work performed to the date of termination in accordance with the provisions of Article 9.
- 14.6 EARLY TERMINATION Notwithstanding any provision herein to the contrary, if for any fiscal year of this Contract the governing body of the Owner fails to appropriate or allocate funds for future periodic payments under the Contract after exercising reasonable efforts to do so, the Owner may upon thirty (30) days' notice, order work on the Project to cease. The Owner will remain obligated to pay for the work already performed but shall not be obligated to pay the balance remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and for which the work has not been done.

SECTION 011000 SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

- 1. Project information.
- 2. Work covered by Contract Documents.
- 3. Work under separate contracts.
- 4. Access to site.
- 5. Coordination with occupants.
- 6. Work restrictions.
- 7. Specification and drawing conventions.

B. Related Section:

1. Division 015000 Section "Temporary Facilities & Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.2 PROJECT INFORMATION

- A. Project Identification: Relocation of (3) 24'x40' Modular Classroom Buildings to Rancho Vista Elementary School
 - 1. Project Location: 40641 Peonza Lane, Palmdale, CA 93551
- B. Owner: Westside Union School District
 - 1. Owner's Representative: Wayne Trussell, Construction Manager.
- C. Architect: Flewelling & Moody.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of the Project is defined by the Contract Documents and consists of the following:
 - 1. Site work and utilities as indicated for the three (3) relocatable classroom buildings.

B. Type of Contract.

1. Project will be constructed under a single prime general contract.

1.4 WORK UNDER SEPARATE CONTRACTS

A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract or other contracts. Coordinate the Work of this Contract with work performed under separate contracts.

1.5 ACCESS TO SITE

- A. General: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - Driveways, Walkways and Entrances: Keep driveways loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.6 COORDINATION WITH OCCUPANTS

- A. Partial Owner Occupancy: Owner will not occupy the premises during entire construction period. Adjacent site is elementary school and residential area. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.
 - Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
 - 2. Provide not less than 72-hour notice to Owner of activities that will affect Owner's operations.

- B. Owner Limited Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work.
 - 1. Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner acceptance of the completed Work.
 - 2. Obtain a Certificate of Occupancy from authorities having jurisdiction before limited Owner occupancy.
 - 3. Before limited Owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. On occupancy, Owner will operate and maintain mechanical and electrical systems serving occupied portions of Work.
 - 4. On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of Work.

1.7 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours as regulated by the County of Los Angeles.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Owner not less than two days in advance of proposed disruptive operations.
 - 2. Obtain Owner's written permission before proceeding with disruptive operations.

- E. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor air intakes.
- F. Controlled Substances: Use of tobacco products and other controlled substances on the Project site is not permitted.

1.8 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
 - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 011030 PROJECT PROCEDURES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Work included: This section establishes special project procedures regarding
 - 1. Documents and bid procedures;
 - 2. Protection of existing facilities;
 - 3. Limits of work and storage areas;
 - 4. Construction controls;
 - 5. Coordination;

1.2 QUALITY ASSURANCE

A. Perform all work in strict accordance with pertinent requirements of these Specifications and, in the event no such requirements are determined, in conformance with the Architect's written direction.

1.3 SUBMITTALS

A. None required.

PART 2 - PRODUCTS

2.1 GENERAL

A. It is the intent of these Specifications and other Contract Documents to provide a complete workable design in all parts; any equipment shown or specified shall be furnished and installed with all accessories, controls, power, and full connections as may be necessary to assure safe and proper installation and operation.

2.2 PRECEDENCE

A. The Contract and each of the Contract Documents are complementary and they shall be interpreted so that what is called for in any one shall be as binding as if called for in all.

- B. If there is a conflict between these Technical Specifications and any remaining portion of the bid, the provisions requiring the most expensive or elaborate method of work, materials, or equipment shall control. Items in direct conflict, discovered during the bid, should be brought to the attention of the Architect, for clarification, by written Addenda. If clarification and/or Addenda is unable to be issued, the bidders shall bid the more expensive of the conflicting items/conditions; this provision shall govern the entire scope of this contract. Following Award of Bid, should the District elect to utilize the cheaper or less elaborate condition, a credit change Order shall be issued. Refer to related information in the General and Special Conditions. Contractor shall secure written permission from Architect before proceeding with work affected by omission or discrepancies in the Contract.
- C. Separate sections of this Specification are arranged only for convenience of Contractor, and nothing stated herein should be misconstrued as suggesting jurisdiction over items of work by any different building trades.

PART 3 - EXECUTION

3.1 CARE OF PRESENT BUILDINGS AND GROUNDS

- A. Contractor shall be held responsible, so far as his operations are concerned, for the care and preservation of the adjacent premises, utilities, walks, streets and coterminus property. Any parts of them injured, damaged, or disturbed because of his work shall be repaired, replaced, or cleaned, at Contractor's expense, to the satisfaction of District Representative. Prior to commencement of the Work, the Contractor or his designated representative shall jointly review the site as a part of the Pre-Construction Conference.
- B. Any such facilities as existing roads, curbing, utility poles, or underground utility lines damaged by Contractor in execution of this Contract shall be restored to former condition by Contractor at no change in the Contract price to satisfaction of District.
- C. Contractor shall take all precautions and care to preserve and protect all trees and shrubs in the right-of-ways and on the property. No tree or trees shall be cut or felled without specific permission in writing from the Architect. Trees cut without explicit instructions do so shall be replaced at the expense of the Contractor.
- D. No pruning of trees is to be done except by specified instructions of the District. Soil within the spread of the tree branches shall not be disturbed.
 Advance notice shall be given to the District if roots of a diameter greater than 1" must be cut.
- E. Contractor shall record and submit to District for verification any damage prior to commencement of work. Any damage not recorded and verified by District is the responsibility of the Contractor to correct.

3.2 LIMITS OF WORK AND STORAGE AREAS

A. Submit for Construction Manager's approval a site utilization plan for construction. Plans shall indicate limits of work, storage areas, and truck routes.

3.3 CONSTRUCTION CONTROLS

- A. Dust palliation: In addition to cleanup provisions of the Specifications, Contractor shall take appropriate steps during and throughout term of the Project to prevent airborne dust due to work under this Contract. Water shall be applied to settle and prevent dust, particularly during excavation and moving of materials. No chemical palliatives shall be used without permission of the District.
- B. Noise control: Noise from job equipment shall be kept to a minimum by adequate mufflers and other means as approved by Architect or Construction manager.
- C. Interruptions of existing services shall be held to minimum and shall be made only at such times as the District directs. Approval of the District shall be requested at least 3 days in advance of desired interruption time. Contractor shall be responsible for full Utility service to be maintained at all times to the adjacent buildings.

3.4 SPECIAL COORDINATION REQUIREMENT

- A. It is possible that the District might have various projects under different contracts in progress simultaneously in areas adjacent to, or coincident with, areas involved in the Project.
- B. Contractor shall be responsible to coordinate the work with that of other contractors' work to allow access to sites and to avoid rework and damages to new work.
- C. Contractor shall submit a detailed critical-path schedule for District's approval before beginning work and shall make such changes in this schedule as required by District in order to assure smooth and proper execution of all works.

3.5 VERIFICATION OF EXISTING UTILITIES

A. Prior to constructing any new underground utility, the Contractor shall expose and verify all existing underground facilities that may conflict with the new utility, to ensure accuracy of the information shown on the Drawings.

3.6 HAZARDOUS MATERIALS

A. Should asbestos, PCB or other hazardous materials be encountered in any area, immediately stop all work in that area and notify the District's representative; the District will remove all hazardous material, clean the area, and have it certified as safe by a Certified Industrial Hygienist before work under this contract may proceed in that area. A time extension will be granted for delay caused by this cleanup.

B. Non-Specified asbestos removal from buildings shall be done under separate contract by the District.

3.7 ADDENDA AND CHANGE ORDER

A. Changes in the Plans and Specifications shall be made be Addenda and Change Orders approved by the Division of the State Architect. Minor modifications, as determined by the District, may be made to the Plans and Specifications in writing accompanied with the Architect's signature without the processing of a formal Change Order.

3.8 ACCESS PANELS

A. Access panels are referenced in separate sections for different trades (mechanical, plumbing, electrical). It shall be the responsibility of the individual trades to provide the access panels (sized accordingly) required for their installations. Coordinate exact location with Construction Manager prior to installation.

3.9 FIRESAFETY DURING DEMOLITION

- A. Demolition of buildings shall be in accordance with Section 8706 and, where applicable, Sections 8704 and 8705 of the California Fire Code, most recent addition.
- B. Suitable fire hose, shall be maintained at the demolition site. Such hose shall be connected to an approved source of water and shall not impede fire department use of hydrants.
- C. Demolition operations involving cutting and welding shall be in accordance with Section 4907, C.F.C.
- D. Combustible waste material, trash and rubbish shall not be burned at the demolition site, unless approved. Accumulations of such material shall be removed from the site as often as necessary to minimize the hazards therefrom.
- E. When required by the District, for building demolition which is hazardous in nature, qualified personnel shall be provided to serve as on-site fire watch. The sole duty of fire watch personnel shall be to watch for the occurrence of fire.

3.10 FIRE SAFETY DURING CONSTRUCTION

- A. Buildings under construction shall be in accordance with Section 8704 of the California Fire Code, most recent edition.
- B. Fire department access roads shall be established and maintained in accordance with Section 902, C.F.C.
- C. Water mains and hydrants shall be installed and operational in accordance with Section 903.

- D. During the construction of a building and until the permanent fire-extinguishing system has been installed and is in service, fire protection shall be provided in accordance with Section 8704, C.F.C.
- E. Fire extinguishers shall be provided for the buildings under construction. The number and type of extinguishers and the type of extinguisher shall be suitable for the type of fire associated with the hazards present.
- F. Combustible Debris. Combustible debris shall not be accumulated within buildings. Combustible debris, rubbish and waste material shall be removed from building as often as practical. Combustible debris, waste material and trash shall not be burned on the site unless approved.
- G. Internal-combustion-powered construction equipment shall be used in accordance with the following:
 - 1. Equipment shall be located so that exhausts do not discharge against combustible material.
 - 2. When possible, exhausts shall be piped to the outside of the building.
 - 3. Equipment shall not be refueled while in operation.
 - 4. Fuel for equipment shall be stored in an approved area outside of the building.
- H. Temporary heating devices shall be located away from combustible materials, and attended and maintained by competent personnel.
- I. Smoking shall be prohibited. A suitable number and type of NO SMOKING signs shall be posted.
- J. Cutting and welding operations shall be in accordance with Article 49, C.F.C.
- K. The use of torched or flame-producing devices for the sweating of pipe joints shall be in accordance with Section 1109.3.2, C.F.C.
- L. The storage, use and handling of flammable liquids shall be in accordance with Article 79. Ventilation shall be provided for operation utilizing the application of materials containing flammable solvents.
- M. Open-flame devices and other sources of ignition shall not be located in areas where flammable materials are being used.
- N. Asphalt and tar kettles shall be located and operated in accordance with Section 1105, C.F.C.
- O. Temporary electrical wiring shall be in accordance with Section 8503, C.F.C.

- P. When required by the chief, access to buildings for the purpose of fire-fighting shall be provided. Construction material shall not block access to buildings, hydrants or fire appliances.
- Q. Telephone facilities shall be provided at the construction site for the purpose of emergency notification of the fire department. The street address of the construction site shall be posted adjacent to the telephone together with the fire department telephone number.
- R. A fire-protection plan shall be established by the Shell, Electrical and HVAC Contractors for each school site

3.11 REQUESTS FOR INFORMATION AND OTHER OFFICIAL CONTRACT CORRESPONDENCE

- A. Requests for Information (and/or Clarification) (hereinafter referred to as "RFI's") submitted by the Contractor to the District shall contain the following:
 - 1. Sequential RFI number.
 - 2. Date.
 - 3. Project Title and Information.
 - 4. Statement whether sent via facsimile only and/or hard copy to follow. It is acceptable to send a facsimile copy only; it is acceptable for the District to send a facsimile response only.
 - 5. Addressed to the District.
 - 6. Plan Sheet Reference and/or Spec. Section Reference including additional detail as required, such as column grid reference, or Part/Paragraph section of the Specification.
 - 7. Bold Reference citing the "Description of the Scope in Question" such as: "Ceiling Height in Classroom B123, Duct Clearances".
 - 8. A complete, concise question regarding the issue. Note: If sketches, or other documentation, are attached, a reference shall be provided alluding to these attachments. If the RFI is originated from a subcontractor, this shall be noted.
 - 9. The date the answer is needed by so as not to impact schedule. Note: The Contractor shall allow a minimum of 5 working days for each RFI.
 - 10. If a "yes" answer, or some such similar answer, would impact the contract schedule, this shall be noted.
 - 11. If there is a potential cost/credit impact to the District's answer, this shall be noted. Failure to notify the Construction manager at the time of the RFI may waive the Contractor's rights to such future claim.

- 12. The signature of the Contractor or Contractor's superintendent.
- 13. An area with printed lines for the District's response.
- 14. A space for the Project Manager's signature and date.
- 15. The Contractor's field office facsimile number printed on the RFI.
- B. The Contractor shall not submit more than six (6) RFl's in any one day, or more than twenty-four (24) RFl's in any one working week. It shall be the Contractor's responsibility to study the plans and specifications, in conjunction with his subcontractors, far enough in advance to submit the RFl's so as to not have an adverse impact upon the project sequencing or schedule.
- C. The Construction Manager shall be responsible for the distribution of all RFI's, once they have been answered by the Architect, in an appropriate and final manner, to all applicable trade contractors. The Architect shall make initial distribution to the District, Inspector of Record, Construction Manager, as well as to her own consultants and engineers.
- D. The Construction Manager shall maintain an RFI log, and distribute the log, showing current status at each project meeting. The Construction Manager shall maintain a bound file of all the RFI's, with the District's response, including all applicable attachments, in the job trailer at all times during the project.
 - 1. When applicable, all Contractors shall attach an RFI response to the Master Project Construction Set, at the appropriate location in the plans and/or specifications, if the answer affects, revises, or provides necessary clarification to the construction issue in question.
- E. Proposal Requests: When the Contractor has notified the Construction Manager that the response is generating either a potential cost or credit to the contract, the Construction Manager shall issue a proposal request to the Contractor, and copy all applicable parties.
 - When the costs and/or credits have been submitted properly for the work in question, and have been reviewed by the District and Construction Manager, and the cost(s) and/or credits have been agreed upon, the Construction Manager will then assign the item to the next change order in the billing cycle.
- F. Frivolous RFI's: The RFI format shall not be used for the following:
 - 1. A method for getting the Construction Manager or Architect to perform the Contractor's duties of properly reviewing and coordinating the plans and specifications. The Contractor is asked to use discretion in submitting RFI's; simple questions can be solved by teleconference with the Construction Manager, or bringing up questions at the weekly meetings. The Construction Manager will work with the Contractor in defining what constitutes the difference.

- 2. The method for getting the District to answer a subcontractor's question that normally is part of the trade bid Contractor's responsibility.
- 3. A method for attempting to create additional cost to the contract where no additional cost is due.
- 4. A method for luring to District into providing an answer clearly different than the documents require.
- 5. In the event that the Contractor is deemed to be abusing the RFI process, the Construction Manager reserves the right to "back-charge" the contract, per his standard hourly rates, as a credit in dollars to be applied to contract extra costs.
- G. Status of District's Responses to RFI's: The Architect's written response, when applicable, shall be incorporated into the contract as the most current ruling or interpretation of the plans and specifications.
- H. Bulletins: "Bulletins" issued by the Architect, whether or not generated by an RFI, shall become official contract correspondence and incorporated into the contract. If necessary, and subject to the agreement of all parties, Bulletin issues may lead into a Proposal Request and Change Order.

SECTION 011045 CUTTING AND PATCHING

PART 1 – GENERAL

1.1 SUMMARY

- A. This Section establishes general requirements pertaining to cutting (including excavating), fitting, and patching of the Work required to:
 - 1. Make the several parts fit properly;
 - 2. Uncover work to provide for installing, inspecting, or both, of ill-timed work;
 - 3. Remove and replace work not conforming to requirements of the Contract Documents; and
 - 4. Remove and replace defective work.

B. Related work:

- Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- 2. In addition to other requirements specified, upon the District's request uncover work to provide for inspection by the District of covered work, and remove samples of installed materials for testing.
- 3. Do not cut or alter work performed under separate contracts without the District's written permission.

1.2 SUBMITTALS

- A. Request for District's consent:
 - 1. Prior to cutting which affects structural safety, submit written request to the Project Manager for permission to proceed with cutting.
 - 2. Should conditions of the Work, or schedule, indicate a required change of materials or methods for cutting and patching, so notify the Project Manager and secure his written permission and the required Change Order prior to proceeding.

B. Notices to the Project Manager:

- 1. Prior to cutting and patching performed pursuant to the District's instructions, submit cost estimate to the Project Manager. Secure the Project Manager's approval of cost estimates and type of reimbursement before proceeding with cutting and patching.
- 2. Submit written notice to the Project Manager designating the time the Work will be uncovered, to provide for the District's observation.

1.3 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen thoroughly trained and experienced in the necessary crafts and completely familiar with the specified requirements and methods needed for proper performance of the work of this Section.

PART 2 - PRODUCTS

2.1 MATERIALS

A. For replacement of items removed, use materials complying with pertinent Sections of these Specifications.

2.2 PAYMENT FOR COSTS

A. The Owner will reimburse the Contractor for cutting and patching performed pursuant to a written Change Order, after claim for such reimbursement is submitted by the Contractor. Perform other cutting and patching needed to comply with the Contract Documents at no additional cost to the Owner.

PART 3 – EXECUTION

3.1 SURFACE CONDITIONS

A. Inspection:

- 1. Inspect existing conditions, including elements subject to movement or damage during cutting, excavating, patching, and backfilling.
- 2. After uncovering the work, inspect conditions affecting installation of new work.

B. Discrepancies:

- 1. If uncovered conditions are not as anticipated, immediately notify the Architect and secure needed directions.
- 2. Do not proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION PRIOR TO CUTTING

A. Provide required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the Work.

3.3 PERFORMANCE

- A. Perform required excavating and backfilling as required under pertinent other Sections of these Specifications and OSHA standards for such work.
 - Perform cutting and demolition by methods which will prevent damage to other portions of the Work and provide proper surfaces to receive installation of repair and new work.
 - 2. Perform fitting and adjusting of products to provide finished installation complying with the specified tolerances and finishes.
 - 3. Typically chip back existing adjoining plaster surfaces to expose the lath and building paper to permit proper lapping on new infill materials.

SECTION 011060 REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES:

A. This Section sets forth certain codes and standards and relevant requirements applicable to the work required under this contract.

1.2 STATUTORY AND JURISDICTIONAL REGULATIONS

- A. State of California Code of Regulation and Amendments:
 - 1. Title 24 Industrial Relations; Safety Orders.
 - 2. Current Federal ADA Guidelines
 - 3. 2019 Building Standards Administrative Code, Title 24 C.C.R.
 - 4. 2019 California Building Code (CBC), Title 24 C.C.R.; (2009 International Building Code of the International Code Council, with California Amendments)
 - 2019 California Electrical Code (CEC), Title 24 C.C.R.; (2011 National Electrical Code of the National Fire Protection Association, NFPA with 2010 California Amendments)
 - 6. 2019 California Mechanical Code (CMC), Title 24 C.C.R.; (2012 IAPMO Uniform Mechanical Code with 2010 California Amendments)
 - 7. 2019 California Plumbing Code (CPC), Title 24 C.C.R.; (2012 Edition IAPMO Uniform Plumbing Code with 2010 California Amendments)
 - 8. 2019 Energy Code (CEC), Title 24 C.C.R.
 - 2019 California Historical Building Code, Title 24, C.C.R
 - 10. 2019 California Fire Code (CFC), Title 24, C.C.R. (2009 International Fire Code of the International Code Council with 2010 California Amendments)
 - 2019 California Existing Building Code, Title 24 C.C.R (2009 International Existing Building Code of the International Code Council with 2010 California Amendments)
 - 12. 2019 California Green Building Standards Code (CalGreen) Title 24, C.C.R
 - 13. 2019 California Referenced Standards Code, Title 24, C.C.R.
 - 14. 2019 California Public Safety, State Fire Marshal Regulations, Title 19, C.C.R.
- B. List of Applicable NFPA Standards:

1.	NFPA 253	Critical Radiant Flux of Floor Covering Systems	2019 Edition
2.	NFPA 2001	Clean Agent Fire Extinguishing Systems	2019 Edition
3.	Reference code	e section for NFPA Standards – CBC (SFM) 3504	.1
4.	NFPA 13	Automatic Sprinkler Systems	2019 Edition
5.	NFPA 14	Standpipe Systems	2019 Edition
6.	NFPA 24	Private Fire Mains	2019 Edition
7.	NFPA 25	Standard for Inspection, Testing & Maintenance of Water Based Fire Protection System	2019 Edition
8.	NFPA 72	National Fire Alarm Code (California Amended) (Note see UL Standard 1971 for "Visual Devices	
9.	NFPA 80	Fire Door & Windows	2019 Edition
10.	NFPA 105	Smoke & Draft Control Door Assemblies	2019 Edition
11.	NFPA 20	Stationary Pumps	2019 Edition
12.	NFPA 17	Dry Chemical Extinguishing Systems	2019 Edition
13.	NFPA 17a	Wet Chemical Systems	2019 Edition

C. Construction Safety

- 1. Statutory and jurisdictional requirements as applicable to temporary work, including California Construction Safety Orders.
- 2. Associated General Contractors of America, Inc., Manual of Accident Prevention.
- 3. OSHA, Occupational Safety and Health Agencies requirements.

1.3 GENERAL STANDARDS FOR WORK AND MATERIALS

- A. Work or materials specified by reference to a number, symbol or title of a specific standard - such as ASTM, U.L., F.S., or other standards - shall comply with requirements thereof, except as limited to type, class, grade or modifications shown or specified.
- B. Referenced standards shall have full force and effect as though printed herein and are not repeated for reasons that manufacturers and Contractors are assumed to be familiar with requirements governing or applicable to their work. Upon request, Architect will furnish information as to where copies may be obtained.
- C. Material or trade associations, societies, or other bodies regularly publishing standards most widely used under these documents a\re listed herein together with reference symbols.

D. Individual standards are referred to under Technical Sections by said reference symbol followed by designation number.

A.A. The Aluminum Association

AASHO American Association of the State Highway and Transportation Officials

ACI American Concrete Institution AGA American Gas Association

AISC American Institute for Steel Construction
ANSI American National Standards Institute

ASHRAE American Society of Heating, Refrigeration and Air Conditioning Engineers

ASME American Society of Mechanical Engineers
ASTM American Society of Testing and Materials

AWS American Welding Society

AWWA American Water Works Association

CS Commercial Standards, U.S. Department of commerce

FGMA Flat Gas Marketing Society
FML Factory Mutual Laboratories
F.S. Federal Specifications
GA Gypsum Association

IEEE Institute of Electrical and Electronic Engineers
MFMA Maple Flooring Manufacturer's Association

M.S. Military Specifications U.S. GSA

NAAMM National Association of Architectural Metal Manufacturers

NBS National Bureau of Standards

NEMA National Electrical Manufacturer's Association

NFPA National Fire Protection Association

PCA Portland Cement Association

PS Product Standard, U.S. Department of Commerce

RIS Redwood Inspection Service SDI Steel Door Inspections

SMANCA Sheet Metal and Air Conditioning Contractor's National Association

TCA Tile Council of America
UL Underwriter's Laboratories, Inc.
WCLIB West Coast Lumber Inspection Bureau
WIC Wood Work Institute of California
WWPA Western Wood Products Association

E. Book of Standards

- 1. State of California, Business and Transportation Agency, Department of Transportation.
 - a. CALIFORNIA STANDARD SPECIFICATIONS: Standard Specifications, January 1988, specific parts referred to by Section number.
 - b. CALIFORNIA TEST METHOD: Methods and Research Dept., Materials manual, 1988; specific tests referred to by California number.
- APWA Standard Specifications: American Public Works Association, No. California Chapter, Standard Specifications for Public Works Construction, 2000 Edition; specific parts referred to by APWA Section number 3 U.L.; Underwriters' Laboratories Inc.; Buildings Materials List, 2001 or latest edition; and others regularly published; specific parts referred to by U.L. Classification Title and number.

1.4 MANUFACTURER'S STANDARDS

- A. Applicable to type of items and products.
- B. Instructions not otherwise shown or specified shall be those of producer, as applicable, covering:
 - 1. Primary materials, auxiliary materials and accessories.
 - 2. Conditions of handling and for storage and protection.
 - 3. Preparation of backup surfaces.
 - 4. Installation, cleaning and maintenance procedures.
- C. Publications of procedures shall apply as particularly referred to, otherwise as regularly provided by producer, and shall include generalized installation publications or instructions.

SECTION 013100 PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination drawings.
 - 2. Requests for Information (RFIs).
 - 3. Project meetings.

1.2 DEFINITIONS

A. RFI: Request from Owner, Architect, or Contractor seeking information from each other during construction.

1.3 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required obtaining the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Pre-installation conferences.
 - 7. Project closeout activities.
 - 8. Startup and adjustment of systems.
 - 9. Project closeout activities.

1.4 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings in accordance with requirements in individual Sections, where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 - 1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - b. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
 - 1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire protection, fire alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid.

- 2. Plenum Space: Indicate sub-framing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on Drawings.
- 3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire protection, fire alarm, and electrical equipment.
- 4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
- 5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
- 6. Review: Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are the Contractor's responsibility.

1.5 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. Project number.
 - 3. Date.
 - 4. Name of Contractor.
 - 5. Name of Architect.
 - 6. RFI number, numbered sequentially.
 - 7. RFI subject.
 - 8. Specification Section number and title and related paragraphs, as appropriate.

- 9. Drawing number and detail references, as appropriate.
- 10. Field dimensions and conditions, as appropriate.
- 11. Contractor's suggested resolution. If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
- 12. Contractor's signature.
- 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
- C. RFI Forms: AIA Document G716 or Software-generated form with substantially the same content as indicated above, acceptable to Architect.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
 - 1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Architect's actions on submittals.
 - f. Incomplete RFIs or inaccurately prepared RFIs.
 - 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
 - 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 0 "General Requirements".
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect and Owner's Project Manager in writing within 5 days of receipt of the RFI response.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect and Owner's Project Manager within seven days if Contractor disagrees with response.

- F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly.
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.6 PROJECT MEETINGS

- A. General: Architect will schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner, and Architect, within three days of the meeting.
- B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
 - 1. Attendees: Authorized representatives of Owner, Architect, Contractor and its superintendent. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Discuss items of significance that could affect progress, including the following:

- a. Tentative construction schedule.
- b. Phasing.
- c. Critical work sequencing and long-lead items.
- d. Designation of key personnel and their duties.
- e. Procedures for processing field decisions and Change Orders.
- f. Procedures for RFIs.
- g. Procedures for testing and inspecting.
- h. Procedures for processing Applications for Payment.
- i. Distribution of the Contract Documents.
- j. Submittal procedures.
- k. Sustainable design requirements.
- I. Preparation of record documents.
- m. Use of the premises and existing building.
- n. Work restrictions.
- o. Working hours.
- p. Owner's occupancy requirements.
- q. Responsibility for temporary facilities and controls.
- r. Procedures for moisture and mold control.
- s. Procedures for disruptions and shutdowns.
- t. Construction waste management and recycling.
- u. Parking availability.
- v. Office, work, and storage areas.
- w. Equipment deliveries and priorities.
- x. First aid.
- y. Security.
- z. Progress cleaning.

- 3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Pre-installation Conferences: Conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction.
 - Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect, and Owner's Project Manager, of scheduled meeting dates.
 - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. Contract Documents.
 - b. Options.
 - c. Related RFIs.
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Review of mockups.
 - i. Possible conflicts.
 - j. Compatibility problems.
 - k. Time schedules.
 - I. Weather limitations.
 - m. Manufacturer's written recommendations.
 - n. Warranty requirements.
 - o. Compatibility of materials.
 - p. Acceptability of substrates.
 - q. Temporary facilities and controls.
 - r. Space and access limitations.

- s. Regulations of authorities having jurisdiction.
- t. Testing and inspecting requirements.
- u. Installation procedures.
- v. Coordination with other work.
- w. Required performance results.
- x. Protection of adjacent work.
- y. Protection of construction and personnel.
- 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
- 4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
- 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Architect will conduct progress meetings at weekly intervals.
 - 1. Attendees: Representative of Owner, Architect and Contractor. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.

- 3) Status of submittals.
- 4) Deliveries.
- 5) Off-site fabrication.
- 6) Access.
- 7) Site utilization.
- 8) Temporary facilities and controls.
- 9) Progress cleaning.
- 10) Quality and work standards.
- 11) Status of correction of deficient items.
- 12) Field observations.
- 13) Status of RFIs.
- 14) Status of proposal requests.
- 15) Pending changes.
- 16) Status of Change Orders.
- 17) Pending claims and disputes.
- 18) Documentation of information for payment requests.
- 3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 013216 CONSTRUCTION SCHEDULE

PART 1 – GENERAL

1.1 DESCRIPTION

A. Work included: Construction Schedule procedures, preparation, submittal, updates, and revisions.

1.2 QUALITY ASSURANCE

A. Perform all work in strict accordance with pertinent requirements of these Specifications and in the event no such requirements are determined, in conformance with the Architect's written direction.

1.3 SUBMITTALS

- A. The construction of this project will be planned and recorded with a conventional Gantt chart schedule. The schedule shall be used for coordination, monitoring, and payment of all work under the contract including all activity of subcontractors, vendors, suppliers, and for all submittals.
- B. Contractor is responsible for preparing the schedule. All costs incurred by Contractor in preparing the schedule shall be borne by Contractor as a part of its responsibility under this contract.

1.4 PROCEDURES

- A. Baseline Construction Schedule
 - Before proceeding with any work on site, Contractor shall prepare, submit, and receive District's approval of a Baseline Construction Schedule. This schedule shall provide a detailed breakdown of activities scheduled for the first 90 days of the project and shall include mobilization, submittals, procurement, and construction.
 - 2. No contact work may be pursued at the site without an approved Baseline Construction Schedule or an approved Gantt chart schedule.
- B. Within seven (7) calendar days after date of Notice to Proceed, Contractor shall submit, for review, a Detailed Project Schedule setting forth all requirements for complete execution of work.
- C. Preparation of Detailed Project Schedule

- The construction time, for the entire project or any milestone, shall not exceed the specified contract time. In the event that any milestone date or contract completion date is exceeded in the schedule, logic and/or time estimates will be revised.
- 2. Following the District's review, if revisions to the proposed schedule are required, the Contractor shall do so promptly. The schedule must be finalized within 60 days of the Notice to Proceed. Failure to finalize the schedule by that date will result in withholding all contract payments until the schedule is finalized.
- D. Simultaneously with each submittal of Progress Payment Request, Contractor shall deliver to the District an updated Detailed Project Schedule reflecting work progress as of end of previous reporting period. Each such Schedule shall indicate actual progress to date in execution of work, together with a projected schedule for completion of work.
- E. All Schedule submittals are subject to review and acceptance by the District. The District shall withhold progress payments until Contractor submits a Detailed Project Schedule acceptable to the District.
- F. Concurrent with the District's acceptance of Contractor's submitted Detailed Project Schedule, shall be Contractor's signature of acceptance.

1.5 PREPARATION GUIDELINES

- A. Work of this Contract shall be scheduled and progress monitored using a bar chart, although any of the CPM network type scheduling systems, including precedence diagramming or arrow are acceptable. Scheduling system shall show the sequence and interdependence of all activities required for complete performance of all items of work under this contract, including all approvals, shop drawings and other submittals and approvals, and fabrication and delivery activities. Scheduling system shall indicate all inter-relationships between trades and suppliers.
- B. Level of detail indicated in schedule shall be equal to or greater than that provided by Table of Contents of Contract Technical Specifications, including any addenda. Duration and events indicated on schedule shall conform to phasing set forth in the Contract and shall show any area or building within a particular phase. Schedule shall indicate any and all Contract "milestone events" and other milestones agreed to by the District, but no other manually-imposed dates will be accepted unless approved.
- C. Detailed Project Schedule shall represent a practical plan to complete work within time requirements of the Contract.

- 1. The Contractor may submit a Detailed Project Schedule depicting completion of the Work in a duration shorter than the Contract Time; provided that such Detailed Project Schedule shall not be a basis for adjustment to the Contract Price in the event that completion of the Work shall occur after the time depicted therein, nor shall such Detailed Project Schedule be the basis for any extension of the Contract Time.
- 2. A schedule found unacceptable by the District shall be revised by Contractor and resubmitted.
- D. Detailed Project schedule shall clearly indicate sequence of construction activities, grouped by applicable phase and sorted by areas, buildings, or facilities within phase, and shall specifically indicate:
 - 1. Start and completion of all items of work, their major components, and interim milestone completion dates, as determined by Contractor and the District.
 - 2. Activities for procurement, delivery, installation of equipment, materials, and other supplies, including:
 - a. Time for submittals, re-submittals, and reviews. Include decision dates for selection of finishes, if applicable.
 - b. Time for fabrication, and delivery of, manufactured products for work.
 - c. Interdependence of procurement and construction activities.
 - d. As applicable, dates for testing, balancing equipment, and final inspection.
- E. Schedule shall be in sufficient detail to assure adequate planning and execution of work.
 - 1. Each activity shall range in duration no longer than two (2) weeks and shall be total of actual days required for completion, and shall include consideration of normal weather impact on completion of that activity.
 - 2. The activities are to be described so that the work is readily identifiable and the progress of each activity can be readily measured. For each activity, Contractor shall identify the trade or subcontractor performing the work, the duration of the activity in work days, the manpower involved by trade, the equipment involved, the location of the work, and a dollar value of the activity. The dollar value assigned to each activity is to be reasonable and based on the amount of labor, materials, and equipment involved. When added together, the dollar value of all activities are to equal the contract price.
 - 3. Schedule shall be suitable, in judgement of the Architect, to allow monitoring and evaluation of progress in performance of work; it shall be calendar time-scaled and, at a minimum, in a Bar Chart format.

- 4. Activities shall include:
 - a. Description; what is to be accomplished and where.
 - b. Workday duration.
 - c. Scheduled activities shall indicate continuous flow, from left to right.
- 5. Identify days per week and shifts per day worked; also, non-work days and holidays.
- F. Failure to include any element of work required for performance of this Contract shall not excuse Contractor from completing work required to comply with the Contract Documents, notwithstanding acceptance of Construction Schedule.
- G. Submittal of Construction Schedule shall be understood to be Contractor's confirmation that the schedule meets requirements of the Contract Documents, and that work will be executed in sequence indicated in schedule.

1.6 REVIEWS, UPDATES, AND REVISIONS

- A. The District will review and return Contractor's Detailed Project Schedule, with summary comments, within seven (7) calendar days. If revisions are required, Contractor shall resubmit Schedule within fourteen (14) calendar days following receipt of the District's comments.
- B. After Contractor and the District agree to a final schedule, it will become the Project Construction Schedule and considered part of the Contract Documents. No changes to Schedule will be allowed unless mutually agreed upon with the District.
- C. Contractor shall analyze and update the Detailed Project Schedule:
 - 1. As part of monthly payment application, Contractor shall submit to and participate with the District in a schedule review to include:
 - a. Actual completion dates for work items completed during report period.
 - b. Actual start dates for work items started during report period.
 - c. Estimated remaining duration for work items in progress, which will not exceed original duration for activity.
 - d. Estimated start dates for work items scheduled to start during month following report period, if applicable.
 - e. Changes in duration of work items.

- f. A summary bar chart schedule, organized first by work segment plan, and then by area (building number or other appropriate subdivision) shall show construction progress in each area. The previous schedule shall be included in this report to compute the current performance with the original planned sequence of work.
- In case of a change to Contractor's planned sequence of work, Contractor shall
 include a narrative report with updated progress schedule which shall include, but
 not be limited to, a description of problem areas, current and anticipated delaying
 factors, and any proposed revisions for a recover plan.
- 3. All change orders affecting this schedule shall be clearly identified as a separate and new activity.
- 4. Review of Detailed Project Schedule will not relieve Contractor of responsibility for accomplishing all work in accordance with the Contract Documents.
- D. Updates: The Contractor shall submit to the District, with each payment application, an up-to-date Detailed Project Schedule to include following:
 - 1. Work Item Report: Detailing work items and dependencies as indicated on Bar Chart.
 - 2. Separate listing of activities completed during reporting period.
 - 3. Separate listing of activities which are currently in progress, indicating their remaining duration and percentages completed.
 - 4. Separate listing of activities which are causing delay in work progress.
 - 5. Narrative report to define problem areas, anticipated delays, and impact on Detailed Project Schedule. Report corrective action taken, or proposed, and its effect, including effect of changes on schedules of separate contractors.
 - Resolution of conflict between actual work progress and schedule logic: when out-of-sequence activities develop in the Schedule because of actual construction progress, Contractor shall submit a revised schedule to conform to current job sequence and direction.
- E. If, according to current updated Detailed Project Schedule, the District determines Contractor is behind the Contract completion date or any interim milestone completion dates, considering all time extensions to which Contractor is entitled, Contractor shall submit a revised schedule, showing a workable plan and a narrative description to complete project on time in accordance with Article 1.06, Paragraph C-2.
 - 1. The District shall withhold progress payments until a revised schedule, acceptable to the District, is submitted by Contractor.

- F. Scheduling of change or extra work orders is responsibility of Contractor.
 - Contractor shall revise Detailed Project Schedule to incorporate all activities involved in completing change orders or extra work orders and submit it to the District for review.
- G. If the District finds Contractor is entitled to extension of any completion date, under provisions of the Contract, the District's determination of total number of days extension will be based upon current analysis of Construction Schedule, and upon data relevant to extension.
- H. Contractor acknowledges and agrees that delays to non-critical activities will not be considered a basis for a time extension unless activities become critical. Non-critical activities are those activities which, when delayed, do not affect an interim or final Contract completion date.
- I. Any claim for extension of time shall be made in writing to the Architect not more than seven (7) days after commencement of delay, otherwise, it shall be deemed finally waived for all purposes. Contractor shall provide an estimate of probable effect of such delay on progress of work as part of claim.

1.7 CONTRACTOR'S RESPONSIBILITY

- A. Nothing in these requirements shall be deemed to be an assumption of Contractor's authority and responsibility to plan and schedule work as Contractor sees fit, subject to all other requirements of Contract Documents.
- B. Contractor shall provide at all times sufficient competent labor, materials, and equipment to properly carry on work and to insure completion of each part in accordance with Construction Schedule and within time agreed.
- C. Contractor shall be responsible for ensuring that all submittals to the District are accurate and consistent. Damages, including extra time and cost, caused by inaccuracies from Contractor will be compensated by Contractor.

1.8 SUSPENSION OF PAYMENTS

- A. Initial Submittal: The District has the right to withhold progress payments until Detailed Project Schedule is accepted by the District.
- B. Update Submittals: The District has the right to withhold progress payments if Contractor fails to update and submit Detailed Project Schedule and reports as required by the District.

1.9 RECORD COPY

A. At completion of work items, submit Detailed Project Schedule reflecting "as-built" sequence.

1.10 FORM OF SUBMITTAL

A. All Detailed Project Schedule submittals shall be transmitted with a Letter of Transmittal and shall include three (3) hard copies and one (1) electronic copy.

SECTION 013300 SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. Related Sections:

1. Division 1 Section "Operation and Maintenance Manuals" for submitting operation and maintenance manuals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action.
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 ACTION SUBMITTALS

A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or modifications to submittals noted by the Architect and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. All submittals to be provided by Contractor within 15 days of award of bid.
- B. Architect's Digital Data Files: Electronic copies of CAD Drawings of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

- 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that requires sequential activity.
- 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- D. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 18 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
 - 4. DSA Deferred Approval: In addition to the review periods indicated above allow 90 days for DSA review and approval.
- E. Identification and Information: Place a permanent label or title block on each paper copy submittal item for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space approximately 6 by 8 inches (150 by 200 mm) on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
 - 3. Include the following information for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of subcontractor.

- g. Name of supplier.
- h. Name of manufacturer.
- i. Submittal number or other unique identifier, including revision identifier.
 - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 06 10 00.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 06 10 00.01.A).
- j. Number and title of appropriate Specification Section.
- k. Drawing number and detail references, as appropriate Location(s) where product is to be installed, as appropriate.
- I. Other necessary identification.
- F. Identification and Information: Identify and incorporate information in each electronic submittal file as follows:
 - 1. Assemble complete submittal package into a single indexed file with links enabling navigation to each item.
 - 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-06 10 00.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-06 10 00.01.A).
 - 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
 - 4. Include the following information on an inserted cover sheet:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Name of subcontractor.

- h. Name of supplier.
- i. Name of manufacturer.
- j. Number and title of appropriate Specification Section.
- k. Drawing number and detail references, as appropriate.
- I. Location(s) where product is to be installed, as appropriate.
- m. Related physical samples submitted directly.
- n. Other necessary identification.
- G. Options: Identify options requiring selection by the Architect.
- H. Deviations: Identify deviations from the Contract Documents on submittals.
- I. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
 - 1. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.
- J. Transmittal: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return submittals, without review, received from sources other than Contractor.
 - 1. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- K. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- L. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, and authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

M. Use for Construction: Use only final submittals that are marked with approval notation from Architect's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
 - 1. Action Submittals: Submit six paper copies of each submittal, unless otherwise indicated. Architect through owner's project manager will return at least two copies, or submit PDF of submittal.
 - 2. Informational Submittals: Submit four paper copies of each submittal, unless otherwise indicated. Architect and owner's project manager will not return copies.
 - 3. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 1 Section "Closeout Procedures".
 - 4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
 - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
 - 5. Test and Inspection Reports Submittals: Comply with requirements specified in Division 1 Section "Quality Control".
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.

- c. Standard color charts.
- d. Statement of compliance with specified referenced standards.
- e. Testing by recognized testing agency.
- f. Application of testing agency labels and seals.
- g. Notation of coordination requirements.
- h. Availability and delivery time information.
- 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
- 5. Submit Product Data before or concurrent with Samples.
- 6. Submit Product Data in the following format:
 - a. Six paper copies of Product Data, unless otherwise indicated. Architect, through owner's project manager, will return two copies.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 30 by 42 inches (750 by 1067 mm)].

- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 - 3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 - 4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit four full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect, through Owner's Project Manager, will return one submittal with options selected.
 - 5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit four sets of Samples. Architect and Owner will retain two Sample sets; remainder will be returned.

- 1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Contractor's Construction Schedule: Comply with requirements specified in Division 1 Section "Construction Schedule".
- F. Application for Payment: Comply with requirements specified in Division 0 "General Conditions".
- G. Schedule of Values: Comply with requirements specified in Division 0 "General Conditions".
- H. Coordination Drawings: Comply with requirements specified in Division 1 Section "Project Management and Coordination".
- Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- J. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on American Welding Society (AWS) forms. Include names of firms and personnel certified.
- K. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- L. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- M. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- N. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- O. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- P. Product Test Reports: Submit written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

- Q. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.
- R. Schedule of Tests and Inspections: Comply with requirements specified in Division 1 Section "Quality Control".
- S. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- T. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- U. Field Test Reports: Submit reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- V. Maintenance Data: Comply with requirements specified in Division 1 Section "Operation and Maintenance Manuals".
- W. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally-signed PDF electronic file and three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in Division 1 Section "Project Closeout".
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION

SECTION 014200 REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed".
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated".
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Thomson Gale's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

AA Aluminum Association, Inc. (The)

AAADM American Association of Automatic Door Manufacturers

AABC Associated Air Balance Council

AAMA American Architectural Manufacturers Association

AASHTO American Association of State Highway and Transportation Officials

AATCC American Association of Textile Chemists and Colorists

ABAA Air Barrier Association of America

ABMA American Bearing Manufacturers Association

ACI American Concrete Institute

ACPA American Concrete Pipe Association

AEIC Association of Edison Illuminating Companies, Inc. (The)

AF&PA American Forest & Paper Association

AGA American Gas Association

AGC Associated General Contractors of America (The)

AHA American Hardboard Association

(Now part of CPA)

AHAM Association of Home Appliance Manufacturers

Al Asphalt Institute

AIA American Institute of Architects (The)

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

AITC American Institute of Timber Construction

ALCA Associated Landscape Contractors of America

(Now PLANET - Professional Landcare Network)

ALSC American Lumber Standard Committee, Incorporated

AMCA Air Movement and Control Association International, Inc.

ANSI American National Standards Institute

AOSA Association of Official Seed Analysts, Inc.

APA Architectural Precast Association

APA APA - The Engineered Wood Association

APA EWS APA - The Engineered Wood Association; Engineered Wood Systems

(See APA - The Engineered Wood Association)

API American Petroleum Institute

ARI Air-Conditioning & Refrigeration Institute

ARMA Asphalt Roofing Manufacturers Association

ASCE American Society of Civil Engineers

ASCE/SEI American Society of Civil Engineers/Structural Engineering Institute

(See ASCE)

ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers

ASME ASME International

(American Society of Mechanical Engineers International)

ASSE American Society of Sanitary Engineering

ASTM ASTM International

(American Society for Testing and Materials International)

AWCI Association of the Wall and Ceiling Industry

AWCMA American Window Covering Manufacturers Association

(Now WCMA)

AWI Architectural Woodwork Institute

AWPA American Wood Protection Association

(Formerly: American Wood Preservers' Association)

AWS American Welding Society

AWWA American Water Works Association

BHMA Builders Hardware Manufacturers Association

BIA Brick Industry Association (The)

BICSI BICSI, Inc.

BIFMA BIFMA International

(Business and Institutional Furniture Manufacturer's Association

International)

BISSC Baking Industry Sanitation Standards Committee

BWF Badminton World Federation

(Formerly: IBF - International Badminton Federation)

CCC Carpet Cushion Council

CDA Copper Development Association

CEA Canadian Electricity Association

CEA Consumer Electronics Association

CFFA Chemical Fabrics & Film Association, Inc.

CGA Compressed Gas Association

CIMA Cellulose Insulation Manufacturers Association

CISCA Ceilings & Interior Systems Construction Association

CISPI Cast Iron Soil Pipe Institute

CLFMI Chain Link Fence Manufacturers Institute

CRRC Cool Roof Rating Council

CPA Composite Panel Association

CPPA Corrugated Polyethylene Pipe Association

CRI Carpet and Rug Institute (The)

CRSI Concrete Reinforcing Steel Institute

CSA Canadian Standards Association

CSA CSA International

(Formerly: IAS - International Approval Services)

CSI Cast Stone Institute

CSI Construction Specifications Institute (The)

CSSB Cedar Shake & Shingle Bureau

CTI Cooling Technology Institute

(Formerly: Cooling Tower Institute)

DHI Door and Hardware Institute

EIA Electronic Industries Alliance

EIMA EIFS Industry Members Association

EJCDC Engineers Joint Contract Documents Committee

EJMA Expansion Joint Manufacturers Association, Inc.

ESD ESD Association

(Electrostatic Discharge Association)

ETL SEMCO Intertek ETL SEMCO

(Formerly: ITS - Intertek Testing Service NA)

FIBA Federation Internationale de Basketball

(The International Basketball Federation)

FIVB Federation Internationale de Volleyball

(The International Volleyball Federation)

FM Approvals FM Approvals LLC

FM Global FM Global

(Formerly: FMG - FM Global)

FMRC Factory Mutual Research

(Now FM Global)

FRSA Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.

FSA Fluid Sealing Association

FSC Forest Stewardship Council

GA Gypsum Association

GANA Glass Association of North America

GRI (Part of GSI)

GS Green Seal

GSI Geosynthetic Institute

HI Hydraulic Institute

HI Hydronics Institute

HMMA Hollow Metal Manufacturers Association

(Part of NAAMM)

HPVA Hardwood Plywood & Veneer Association

HPW H. P. White Laboratory, Inc.

IAS International Approval Services

(Now CSA International)

IBF International Badminton Federation

(Now BWF)

ICEA Insulated Cable Engineers Association, Inc.

ICRI International Concrete Repair Institute, Inc.

IEC International Electrotechnical Commission

IEEE Institute of Electrical and Electronics Engineers, Inc. (The)

IESNA Illuminating Engineering Society of North America

IEST Institute of Environmental Sciences and Technology

IGCC Insulating Glass Certification Council

IGMA Insulating Glass Manufacturers Alliance

ILI Indiana Limestone Institute of America, Inc.

ISO International Organization for Standardization

Available from ANSI

ISSFA International Solid Surface Fabricators Association

ITS Intertek Testing Service NA

(Now ETL SEMCO)

ITU International Telecommunication Union

KCMA Kitchen Cabinet Manufacturers Association

LMA Laminating Materials Association

(Now part of CPA)

LPI Lightning Protection Institute

MBMA Metal Building Manufacturers Association

MFMA Maple Flooring Manufacturers Association, Inc.

MFMA Metal Framing Manufacturers Association, Inc.

MH Material Handling

(Now MHIA)

MHIA Material Handling Industry of America

MIA Marble Institute of America

MPI Master Painters Institute

MSS Manufacturers Standardization Society of The Valve and Fittings Industry

Inc.

NAAMM National Association of Architectural Metal Manufacturers

NACE NACE International

(National Association of Corrosion Engineers International)

NADCA National Air Duct Cleaners Association

NAGWS National Association for Girls and Women in Sport

NAIMA North American Insulation Manufacturers Association

NBGQA National Building Granite Quarries Association, Inc.

NCAA National Collegiate Athletic Association (The)

NCMA National Concrete Masonry Association

NCPI National Clay Pipe Institute

NCTA National Cable & Telecommunications Association

NEBB National Environmental Balancing Bureau

NECA National Electrical Contractors Association

NeLMA Northeastern Lumber Manufacturers' Association

NEMA National Electrical Manufacturers Association

NETA InterNational Electrical Testing Association

NFHS National Federation of State High School Associations

NFPA NFPA

(National Fire Protection Association)

NFRC National Fenestration Rating Council

NGA National Glass Association

NHLA National Hardwood Lumber Association

NLGA National Lumber Grades Authority

NOFMA NOFMA: The Wood Flooring Manufacturers Association

(Formerly: National Oak Flooring Manufacturers Association)

NOMMA National Ornamental & Miscellaneous Metals Association

NRCA National Roofing Contractors Association

NRMCA National Ready Mixed Concrete Association

NSF NSF International

(National Sanitation Foundation International)

NSSGA National Stone, Sand & Gravel Association

NTMA National Terrazzo & Mosaic Association, Inc. (The)

NTRMA National Tile Roofing Manufacturers Association

(Now TRI)

NWWDA National Wood Window and Door Association

(Now WDMA)

OPL Omega Point Laboratories, Inc.

(Now ITS)

PCI Precast/Prestressed Concrete Institute

PDCA Painting & Decorating Contractors of America

PDI Plumbing & Drainage Institute

PGI PVC Geomembrane Institute

PLANET Professional Landcare Network

(Formerly: ACLA - Associated Landscape Contractors of America)

PTI Post-Tensioning Institute

RCSC Research Council on Structural Connections

RFCI Resilient Floor Covering Institute

RIS Redwood Inspection Service

SAE SAE International

SDI Steel Deck Institute

SDI Steel Door Institute

SEFA Scientific Equipment and Furniture Association

SEI/ASCE Structural Engineering Institute/American Society of Civil Engineers

(See ASCE)

SGCC Safety Glazing Certification Council

SIA Security Industry Association

SIGMA Sealed Insulating Glass Manufacturers Association

(Now IGMA)

SJI Steel Joist Institute

SMA Screen Manufacturers Association

SMACNA Sheet Metal and Air Conditioning Contractors'

National Association

SMPTE Society of Motion Picture and Television Engineers

SPFA Spray Polyurethane Foam Alliance

(Formerly: SPI/SPFD - The Society of the Plastics Industry, Inc.; Spray

Polyurethane Foam Division)

SPIB Southern Pine Inspection Bureau (The)

SPRI Single Ply Roofing Industry

SSINA Specialty Steel Industry of North America

SSPC SSPC: The Society for Protective Coatings

STI Steel Tank Institute

SWI Steel Window Institute

SWRI Sealant, Waterproofing, & Restoration Institute

TCA Tile Council of America, Inc.

(Now TCNA)

TCNA Tile Council of North America, Inc.

TIA/EIA Telecommunications Industry Association/Electronic Industries Alliance

TMS The Masonry Society

TPI Truss Plate Institute, Inc.

TPI Turfgrass Producers International

TRI Tile Roofing Institute

UL Underwriters Laboratories Inc.

UNI Uni-Bell PVC Pipe Association

USAV USA Volleyball

USGBC U.S. Green Building Council

USITT United States Institute for Theatre Technology, Inc.

WASTEC Waste Equipment Technology Association

WCLIB West Coast Lumber Inspection Bureau

WCMA Window Covering Manufacturers Association

WCSC Window Covering Safety Council

(Formerly: WCMA - Window Covering Manufacturers Association)

WDMA Window & Door Manufacturers Association

(Formerly: NWWDA - National Wood Window and Door Association)

WI Woodwork Institute (Formerly: WIC - Woodwork Institute of California)

WIC Woodwork Institute of California

(Now WI)

WMMPA Wood Moulding & Millwork Producers Association

WSRCA Western States Roofing Contractors Association

WWPA Western Wood Products Association

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

IAPMO International Association of Plumbing and Mechanical Officials

ICC International Code Council

ICC-ES ICC Evaluation Service, Inc.

UBC Uniform Building Code

(See ICC)

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

CE Army Corps of Engineers

CPSC Consumer Product Safety Commission

DOC Department of Commerce

DOD Department of Defense

DOE Department of Energy

EPA Environmental Protection Agency

FAA Federal Aviation Administration

FCC Federal Communications Commission

FDA Food and Drug Administration

GSA General Services Administration

HUD Department of Housing and Urban Development

LBL Lawrence Berkeley National Laboratory

NCHR National Cooperative Highway Research Program

Ρ

(See TRB)

NIST National Institute of Standards and Technology

OSHA Occupational Safety & Health Administration

PBS Public Buildings Service

(See GSA)

PHS Office of Public Health and Science

RUS Rural Utilities Service

(See USDA)

SD State Department

TRB Transportation Research Board

USDA Department of Agriculture

USPS Postal Service

E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

ADAAG Americans with Disabilities Act (ADA)

Architectural Barriers Act (ABA)

Accessibility Guidelines for Buildings and Facilities

Available from U.S. Access Board

CFR Code of Federal Regulations

Available from Government Printing Office

DOD Department of Defense Military Specifications and Standards

Available from Department of Defense Single Stock Point

DSCC Defense Supply Center Columbus

(See FS)

FED-STD Federal Standard

(See FS)

FS Federal Specification

Available from Department of Defense Single Stock Point

Available from Defense Standardization Program

Available from General Services Administration

Available from National Institute of Building Sciences

FTMS Federal Test Method Standard

(See FS)

MIL (See MILSPEC)

MIL-STD (See MILSPEC)

MILSPEC Military Specification and Standards

Available from Department of Defense Single Stock Point

UFAS Uniform Federal Accessibility Standards

Available from Access Board

F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

CBH State of California, Department of Consumer Affairs Bureau of Home Furnishings and F Thermal Insulation

CCR California Code of Regulations

CPU California Public Utilities Commission

С

TFS Texas Forest Service Forest Resource Development

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 014300 QUALITY CONTROL

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

C. Related Sections:

1. Divisions 2 through 33 Sections for specific test and inspection requirements.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Mockups: Full size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.

- D. Preconstruction Testing: Tests and inspections performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - Use of trade-specific terminology in referring to a trade or entity does not require
 that certain construction activities be performed by accredited or unionized
 individuals, or that requirements specified apply exclusively to specific trade or
 trades.
- J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.4 INFORMATIONAL SUBMITTALS

- A. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems.
 - 1. Seismic-force resisting system, designated seismic system, or component listed in the designated seismic system quality assurance plan prepared by the Architect.
 - 2. Main wind-force resisting system or a wind-resisting component listed in the wind-force-resisting system quality assurance plan prepared by the Architect.
- B. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

1.5 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.

- 13. Recommendations on retesting and re-inspecting.
- B. Manufacturer's Field Reports: Prepare written information documenting tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, and telephone number of representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 4. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 5. Other required items indicated in individual Specification Sections.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or products that are similar to those indicated for this Project in material, design, and extent.

- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
- H. Manufacturer's Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. When testing is complete, remove test specimens, assemblies, mockups; do not reuse products on Project.
 - 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- J. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect.
 - 2. Notify Architect seven days in advance of dates and times when mockups will be constructed.
 - 3. Demonstrate the proposed range of aesthetic effects and workmanship.

- 4. Obtain Architect's approval of mockups before starting work, fabrication, or construction
 - a. Allow seven days for initial review and each re-review of each mockup.
- 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
- 6. Demolish and remove mockups when directed, unless otherwise indicated.

1.7 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
 - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 - 2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 - 2. Notify testing agencies at least 48 hours in advance of time when Work that requires testing or inspecting will be performed.
 - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a manufacturer's representative to observe and inspect the Work. Manufacturer's representative's services include examination of substrates and conditions, verification of materials, inspection of completed portions of the Work, and submittal of written reports.

- D. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- E. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform any duties of Contractor.
- F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.

- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.

1.8 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Owner will engage a qualified testing agency and/or special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, as indicated in Statement of Special Inspections attached to this Section, and as follows:
- B. Special Tests and Inspections: Conducted by a qualified testing agency or special inspector as required by authorities having jurisdiction, as indicated in individual Specification Sections, and as follows:
 - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
 - 2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 - 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
 - 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - 6. Retesting and re-inspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

- 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Division 1 Section "Execution Requirements".
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION

SECTION 014529 TESTING AND INSPECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Cooperate with the Owner's selected testing agency, the Project Inspector, and others responsible for testing and inspecting the Work, and assist the Owner by coordinating such testing and inspecting services as specified in this Section and/or elsewhere in the Contract Documents including the attached Division of State Architect Structural Tests and Inspections sheet (enclosed).

B. Related Work Specified Elsewhere:

- 1. Requirements for testing may be required in other Sections of these Specifications.
- 2. Where no testing requirements are specified or required by reference standards or authorities having jurisdiction, the Owner may require such testing to be performed under current pertinent standards for testing. Payment for such testing will be made as described herein.

C. Work Not Included:

- The Owner will select a pre-qualified independent testing laboratory and Inspector as approved by the Division of the State Architect, Office of Regulation Services.
- 2. The Owner will pay for initial services of the testing laboratory as further described hereinafter.

1.2 QUALITY ASSURANCE

- A. The Owner will select an independent testing laboratory to conduct the tests. Selection of the material required to be tested shall be by the laboratory or the Owner's representative and not by the Contractor.
- B. Qualifications of Testing Laboratory: The testing laboratory shall be qualified to the Owner's acceptance in accordance with ASTM E 329. The testing laboratory shall be qualified by the Division of State Architect in accordance with Interpretation of Regulation No. 1R1-1.
- C. Codes and Standards: Testing, when required, will be in accordance with pertinent codes and regulations and with selected standards of the American Society for Testing and Materials and other organizations or agencies which publish recognized codes, standards, or tests. Refer to Article 3.04 Required Testing of this Section.
- D. The project specifications shall be in accordance with the provisions of the Standard Specifications for Public Works Construction (SSPWC) 2012 Edition.

1.3 TEST REPORT DISTRIBUTION

- A. Promptly process and distribute required copies of test reports and related instructions to ensure necessary retesting and/or replacement of materials with the least possible delay in progress of the Work.
- B. One copy of test reports shall be forwarded to the Division of the State Architect by the testing agency. Such reports shall include tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of Title 24 and with the approved specifications. Test reports shall show the specified design strength. They shall also state definitely whether or not the material or materials tested comply with requirements.
- C. Each testing agency shall submit to the Division of the State Architect a verified report in duplicate covering tests which are required to be made by that agency during the progress of the project. Such report shall be furnished each time that work on the project is suspended, including tests up to that time, and at the completion of the project.

1.4 PAYMENT FOR TESTING SERVICES

- A. Initial Services: The Owner will pay for initial testing and inspection except as specifically modified herein-after or as specified otherwise in technical sections. Provided the results of inspection indicating compliance with the Contract Documents.
- B. Retesting: When initial tests or inspection indicate noncompliance with the Contract Documents, subsequent retesting or re-inspection occasioned by the noncompliance shall be performed by the same testing laboratory or Inspector and the costs thereof will be deducted by the Owner from the Contract Sum. Retesting and re-inspection will continue until test or inspection results indicate compliance.
- C. Code Compliance Testing: Inspections and tests required by codes or ordinances, or by authorities having jurisdiction and made by a legally constituted authority, shall be the responsibility of and shall be paid for by the Owner, but back charged to the Contractor in case of retesting due to noncompliance.
- D. Specified Inspections and Tests: Tests and inspections specified in the Specifications, directly or by reference, shall be coordinated by the Contractor at his expense and paid for by the Owner. Corrections of noncompliance and test failures shall be paid for by the Owner, but shall be back charged to the Contractor. Re-inspection and retesting shall be in accordance with paragraph 1.04-B.
- E. Contractor's Convenience Testing: Inspecting or testing performed exclusively for the Contractor's convenience shall be the sole responsibility of and at the expense of the Contractor.

1.5 INSPECTION BY THE OWNER

- A. The Owner and his representatives will have access, for the purpose of inspection, to parts of the work and to the shops wherein the work is in preparation, and the Contractor shall maintain proper facilities and provide safe access for such inspection.
- B. The Owner shall have the right to reject materials and workmanship which are defective, and to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the Owner. If the Contractor does not correct such rejected within a reasonable time, fixed by written notice, the Owner may correct rejected work and charge the expense to the Contractor.
- C. Should it be considered necessary or advisable by the Owner at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out the same, the Contractor shall on request promptly furnish necessary facilities, labor and materials. If such work is found to be defective in respect due to fault of the Contractor or his subcontractor, he shall defray expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the contract, the additional cost of labor and material necessarily involved in the examination and replacement will be allowed the Contractor.

1.6 PROJECT INSPECTOR

- A. An Inspector employed by the Owner in accordance with the requirements of State of California Building Code, Title 24, Part 1, and qualified in accordance with Division of State Architect will be assigned to the work. His duties are specifically defined in Title 24, Part 1, Section 4-342, reprinted herein:
 - 1. Duties of the Project Inspector.
 - (A) General: The Project Inspector shall act under the direction of the A/E/Engineer.
 - (B) Duties: The general duties of the Project Inspector in fulfilling his or her responsibilities are as follows:
 - (1) Inspection: He or she must have actual personal knowledge, obtained by his personal inspection of the work of construction in stages of its progress, that the requirements of the approved plans and specifications are being completely executed.

 Inspection means complete inspection of every part of the work. Work, such as concrete work or brick work which can be inspected only as it is placed, shall require the constant presence of the Project Inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the Inspector is not present. In any case, the Project Inspector must personally inspect every part of the work. In no case shall the Project Inspector have or assume duties which will prevent him or her from providing inspection.

The Project Inspector may obtain personal knowledge of the work of construction, either on-site or off-site, performed under the inspection of a Special Inspector or Assistant Inspector from the reporting of others on testing or inspection of materials and workmanship for compliance with the plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts shall be required.

- (2) Relations with A/E/Engineer: The Project Inspector shall work under the general direction of the A/E/Engineer. Inconsistencies or seeming errors in the A/E/Engineer for his interpretation and instructions. In no case, however, shall the instruction of the A/E/Engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications, and change orders.
- (3) Job File: The Project Inspector shall keep a file of approved plans and specifications (including approved addenda or change orders) on the job, and shall immediately return unapproved documents to the A/E for proper action. The Project Inspector, as a condition of his employment, shall have and maintain on the job, codes and documents referred to in the plans and specifications.
- (4) Project Inspector's Semi-Monthly Reports: The Project Inspector shall keep the A/E/Engineer thoroughly informed as to the progress of the work by making semi-monthly reports in writing as required in Section 37.
- (5) Not Used.
- Construction Procedure Records: The Project Inspector shall keep a record of certain phases of construction procedure.
 All such records of construction procedure shall be kept on the job until the completion of the work. These records shall be made a part of the permanent school records.
- (7) Deviations: The Project Inspector shall notify the Contractor, in writing, of deviations from the approved plans and specifications which are not immediately corrected by the Contractor when brought to his or her attention. Copies of such notice shall be forwarded immediately to the A/E/Engineer. Failure on the part of the Project Inspector to notify the Contractor of deviations from the approved plans and specifications shall in no way relieve the Contractor of responsibility to complete the work covered by his or her contract in accordance with the approved plans and specifications and laws and regulations.

(8) Verified Reports: The Project and Special Inspectors shall each make and submit to the Division of the State Architect verified reports. The Project Inspector shall prepare and deliver to the Division of the State Architect detailed statements of fact regarding materials, operations, etc., when requested. Violations: Failure, refusal, or neglect on the part of the Inspector to notify the Contractor of work which does not comply with the requirements of the approved plans and specifications, or failure, refusal, or neglect to report immediately, in writing, such violation to the A/E/Engineer, to the School Board, and to the Division of the State Architect shall constitute a violation of the act and shall be cause for the Division of the State Architect to take action.

Note: Authority cited: Section 39152 and 81142, Education Code. Reference: Sections 39151, 39153, 81141 and 81143, Education Code."

B. The work of construction in stages of progress shall be subject to the personal continuous observation of the Project Inspector as continuous observation is defined by Title 24. He shall have free access to all parts of the work at any time. The Contractor shall furnish the Project Inspector reasonable facilities for obtaining such information as may be necessary to keep him fully informed respecting the progress and manner of the work and the character of the materials. Inspection of the work shall not relieve the Contractor from obligation to fulfill this Contract.

1.7 OWNER'S OTHER PERSONNEL

A. From time to time, other personnel in the employ of the Owner may inspect the Work when the Work is in progress but shall have no authority to direct the Contractor or request changes in the Work except as may be provided elsewhere in the Contract Documents.

1.8 REPRESENTATIVE OF THE DIVISION OF THE STATE ARCHITECT

- A. Architect shall have access to the site in accordance with Title 24, Part 1, 4-333.
- B. Field Engineers and Inspectors from D.S.A. Structural Safety Section, Fire & Life Safety Review and Access Compliance shall have access to the site in accordance with Title 24, Part 1, 4-334.

PART 2 - PRODUCTS

(NOT USED)

PART 3 - EXECUTION

3.1 COOPERATION WITH TESTING LABORATORY AND INSPECTORS

- A. Inspectors and representatives of the testing laboratory shall have access to the work. Provide facilities for such access in order that the testing, inspection, and the obtaining of samples may be done properly.
- B. Contractor shall deliver material specimens to the Owner's testing lab, which must by terms of the Contract be tested prior to inclusion in the Project, at least 45 days prior to scheduled delivery to the job site.
- C. Material shipped by the Contractor from the source of supply prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said representative that such testing and inspection will not be required shall not be incorporated in the job.

3.2 TAKING SPECIMENS

A. Field specimens and samples for testing, unless otherwise provided in these Contract Documents, shall be selected and taken by the Testing Laboratory or Project Inspector and not the Contractor. Sampling equipment and personnel will be provided by the testing laboratory. Deliveries of specimens and samples to the testing laboratory will be performed by the testing laboratory. Soil samples for approval of import fill shall be picked-up by the Testing Laboratory.

3.3 SCHEDULES FOR TESTING

- A. Establishing Schedule:
 - By advance discussion with the testing laboratory selected by the Owner, determine the time required for the laboratory to perform its tests and to issue each of its findings.
 - 2. Provide required time within the construction schedule.
- B. Revising Schedule: When changes of construction schedule are necessary during construction, coordinate such changes of schedule with the testing laboratory as required.
- C. Adherence to Schedule: When the testing laboratory is ready to test according to the determined schedules, but is prevented from testing or taking specimens due to incompleteness of the work, extra charges for testing attributable to the delay may be back-charged to the Contractor and will be deducted by the Owner from the Contract Sum.

3.4 REQUIRED TESTING

Tests and inspections for the following items, where applicable, will be required in accordance with referenced Sections/Chapters of California Building Code, 2013 Edition, Title 24, Part 2:

A. FOUNDATIONS & RETAINING WALL:

1. INSPECTION:

a. Inspection of Driven Deep Foundations 1704A.8

Portland Cement

b. Inspection of Cast-In-Place Deep Foundation 1704A.9

B. CONCRETE (Chapter 19A)

1. MATERIALS:

a.

		1916A.1
b.	Concrete Aggregates	1704A.4.1; 1903A.3
c.	Shotcrete Aggregates	1913A.3
d.	Reinforcing Bars	1704A.4.1; 1916A.2
e.	Pre-stressing Steel & Anchorage	1704A.4.1; 1916A.3

2. QUALITY:

a.	Proportions of Concrete	1905A.2; 1905A.3; 1905A.4
b.	Strength Tests of Concrete	1905A.1.1; 1905A.6
C.	Shotcrete Proportions	1913A.2
d.	Shotcrete Cores	1913A.5
e.	Composite Construction Cores	1916A.4
f.	Gypsum Concrete Strength Tests	1914A;

1916A.6

1704A.4.1;

3. **INSPECTION:** 1905A.7 Job Site a. Batch Plant b. 1704A.4.2 Waiver of Batch Plant 1704A.4.3 C. d. Pre-stressed Concrete 1704A.4.4 Shotcrete e. 1704A.17; 1913A f. Reinforcing Bar Welding 1903A.7; Table 1704A.3 Post-Installed Anchors in Concrete 1916A.7 g. C. LIGHT WEIGHT METALS 1. **MATERIALS** 2002.1 **Alloys** a. b. Identification 2002.1 2. **INSPECTION** 2003.1 a. Welding D. **MASONRY** 1. MATERIALS 2103A.1 a.. Masonry units b. Portland cement, lime 2103A Mortar and grout aggregates 2103A.8; C.

Reinforcing bars

d.

2103A.12; 2103A.12.3

2103A.13

2. QUALITY

E.

	a.	Portland cement tests	1916A.1			
	b.	Mortar and grout tests	2105A.2.2.1.4			
	C.	Masonry prism test	2105A.2.2.2			
	d.	Masonry core tests	2105A.4			
	e.	Masonry Unit Test	2105A.2.2.1			
	f.	Reinforcing bar tests	1916A.2			
3.	INSP	ECTION				
	a.	Reinforced masonry	1704A.5			
	b.	Reinforced Bar Welding	1704A.3.1.3; 1903A.7			
STRU	ICTUR	AL STEEL				
1.	MATE	ERIALS				
	a.	Structural Steel	2205A.1			
	b.	Cold Form Steel	2209A.1			
	C.	Identification	2203A.1			
2.	QUALITY					
	a.	Tests of Structural and Cold Form Steel	2210A.1			
	b.	Tests of High Strength Bolts, Nuts, Washers	2212A.1			
	C.	Tests of End Welded Studs	2212A.2			
	d.	Steel Joists	2206A; 1704A.3.2.1			
	e.	Non-Destructive Weld Tests	1704A.3.1			

3. **INSPECTION Shop Fabrication** 1704A.2; a. 1704A.3 b. Welding 1704A.3.1 **Nelson Stud Welding** 1704A.3 C. d. High Strength Bold Installation 1704A.3.3 F. WOOD 1. MATERIALS: Lumber and plywood 2303.1 a. b. **Glued Laminated Members** 2303.1.3 2. INSPECTION: a. Glued Laminated Fabrication 1704A.6.3.1; 2303.1.3 1704A.6.4 b. **Timber Connectors** C. Manufactured Trusses 1704A.6.2; 1704.6.3.2;

END OF SECTION

2303.4.7

SECTION 015000 TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

B. Related Section:

1. Division 1 Section "Summary of Work" for limitations on work restrictions and utility interruptions.

1.2 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.3 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.

1.4 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Accessible Temporary Egress: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.5 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Engage installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Chain-Link Fencing: Minimum 2-inch (50-mm), 0.148-inch- (3.8-mm-) thick, galvanized steel, chain-link fabric fencing; minimum 6 feet (1.8 m) high with galvanized steel pipe posts; minimum 2-3/8-inch- (60-mm-) OD line posts and 2-7/8-inch- (73-mm-) OD corner and pull posts, with 1-5/8-inch- (42-mm-) OD top rails.
- B. Portable Chain-Link Fencing: Minimum 2-inch (50-mm), 0.148-inch- (3.8-mm-) thick, galvanized steel, chain-link fabric fencing; minimum 6 feet (1.8 m) high with galvanized steel pipe posts; minimum 2-3/8-inch- (60-mm-) OD line posts and 2-7/8-inch- (73-mm-) OD corner and pull posts, with 1-5/8-inch- (42-mm-) OD top and bottom rails. Provide galvanized steel bases for supporting posts.

2.2 TEMPORARY FACILITIES

- A. Field Offices, General: Not Required.
- B. Common-Use Field Office: Not Required.
- C. Inspector Office: Not Required.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
 - 1. Locate facilities to limit site disturbance as specified in Division 1 Section "Summary of Work".
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.
- C. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities. Contractor not to use adjacent school toilet facilities.
- E. Heating and/or Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

- F. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
- G. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.
- H. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
 - 1. Install electric power service overhead or underground, unless otherwise indicated.
 - 2. Connect temporary service to Owner's existing power source, as directed by Owner.
- I. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
- J. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install one telephone line(s) for each field office.
 - 1. Provide additional telephone lines for the following:
 - a. Provide a dedicated telephone line for each facsimile machine in each field office.
 - 2. At each telephone, post a list of important telephone numbers.
 - a. Police and fire departments.
 - b. Ambulance service.
 - c. Contractor's home office.
 - d. Architect's office.
 - e. Engineers' offices.
 - f. Owner's office.
 - g. Principal subcontractors' field and home offices.

3. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
 - 2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Temporary Use of Permanent Roads and Paved Areas: Locate temporary roads and paved areas in same location as permanent roads and paved areas. Construct and maintain temporary roads and paved areas adequate for construction operations. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations.
 - 1. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.
 - 2. Retain one of first two subparagraphs below. Retain first subparagraph for concrete or hot-mix asphalt pavement if permanent aggregate base may be used for temporary roads and paved areas.
 - 3. Recondition base after temporary use, including removing contaminated material, regrading, proof rolling, compacting, and testing.
- C. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
 - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- D. Parking: Street parking is available as posted.
- E. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
 - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.
 - 2. Remove snow and ice as required to minimize accumulations.

- F. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
 - 1. Identification Signs: Provide Project identification signs as indicated on Drawings.
 - 2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
 - a. Provide temporary, directional signs for construction personnel and visitors.
 - 3. Maintain and touchup signs so they are legible at all times.
- G. Waste Disposal Facilities: Comply with requirements of local jurisdiction for "Construction Waste Management".
- H. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 1 Section "Execution Requirements" for progress cleaning requirements.
- I. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
 - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
- J. Temporary Elevator Use: Use of elevators is not permitted.
- K. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.
- L. Existing Stair Usage: Use of Owner's existing stairs will be permitted, provided stairs are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore stairs to condition existing before initial use.
 - 1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If stairs become damaged, restore damaged areas so no evidence remains of correction work.
- M. Temporary Use of Permanent Stairs: Use of new stairs for construction traffic will be permitted, provided stairs are protected and finishes restored to new condition at time of Substantial Completion.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

- B. Temporary Erosion and Sedimentation Control: Comply with requirements of the latest SWRCB Construction General Permit or authorities having jurisdiction.
- C. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to requirements of the latest SWRCB Construction General Permit or authorities having jurisdiction, whichever is more stringent.
- D. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Tree and Plant Protection: Comply with District requirements.
- F. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- G. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for Owner. Perform control operations lawfully, using environmentally safe materials.
- H. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
 - 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
 - 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel.
- Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.
- J. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- K. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- L. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather tight enclosure for building exterior.

- 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.
- M. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
 - 1. Prohibit smoking in construction areas.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
 - 4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.
- B. Exposed Construction Phase: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect materials from water damage and keep porous and organic materials from coming into prolonged contact with concrete.
- C. Partially Enclosed Construction Phase: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
 - 1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
 - 2. Keep interior spaces reasonably clean and protected from water damage.
 - 3. Discard or replace water-damaged and wet material.
 - 4. Discard, replace or clean stored or installed material that begins to grow mold.
 - 5. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

- D. Controlled Construction Phase of Construction: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
 - 1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
 - 2. Remove materials that can not be completely restored to their manufactured moisture level within 48 hours.

3.6 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 - 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 1 Section "Closeout Procedures".

SECTION 015813 TEMPORARY PROJECT SIGNAGE

PART 1 - GENERAL

1.1 PROJECT IDENTIFICATION

- A. Provide one 32 square foot Project Identification signs of wood frame and exterior grade plywood construction, painted, with exhibit lettering by professional sign painter, to District's design and colors as indicated on Drawings.
 - 1. Confer with District for confirmation of names prior to lettering signs.
 - 2. Ground Clearance: Two feet.
 - 3. Materials: ½" MDO panel or exterior grade plywood panel with vertical structural members of 4x8 #2 creosote treated Douglas fir installed to depth of 4 feet below grade.
 - a. Stringers: 2x2 stingers of dense #1 Douglas fir, located behind top, bottom, and center of sign panel.
 - 4. Paint: Sign panel and structural members shall be painted on all sides and edges with two coats of exterior type alkyd paint over suitable primer and professionally lettered or silk screened.
 - 5. Typefaces: Optima.
 - 6. Seal: Obtain from District. Coordinate with Project Manager.
- B. Erect one sign at each street front site at locations established by District. Position parallel with street and locate in areas which will not interfere with construction activities.

Signs: Remain on site until the buildings permanent exterior signing is installed, or as otherwise directed by the District.

No other signs shall be permitted.

- C. Signs shall include the following:
 - 1. Name of the School
 - 2. Title of Project.
 - 3. Rendering of the Project
 - 4. Seal of the District.
 - 5. Logo/Name of the Architect
 - 6. Logo/Name of the Contractor
- D. The project sign must be erected within 35 calendar days after Notice of award of this contract.

SECTION 016020 STORAGE AND PROTECTION

PART 1 – GENERAL

1.1 SUMMARY

A. Protect products scheduled for use in the Work by means including, but not necessarily limited to, those described in this Section.

B. Related work:

- 1. Documents affecting work of this Section include, but are not necessarily limited to the General Conditions and Supplementary Conditions.
- 2. Additional procedures also may be prescribed in other Sections of these Specifications.

1.2 QUALITY ASSURANCE

A. Include within the Contractor's quality assurance program such procedures as are required to assure full protection of work and materials.

1.3 MANUFACTURERS' RECOMMENDATIONS

A. Except as otherwise approved by the District, determines and comply with manufacturers' recommendations on product handling, storage, and protection.

1.4 PACKAGING

- A. Deliver products to the job site in their manufacturer's original container, with labels intact and legible.
 - Maintain packaged materials with seals unbroken and labels intact until time of use.
 - 2. Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the Owner.
- B. The District may reject as non-complying such material and products that do not bear identification satisfactory to the District as to manufacturer, grade, quality, and other pertinent information.

1.5 PROTECTION

- A. Protect finished surfaces, including jambs and soffits of openings used as passageways, through which equipment and materials are handled.
- B. Provide protection for finished surfaces in traffic areas prior to allowing equipment or materials to be moved over such surfaces.
- C. Maintain finished surfaces clean, unmarred, and suitably protected until accepted by the Owner.

1.6 REPAIRS AND REPLACEMENTS

- A. In event of damage, promptly make replacements and repairs to the approval of the Architect and at no additional cost to the Owner.
- B. Additional time required to secure replacements and to make repairs will not be considered by the District to justify an extension in the Contract Time of Completion.

SECTION 017700 CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. Closeout Procedures
- B. Final Cleaning.
- C. Pest Control.
- D. Adjusting.
- E. Demonstration and Instructions.
- F. Project Record Documents.
- G. Operation and Maintenance Data.
- H. Warranties.
- I. Spare Parts and Maintenance Materials.

1.2 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect's review.
- B. Prepare and submit to Architect a list of items to be completed or corrected, the value of the items on the list, and reasons why the Work is not complete.
- C. Submit written request to Architect for review of Work.
- D. Submit warranties, bonds, service agreements, certifications, record documents, maintenance manuals, receipt of spare parts and similar closeout documents.
- E. Make final changeover of permanent locks and deliver keys to Owner.
- F. Terminate and remove temporary facilities from Project site.
- G. Advise Owner of change over in heat and other utilities.
- H. Provide submittals to Architect that are required by governing or other authorities.

- I. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- J. Submit affidavit of payment of debts and claims, AIA Document G706.
- K. Submit affidavit of release of liens, AIA Document G706A.
- L. Submit consent of contractor's surety to final payment, AIA Document G707.

1.3 FINAL CLEANING

- A. Execute final cleaning prior to final review by Architect.
- B. Employ experienced professional cleaners for final cleaning.
- C. Clean interior and exterior glass and surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces.
- D. Vacuum carpeted and soft surfaces. Shampoo if visible stains exist.
- E. Clean equipment and plumbing fixtures to a sanitary condition.
- F. Clean exposed surfaces of grilles, registers and diffusers.
- G. Replace filters of operating mechanical equipment.
- H. Clean debris from roofs, gutters, downspouts, and drainage systems.
- I. Clean site; sweep paved areas, rake clean landscaped surfaces.
- J. Remove waste and surplus materials, rubbish, and construction facilities from the site.
- K. Clean light fixtures and replace burned out lamps and bulbs.
- L. Re-lamp all lamps and bulbs in lighting fixtures.
- M. Replace defective and noisy ballasts and starters in fluorescent fixtures.
- N. Leave project clean and ready for occupancy by Owner.

1.4 PEST CONTROL

A. Engage an experienced, licensed exterminator to make final inspection and rid Project of rodents, insects, and other pests. Submit final report to Architect.

1.5 ADJUSTING

A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.6 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of products, systems, and equipment to Owner's personnel two weeks prior to date of final review.
- B. For each demonstration submit list of participants in attendance.
- C. Provide two copies of video tape of each demonstration and instructions session.
- D. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- E. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- F. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed-upon times, at equipment location.
- G. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

1.7 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following record documents; record actual revisions to the Work in contrasting color.
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other Modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.

- D. Specifications: Legibly mark and record at each Product Section in contrasting color ink, description of actual Products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Supplier and installers name and contact information.
 - 3. Changes made by Addenda and Modifications.
- E. Contract Drawings and Shop Drawings: Legibly mark each item in contrasting color ink to record actual construction including:
 - 1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 2. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 3. Field changes of dimension and detail.
 - 4. Details not on original Contract Drawings.
 - 5. Revisions to electrical circuitry and locations of electrical devices and equipment.
 - 6. Note change orders, alternate numbers, and similar information, where applicable.
 - 7. Identify each record drawing with the written designation of RECORD DRAWING located in prominent location.
- F. Record Digital Data Files: Immediately before inspection for Substantial Completion, review marked-up record prints with Architect. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
 - 1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.
 - 2. Format: Annotated PDF electronic file with comment function enabled.
 - 3. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
 - 4. Refer instances of uncertainty to Architect for resolution.
 - 5. Architect will furnish Contractor one set of digital data files of the Contract Drawings for use in recording information.

- (a) Refer to Section 013300 Submittal Procedures for requirements related to use of Architect's digital data files.
- (b) Architect will provide data file layer information, record markups in separate layers.
- G. Submit documents to Architect at time of Substantial Completion.

1.8 OPERATION AND MAINTENANCE DATA

A. Summary:

- 1. Organize operation and maintenance data with directory.
- 2. Provide operation and maintenance manuals for products, systems, subsystems, and equipment.
- 3. Refer to Divisions 2 thru 33 for specific operation and maintenance manual requirements for the Work in those Divisions.
- B. Submit two sets prior to final review, bound in 8-1/2-inch x 11 inch, three ring D size binders with durable vinyl covers.
- C. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.
- D. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with laminated plastic tabs.
- E. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Engineers, Contractor, subcontractors, and major equipment suppliers and manufacturers.
- F. Part 2: Operation and maintenance instructions, arranged by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - 1. Performance and design criteria.
 - 2. List of equipment.
 - 3. Parts list for each component.
 - 4. Start-up procedures.
 - 5. Shutdown instructions.
 - 6. Normal operating instructions.

- 7. Wiring diagrams.
- 8. Control diagrams.
- 9. Maintenance instructions for equipment and systems.
- 10. Maintenance instructions for finishes, including recommended cleaning methods and materials.
- G. Part 3: Project documents and certificates, including the following:
 - 1. Shop drawings and product data.
 - 2. Air and water balance reports.
 - Certificates.
 - 4. Warranties.

1.9 WARRANTIES

- A. Commencement of warranties shall be date of Substantial Completion.
- B. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.
- C. Provide duplicate notarized copies in operation and maintenance manuals.
- D. Execute and assemble documents from subcontractors, suppliers, and manufacturers.
- E. Provide Table of Contents and assemble in binder with durable plastic cover.
- F. Submit prior to final Application for Payment.
- G. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of warranty on the work that incorporates the products.
- H. Manufacturer's disclaimer and limitations on product warranties do not relieve suppliers, manufacturer's, and subcontractors required to countersign special warranties with Contractor.
- I. When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.

- J. When work covered by warranty has failed and has been corrected, reinstate warranty by written endorsement. Reinstated warranty shall be equal to original warranty with equitable adjustment for depreciation.
- K. Upon determination that Work covered by warranty has failed, replace or repair Work to an acceptable condition complying with requirements of the Contract Documents.

1.10 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.
- B. Deliver to Project site and place in location as directed.
- C. Obtain signed receipt for delivery of materials and submit prior to request for final review by Architect.

SECTION 017701 PROJECT CLOSEOUT

PART 1 – GENERAL

1.1 REFERENCE

A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 GENERAL

- A. As a prerequisite for final payment, Contractor to complete the work of this Section.
- B. Comply with requirements stated in "Conditions of the Contract" and in "Specifications" for administrative procedures in closing out the Work.
- C. Related Work Specified Elsewhere:
 - 1. Guarantee Form: See General Conditions.
 - 2. Close-out Submittals: See Respective Spec. Sections.

1.3 PREFINAL INSPECTION; SUBSTANTIAL COMPLETION

A. Pre-final Inspection:

- 1. Upon "substantial completion" of the Work, Contractor shall notify Architect and request a "pre-final inspection" of the Work.
- 2. If Architect concurs that "substantial completion" has been reached, he will review the Work and list items to be completed or corrected. List will be amended as required to include items subsequently observed.
- B. Substantial Completion Defined: "Substantial Completion" of the Work is the status, as approved by the Architect, when construction is sufficiently complete, in accordance with the Contract Documents, so District can occupy or utilize the Work for the use for which it is intended, without incomplete work scope items either interior or exterior.

1.4 FINAL INSPECTION

- A. Reference: See General and Supplementary Conditions, titled "Final Adjustment and Completion".
- B. Final Inspection: When Contractor has complied with above Article, Architect will review the Work and list any items to be completed or corrected.
- C. Contractor shall correct and/or complete the Work.

1.5 GUARANTEES

- A. General: Contractor shall guarantee in writing to District that:
 - 1. "Contractor will repair or replace any and all work, together with any other work which may be displaced, damaged or marred in so doing, that may prove defective in workmanship and/or materials, or fail to conform to contract provisions and requirements within the period cited below, such period to begin on date of acceptance of work by District, without any expense whatsoever to District, ordinary wear and tear, and unusual abuse or neglect excepted."
 - 2. Format: Contractor shall submit guarantees typed in the format indicated in "Guarantee Form", See General Conditions Exhibit K.
 - 3. Number of Copies: Submit in duplicate to Architect.
 - 4. Required Guarantees:
 - 5. General: Submit all guarantees listed herein or required by various Spec. Sections; more stringent shall apply. Guarantee periods begin at the date of acceptance written on the "Notice of Completion" as accepted by the School District Board of Education.
 - 6. General Guarantee:
 - a. By General Contractor; For The Entire Work: 1 Year

1.6 WARRANTIES

A. General: Submit all warranties required by various Spec. Sections.

1.7 CERTIFICATES

A. General: Submit all certificates and Verified Reports required by various Spec. Sections or listed herein, notarized as required.

1.8 OPERATION & MAINTENANCE DATA

A. General: Submit all manuals required by various General Conditions, Spec. Sections or listed herein; two copies each.

1.9 PROJECT RECORD DOCUMENTS

A. See Section 017700, "Closeout Procedures".

- B. Additional Information Required: In addition to the requirements in Section 017700, provide the following:
 - 1. By measured dimensions (vertical and horizontal) from permanent improvements or buildings, locate the following new underground utilities, piping systems, and their appurtenances; and existing systems when known, uncovered, in work areas, adjacent to work areas, or modified as part of the work of this Project:
 - a. Site drainage systems piping and cleanouts.
 - b. Landscape sprinkler systems: Complete system, except non-pressure branch lines from automatic control valves to heads.
 - c. All fire protection systems.
 - d. All plumbing systems.
 - e. All electrical systems.
 - f. All pool systems.
 - 2. For gravity flow lines such as sewers and storm drains, locate all cleanouts, and indicate invert elevations at building lines, changes in direction, intersections, and property lines.
 - 3. Electrical Underground: In addition to locations, state number and sizes of conduits and wires, and provide invert elevations.
 - 4. Work Concealed Within Building Construction: Indicate by dimension the locations of Plumbing Systems, HVAC Systems, and Fire Protection Systems.
 - 5. Show any work performed that deviates from original Contract Documents.
 - 6. Show all work authorized by Change Order(s) and number of that Change Order.

SECTION 017740 WARRANTIES

PART 1 - GENERAL

1.1 SUBMITTAL REQUIREMENTS

- A. Assemble Warranties and Service and Maintenance Contracts, executed by each of the respective Manufacturers, Suppliers, and Subcontractors.
- B. Number of original signed copies required: Four (4) each.
- C. Table of Contents: Neatly typed in orderly sequence.
- D. Provide complete information for each one of the following items:
 - 1. Product or Work Item.
 - 2. Firm with name of principal, address, and telephone number.
 - 3. Beginning date of Warranty or Service and Maintenance Contract.
 - 4. Duration of Warranty or Service and Maintenance Contract.
 - 5. Provide the following information for the District's Personnel:
 - a. Procedures in case of failure of malfunction.
 - b. Instances which affect Warranty.
 - 6. Contractor, name of responsible principal, address, and telephone number.

1.2 SUBMITTAL FORM

- A. The list identifies the submittal form requirements for WARRANTIES:
 - 1. Punch sheets for standard 3-ring binder.
 - 2. Size: 8-1/2 x 11 inches.
 - 3. Fold larger sheets to fit into binder.
 - 4. Cover: Identify each packet with typed or printed title "WARRANTIES". List:
 - a. Title of Project.
 - b. Name of Contractor.

SECTION 017823 OPERATION AND MAINTENANCE MANUALS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- Compilation of product data and related information appropriate for the District's maintenance and operation of products and equipment furnished under the Contract.
- 2. Instruction of the District's personnel in the maintenance of products and in the operation of equipment and systems.
- B. Contractor shall comply with the requirements of this Specification Section, except where individual Specification Sections requirements are more stringent.

1.2 SUBMITTAL PROCEDURES

- A. Preliminary: Submit one copy of proposed manuals to the Project Manager at least fifteen (15) days prior to final inspection or acceptance.
- B. Final: Following the indoctrination and instruction of the District's operating and maintenance personnel, review proposed revisions to the manual with the Project Manager.
 - Submit three copies of accepted data in final form 10 days after final inspection. Approval of submittal is a pre-requisite at Substantial Completion prior to the District's agendizing project for acceptance by the Governing Board.

PART 2-PRODUCTS

2.1 FORMAT

- A. Size: minimum 4 inch three-ring binders for 8-1/2 inch by 11 inch punched pages, completely clear plastic covered for insertion of labels on spines and covers.
- B. Provide identifying tabbed pages. Classify by Division and by Section. All tabbing shall be in numerical order.

C. Drawings:

- 1. Provide reinforced punched binder tab. Bind drawings with text.
- 2. Fan fold larger drawings to size of text pages, for easy foldout.

- D. Cover: Identify each volume with typed or printed label, List:
 - 1. Title of Project
 - 2. Identify of separate structures as applicable.
 - 3. Identify of general subject matter covered in the manual.
- E. Spine: Identify each volume with typed or printed label stating OPERATING AND MAINTENANCE INSTRUCTIONS, GUARANTEES AND SERVICE CONTRACTS and the following information:
 - 1. Title of Project.
 - 2. Divisions and Sections included within volume.
 - 3. Volume number (i.e. "1 of 4)

PART 3 - EXECUTION

3.1 CONTENT OF MANUAL

- A. Table of Contents:
 - 1. List of each product indexed to the content of the volume.
 - 2. List with each product the name, address, and the telephone number of:
 - a. Subcontractor and installer.
 - b. Maintenance contractor, as appropriate.
 - c. Local sources of supply for parts and replacement.
- B. Product Data: Annotate each sheet to clearly identify the data applicable to the installation. Delete references to inapplicable information
- C. Drawings:
 - 1. Supplement product data with Drawings as necessary to illustrate the following:
 - a. Relationship of component parts of equipment and systems.
 - b. Control and flow diagrams.
 - 2. Do not include Project Record Drawings as maintenance drawings.

- D. Instructions: Provide written text, as required to supplement product data for the particular installation.
- E. Warranties, Guaranties, Bonds, and Service Contracts: Include a copy of each warranty, guarantee, bond and service contract issued.
 - 1. Provide information sheet for the District's personnel describing the following:
 - a. Propose procedures in the event of failure or emergencies.
 - b. Circumstances under which the validity of warranties, guaranties, or bonds might be compromised.

3.2 MANUAL FOR MATERIALS AND FINISHES

- A. Instructions for Care and Maintenance: Include manufacturer's data as follows:
 - 1. Recommendations for types of cleaning agents and methods.
 - 2. Cautions against cleaning agents and methods which are detrimental to the product.
 - 3. Recommended schedule for cleaning and maintenance.

3.3 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Content, for each unit of mechanical equipment and system, as appropriate:
 - 1. Description of Unit and Component Parts:
 - a. Function, normal operating characteristics, and limiting conditions.
 - b. Performance curves, engineering data, and tests.
 - c. Complete nomenclature and commercial number of replacement parts.
 - 2. Operating Procedures:
 - a. Start-up, break-in, routine, and normal operating instructions.
 - b. Regulation, control, stopping, shut-down, and emergency instructions.
 - c. Summer and winter operation instructions.

- 3. Maintenance Procedures:
 - a. Routine operations.
 - b. Guide to "trouble-shooting".
 - c. Disassembly, repair, and reassemble.
 - d. Alignment, adjusting, and checking.
- 4. Servicing and lubrication schedule including list of lubricants required.
- 5. Manufacturer's printed operating and maintenance Instructions.
- 6. Description of sequence of operation by control manufacturer.
- 7. Original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance, including:
 - a. Predicted life of parts subject to wear.
 - b. Items recommended to be stocked as spare parts.
- 8. Control diagrams by manufacturer of controls as installed in project.
- 9. Coordination Drawings and color coded piping diagrams.
- 10. Charts of valve tag numbers, with the location and function of each valve.
- B. Content, for each electric and electronic system as appropriate:
 - 1. Description of System and Component Parts:
 - a. Function, normal operating characteristics, and limiting conditions.
 - b. Performance curves, engineering data, and tests.
 - c. Complete nomenclature and commercial number of replaceable parts.
 - 2. Circuit directories of panelboards:
 - a. Electrical service.
 - b. Controls.
 - c. Communication.
 - 3. As-installed color coded wiring diagrams.

- 4. Operating Procedures:
 - a. Routine and normal operating instructions.
 - b. Sequences required.
 - c. Special operating instructions.
- 5. Maintenance Procedures:
 - a. Routine operations.
 - b. Guide to "trouble-shooting".
 - c. Disassembly, repair and re-assembly.
 - d. Adjustment and checking.
- 6. Manufacturer's printed Operating and Maintenance Instructions.
- 7. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
- 3.4 INSTRUCTION OF THE DISTRICT'S PERSONNEL
 - A. Prior to final inspection or acceptance, fully instruct the District's designated operating and maintenance personnel in the operation, adjustment and maintenance of all products, equipment, and systems installed in project.
 - 1. Provide services of factory trained instructors from the manufacturer of each major item of equipment or system.
 - B. Operating and maintenance manual shall constitute the basis of instruction.
 - 1. Review contents of manual with personnel in full detail to explain all aspects of operation and maintenance.
 - 2. Review instruction on how to efficiently use state required energy conservation features, materials, components, and mechanical device.

SECTION 033000 CAST-IN-PLACE CONCRETE

1.00 GENERAL

1.01 DESCRIPTION

- A. Principal work in this Section:
 - 1. All Concrete. Concrete mix designs.
 - 2. Formwork.
 - 3. Placement, curing and jointing of concrete and grouting and sacking of concrete surfaces.
 - 4. Setting anchor bolts and dowels.
 - 5. Setting screens and fine grading for slabs on grade.
 - Concrete finishes.

1.02 REFERENCE STANDARDS

- A. ACI 211.1, Recommended Practice for Selecting Proportions Normal and Heavyweight Concrete.
- B. ACI 347-R, Recommended Practice for Concrete Formwork.
- C. ACI 305, Hot Weather Requirements.
- D. ACI 304, Measuring and Mixing.
- E. ACI 308, Compacting and Vibrating.
- F. ACI 309, Curing.

1.03 QUALITY ASSURANCE

A. Refer also to Section 014200: All work shall conform to 2016 Edition of California Building Code and State Building Code, Title 24.

Concrete (Chapter 19A).

- B. Materials:
 - Portland Cement Tests ACI 318, 1903A.5, 1903A.6, 1905A & 1913A
 - 2. Concrete Aggregates 1903A.6 & 1905A
 - 3. Reinforcing Bars 1903A.4, 1905A, 1913A.2

- 4. Batch Plant Inspection 1705A3.2 & 1705A3.3
- C. Concrete Quality:
 - 1. Proportions of Concrete ACI 318 & 1905A.1.
 - Strength Tests of Concrete 1905A.6.
- D. Concrete Inspection:
 - 1. Job Site Inspection Table 1705A.3 & 1913A.1 & 1913A.2
 - 2. Batch Plant or Weighmaster Inspection 1705A3.2 & 1705A3.3
- E. Tests: All concrete materials shall be tested or certified and reported prior to any use of same.
- F. Portland Cement: Shall be mill-tested cement. Certifications of compliance furnished for each shipment of cement, otherwise cement shall be tested by the testing Laboratory.
- G. Aggregate Required Tests for Mix Designs: One for job unless character of material changes, material is substituted, or at the request of the Architect.
 - 1. Sieve analysis per ASTM C136.
 - 2. Specific gravity per ASTM C127 and C128, minimum value 2.60.
- H. Aggregate Optional Tests: Only if required by the Architect because of questionable materials or sources.
 - 1. Soundness per ASTM C88.
 - 2. Abrasion, L.A. Rattler, ASTM C131.
- I. Design Mixes: After acceptance of aggregate and whenever character or source of materials is changed, the laboratory shall furnish mix designs in accordance with ACI 211.1 and CBC 1905A. Mix designs shall indicate the source of aggregates and brands of cement and admixtures used. Mixes designed for pump placement shall be identified as such. Provide mix design for all other compression strengths and detailed uses indicated on the drawings. Contractor shall pay testing laboratory for these design mixes.
- J. Molded Concrete Cylinders: 1 set (3) of molded cylinders, each sampling per ASTM C172, made by Laboratory Inspector, for each 50 cubic yards of each day's pour or fraction thereof. One 7 and two 28 days cylinders shall be prepared and cured in the laboratory per ASTM C31. Cylinders shall be tested for compression per ASTM C19 and shall exhibit the following strengths:

<u>Designation</u> 7 Day 28 Day 3000 3000

- K. Core Tests: Only if ordered by the Architect on the basis of deficient cylinder tests or other conditions indicating defective concrete. Cores, if required, shall be cut from locations directed by the Architect, secured per ASTM C42, prepared and tested by ASTM C39. Results of core tests to be evaluated by the Architect. In general, they will be expected to exceed the 28-day specified strengths.
- L. Batch Plant Inspection: By Laboratory Inspector. Continuous inspection required for all structural concrete. Bonded Weighmaster affidavits acceptable for slab and non-structural concrete.
- M. Placement Record: A record shall be kept on the site of the time and date of placing the concrete in each portion of the structure. Such record shall be kept until the completion of the structure, and shall be open to the inspection of the enforcement agency.
- N. Field Quality Control: Perform work of this Section under the supervision of a capable concrete superintendent. Continuously monitor concrete placing operations to maintain level floors by use of an instrument level, transit or laser.

2.00 MATERIALS

2.01 CONCRETE:

- A. Portland Cement: ASTM C150, Type II, low alkali.
- B. Aggregates: ASTM C33 and C330 for expanded shale and as specified. Each size graded and batched separately. From approved pits.
 - 1. Fine Aggregate: Washed natural sand or hard strong particles, and shall contain not more than 1% deleterious material and not more than 2.5% shall pass the No. 200 sieve.
 - 2. Coarse Aggregate: Clean sound washed gravel or crushed rock, evenly graded. Crushings may constitute not more than 30% of the total volume. Not more than 5% flat, thin, elongated or laminated material. Not more than 1% deleterious substances.
 - Alkali Reaction: Do not reactivate aggregate nor use aggregates that are alkali reactive when tested in accord with ASTM C127, ASTM C289, or ASTM C295.
 - Maximum coarse hardrock aggregate size:

a. General: 1"

b. In slabs on grade: 1"

5. Hardrock Concrete: Washed sand gravel (from acceptable pits), ASTM

C33, including requirements for sampling and testing.

- C. Admixtures: Water-reducing admixture conforming to ASTM C494 shall be used in all slab and superstructure concrete. Foundation concrete optional.
- D. Fly Ash: Conform to ASTM A618, Class C or F. Fly ash shall not exceed 12 percent of total cementitious material by volume.
- E. Water: From domestic sources, clean and free from harmful amounts of acids, alkalis, oil, organic or other deleterious materials and with no pronounced taste or odor.

F. Curing Compound:

- Liquid membrane-forming compound complying with ASTM C309, Type I (1D), Class B, guaranteed not to affect the appearance of the concrete surfaces, and the bond, adhesion, or effectiveness of finishes and surface treatment specified herein to be applied to concrete.
- 2. Curing compound used on exposed concrete surfaces shall be non-discoloring, fast drying and shall be conclusively demonstrated not to darken or yellow with age.
- 3. Curing compound for use on concrete floors to receive adhered covering shall be specially formulated for such use and shall be certified by the manufacturer not to inhibit the bonding qualities of flooring adhesives.
- G. Surface Retarder: Rugasol C/S by Sika Chemical Corp. or True Etch Surface Retarder by Burke Co.
- H. Abrasive Aggregates: Silicone carbide 12/30 grading, aluminum oxide 14/36 grading or emery grits made by one of the following manufacturers. Use only one type on Project.
 - 1. Conrad Sovig Co., Inc.
 - 2. Chemrex, Inc./Sonneborn.
 - 3. Carborundum Co.
 - Norton Co.
 - 5. Anti-Hydro Co.
 - 6. L&M Construction Chemicals, Inc.
- I. Structural Adhesive: ASTM C881, 2-component material suitable for use on dry or damp surfaces. Provide material "Type", "Grade", and "Class" to suit project requirements.
 - 1. Rezi-Weld 1000 by WR Meadows.
 - 2. Thiopoxy by WR Grace.

- 3. Sikadur Hi-Mod by Sika Chemical Corp.
- 4. Patch and Bond Epoxy by The Burke Co.
- J. Sealer: One of the following:
 - 1. Cure-Hard by WR Meadows (sodium silicate).
 - 2. Ashford Formula by Curecrete Chemical Co. (sodium silicate).
 - 3. Lapidolith by Sonneborn (magnesium or zinc fluosilicate).
 - 4. Chem Hard (magnesium fluosilicate), Fluohard (magnesium fluosilicate) or Seal Hard (siliconate/sodium silicate) by L&M Construction Chemicals, Inc.
 - 5. Saniseal 50 by Master Builders Co. (magnesium or zinc fluosilicate).
- K. Expansion Joint Materials:
 - 1. Joint Filler: Use in combination with plastic joint cap made by Greenstreak, Quaker Plastic Corp., WR Meadows, or equal.
 - a. Homex Expansion Joint by Homasote Co., or equal non-bituminous product compatible with sealant.
 - b. Sealtight self-expanding cork by WR Meadows, or equal compatible with sealant.

2.02 FORMWORK:

- A. General: All forming materials shall be new material at the beginning of this project. Materials may be re-used during the progress of the job provided they are capable of producing the formwork requirement for that use.
- B. Studs, Wales, Shoring, Centering, Bracing: "No. 2" grade or better D.F. of designed adequate size utilizing doubled wales.
- C. Unexposed Surfaces: Unoiled DFPA "Plyform B-B"; Douglas Fir "Standard", "T&G" or "Shiplap" boards, and patented modular forms.
- D. Exposed Surfaces: Use APA Ext. Plyform B-B, unoiled. Columns: Smooth plastic coated fiber or Jefferson Smurfit or MFG by Burke Company.
- D. Chemical, surface-conversion type form release agent: Shall be applied and reapplied for each reuse to new and cleaned forms. "Nox-Crete Form Coating" by Nox-Crete Chemical, Inc., "Formshield" by W.R. Grace & Company, "Release" by the Burke Co., are acceptable.

2.03 NON-SHRINK GROUT

- A. Required for setting bolts, base plates, and dowels in new and existing concrete. Grout shall be Sika Grout 212 as indicated on Drawings. Use in accord with manufacturer's directions. The grout shall be pre-mixed and shall require only the addition of water at the Project Site. Properly clean all existing surfaces of foreign materials prior to grouting operations.
- B. Dry Pack: Specified on Drawings, Sheet S-1.

3.00 EXECUTION

3.01 FORM CONSTRUCTION

- A. Shall conform to ACI 237 and to the following additions and clarifications:
 - 1. Tolerances: The tolerances shown in ACI 347 shall govern.
 - 2. Plywood: Forms used for exposed concrete shall have all joints level, backed by studs or blocking, filled and sanded smooth. Holes for ties in forms shall be 1/16-inch maximum oversize to prevent leakage of paste.
 - 3. Chamfer corner of all exposed concrete as indicated or as directed, using milled, tightly-set wood chamfer strips or pre-molded rubber strips.
 - 4. Wood and other below-grade formwork shall be completely removed.
 - 5. Coordination: Provide slots, openings, chases, recesses, grounds, nailers and screens required by other trades and subsequent work.

 Assure that they are secured in forms before placement of concrete.
 - 6. Wood in forms: No wood, temporary or permanent, to be used or installed inside forms, except for item specified.
 - 7. Sides or footings may be formed by neat excavations if banks will stand without caving and the neat trenches are cut 1 inch wider each side than footing dimensions on drawings. Protect edges of excavations with planks staked in place. If banks cave, widen trenches and form footings.

3.02 CONSISTENCY

A. Water shall not exceed amount permitted in mix designs. To be checked by the slump test, ASTM C143, made when test cylinders are cast, and additionally as required. Maximum slumps are indicated on the Drawings.

3.03 MIXING OF CONCRETE

- A. Mix concrete by transit mixers only in accordance with ASTM C94, unless otherwise specified.
- B. Mixing Time: At least 3 minutes after all water is added to mixture not less than one minute of which is immediately prior to discharge at Project Site.
- C. Final Position: Place transit mixed concrete in final position within 1-1/2 hours

after water is first added to the batch, and at the time of placing, the concrete shall be in such condition that it will flow readily into position. Retempering is not permitted.

- D. Water: Concrete at point of delivery shall have 1-1/2 gallons per cubic yard of required water withheld to be added at job site. Mix 5 minutes minimum after last water added.
- E. Load Tickets: In addition to Contractor's copy, legible copy of all load tickets from manufacturer shall be delivered to the Laboratory with each load stating quantities of all constituents in each load, bearing signature of the Weighmaster. Contractor shall keep record of his copy, slump and location in structure of each load and keep all tickets at the job.
- F. Certification: Transit mixed concrete supplier shall be a manufacturer licensed by the governing municipality. The manufacturer of transit mixed concrete shall deliver to Project Site a delivery ticket with each mixer truck. These delivery tickets shall specify type of concrete and weight of materials as noted in mix design and shall be signed by a State Licensed Weighmaster.

3.04 SLAB CONTROL JOINTS

A. Joint Spacing: Exterior - provide joints at 16 ft. maximum spacing. Locate joints coincident with architectural building features and as directed by the Architect.

3.05 CONSTRUCTION JOINTS

- A. Provide construction joints at locations required. See plans for joint detail. Subject to prior approval of the Architect.
- B. Obtain approval of where placing of concrete shall stop or start. The flow surface of freshly poured concrete shall be level whenever any pour is stopped, with tight dams as necessary to accomplish this. Provide keys and dowels at construction joints where that concrete pour is interrupted. Properly prepare clean, rough joint surfaces.
- C. Make construction joints at points shown or as acceptable to the Architect.
- D. Permit no concrete to harden on any portion of forms or reinforcement prior to final depositing of concrete.
- E. Pours, compact and rod floor slabs to the level and thickness shown.

3.06 ANCHORAGE MISCELLANEOUS METAL AND INSERTS

- A. Provide and install, or install those provided by others, accurately, in sizes and in locations shown or required.
 - 1. No pipes permitted in slabs. Conduits over 1/4 slab thickness not permitted. Thicken slab locally to permit this. Conduit in slabs to be middle 1/2 of section. Conduit and piping below slab on grade to be

encased in belled slab. Provide sleeves for pipes or conduit required to pass through footings as indicated on the Drawings.

3.07 CONVEYING AND PLACING CONCRETE

- A. Clean and wet forms before placing concrete, and clean excavations of loose material.
- B. Pouring Against Hardened Concrete Surfaces: Remove laitance and encrustation and expose solidly embedded sound aggregate. Thoroughly wash and moisten previously placed concrete surfaces before placing new concrete.
 - Contact surface may be washed with clean water under pressure (jet blast), may be sandblasted, or in areas which will be concealed from view when the building is completed an approved structural adhesive may be used on clean, structurally sound concrete. Remove wash water entirely from surface.
- C. Method of Placing: As nearly as possible in final position with minimum handling. Free drop, not more than 4 feet. Use pump, tremies, spouts, dump boxes and ports in formwork to reduce drop.
- D. Placing: Comply with requirements of ACI 301. Keep concrete as level as possible, with a minimum flow from one portion of the work to another. Place concrete with a workable, non-segregating mixture. Tamp and vibrate so as to produce a dense smooth job, free from rock pockets and voids. Use acceptable trunks and chutes where free drop exceeds 6 feet.

E. Pumped Concrete:

- 1. General: Do not use aluminum or joint lined pipe. Prevent concrete from contacting aluminum fittings.
- 2. Mix: Do not add more water to mix than maximum allowed on delivery ticket when a slump desired is greater than that initially in pump. Check that mix design entered on delivery ticket complies with that ordered.
- Pumps: Use only piston type pumps. Insure that they are reversible.
 Make standby pump available of no less capacity than that in use for operation at the Project Site within one hours' notice.

3.08 PUMP METHOD OF PLACING

- A. Concrete mix shall conform to requirements of these specifications, designed specially for pump placement and shall contain a proportion of fine aggregate not greater than 47% of the total aggregate volume, by loose dry volume, and shall entrain not more than 5% air.
- B. Capacity: Pumps used shall have a demonstrated capacity to deliver to the forms not less than 22 cubic yards per hour of the types of mixes required by these specifications, at the specified slumps, under average job conditions or

- those required by this work. Regular field service records shall be the only acceptable evidence. Do not use grout pumps for any concrete.
- C. Specified slumps shall not be exceeded and shall be frequently checked at both the pump and discharge ends. Slumps at both ends shall agree within 1 inch. Governing slump shall be that obtained at the discharge end.

3.09 PLACEMENT OF CONCRETE SLABS

- A. Preparations: Fine grade subgrades smooth and level and sprinkle well just prior to placing concrete. Broom and wash clean from surfaces, leaving no standing water. Place screed on adjustable screed support systems that will provide accurate support and will not penetrate the vapor barrier. Verify that all reinforcing steel and other embedded items are in correct position and properly secured.
 - 1. Surface Preparation: Before concrete is deposited upon or against concrete that has taken its initial set or has hardened, remove all encrustation from the forms and reinforcement, and mechanically roughen hardened concrete to minimum 1/4-inch coarseness amplitude.
 - a. Remove all laitance, oil, and loose particles from concrete; clean concrete surfaces and forms thoroughly by washing with water under stiff pressure, or sandblasting, if necessary, to obtain the specified condition.
 - b. Remove laitance after concrete has partially hardened (not less than two nor more than four hours after placing) by brushing with stiff bristles or by directing a stream of water from a 1/4-inch nozzle, or other acceptable method, to expose clean top surface of aggregate.
 - c. Where cleaning is not satisfactory to the Architect, sandblast surface and then wash again.
- B. Placement: Place at a rate not faster than concrete can be properly leveled and compacted, and at point of final repose, directly ahead of the screed bar, vibrating mass just ahead of the screed. Screed twice, the first to strike a full, rough level and move the concrete mass ahead. Follow this with necessary filling of low areas and another screeding to final level. Remove any puddles of "soup", pull screeds and screed supports and fill all depressions, and tamp with flat-surface or mesh tamper only enough to embed coarse aggregate to permit finishing, a maximum 1/8 inch, allowing as much time between tampings as weather conditions will allow.
- C. Leveling and Floating: Level using only wood or magnesium surfaced leveling floats. Steel flat blades <u>shall not</u> be used. Commence fog spray curing as specified below directly following this operation. Allow to stand until water sheen disappears from surface. Power float surface to even surface, producing levels or slopes indicated on Drawings. Surface tolerance to be true to within 1/4 inch in 10 feet, any direction. Follow with trowelling or other

finishes as specified.

3.10 COMPACTING AND VIBRATING CONCRETE

- A. Compact all concrete by vibrating with high-frequency vibration equipment producing not less than 10,000 cycles per minute to assure uniform density, aggregate distribution, and that mix reaches all parts of the form and encloses all reinforcing, hardware and inserts. Compacting and vibrating of concrete shall be as specified in ACI 308.
- B. Vibration: Vibrate all concrete placed. Do not vibrate steel or forms. Do not transport concrete in forms with a vibrator. Use vibrators in horizontal position only in slabs and shallow sections and do not drag.
 - 1. Vibrate in uniform vertical penetrations spaced about 12 in. o.c., rapidly plunging the vibrator to the bottom of preceding lift, then slowing withdrawing in an upward and downward motion until the top of the vibrator head appears at the surface of the concrete.
- C. Re-Vibration: Place concrete containing retarding admixture, if approved, by a schedule that allows layers of concrete to be in place and compacted for at least 30 minutes before next layer of concrete is placed. Remove bleed water on the concrete surface and from forms and re-vibrate the concrete down as far as the concrete is plastic before placing the next layer.
- D. Correction of Segregation: Before placing next layer of concrete, and at top of last placement for vertical elements, remove concrete containing excess water or fine aggregate or showing deficiency of coarse aggregate and fill the space with compacted concrete of correct proportions.
- E. Slabs: Compact and tamp concrete and bring 1/8 to 1/4 inch of mortar to surface. Wood float to straightedges and screeds. Do not use steel or plastic floats of any kind for initial floating operations. Do not apply finish until all surface water disappears and surface is sufficiently hardened. Remove bleed water and laitance as it appears.

3.11 CURING OF CONCRETE

- A. Cure all concrete for at least 10 days. Forms maintained tight and wet are considered adequate curing. Fresh backfill is adequate curing for subgrade walls and foundations. Exposed concrete surfaces shall be cured by use of fine mist-type fog spray continued without interruption until the final trowelling when concrete has attained final permanent set and bleeding has stopped. Then apply specified liquid membrane curing material in strict accordance with the manufacturer's instructions. Curing of concrete shall be as specified in ACI 309.
- B. Adequately protect all exposed concrete surfaces from damage which might result from work of other trades, on or about the Project, until final acceptance of the Work. Comply with applicable ACI requirements to secure satisfactory concrete in either hot or cold weather.

3.12 REMOVAL OF FORMS

- A. Forms, shoring and centering shall not be removed until concrete has cured sufficiently to permit safe removal. Shoring shall not be removed until the member shored has acquired sufficient strength to support its weight and the load upon the member including all construction loads. When forms are stripped there must be no excessive deflection or distortion and no evidence of damage to the concrete, due either to removal of support or to the stripping operation. When forms are removed before the specified curing is completed, measures should be taken to continue the curing. Conform to the following stripping times unless modified by the Architect or safety requirements are greater:
 - 1. Footings and footing walls 2 days
 - 2. Walls 24 hours
 - 3. Columns 24 hours
- B. Take care in removing forms from exposed surfaces that surfaces are not marred or gouged, that corners are true, sharp and unbroken. Break back snap ties or disassemble 3-part ties, without spalling tie holes.
- C. No steel spreaders, ties or other metal shall project from or be visible on any concrete surface.

3.13 FINISHING FORMED SURFACES

- A. Surface of formed concrete which will remain exposed in the finish work, both interior and exterior, including surfaces which will be painted, shall, when finished, have surfaces uniform for the intended texture; free from imperfect joints, fins, "honeycombing", air pockets or "bug" holes, or other such imperfections.
- B. Remove rough spots, stains and hardened mortar or grout from intended smooth surfaces by rubbing such surfaces lightly with fine carborundum stone. Use liberal amount of water and rub sufficiently to remove defects without changing texture of concrete while concrete is green, immediately after specified form removal.
- C. If intended smooth surfaces are not uniform texture, treat as follows:
 - 1. Prepare mix consisting of one part portland cement, 1-1/2 parts fine sand, and sufficient water to product a grout of the consistency of thick paint.
 - 2. Wet surface to be treated and apply grout uniformly with a brush, completely filling air bubble holes. Immediately float, scouring the surface vigorously. Allow cement grout to partially set for an hour or two, depending on weather.

- 3. When grout has sufficiently hardened so it can be scraped from surface with the edge of a steel trowel without removing grout from small air holes, cut off all that can be removed with a trowel, allow surface to dry thoroughly, then rub vigorously with burlap to completely remove surplus.
- 4. Further finish exposed intended smooth surfaces, if necessary, by means of honing with a carborundum stone to uniform surfaces as acceptable to the Architect.
- 5. Complete entire operation for any area the day it is started.
- Do not use dry cement sacking.

3.14 CURING VERTICAL SURFACES

- A. Thoroughly wet forms containing concrete, including the tops and exposed portion of concrete, and maintain in a thoroughly moist condition until the forms are removed, but not less than 7 consecutive days from time of placing concrete.
 - 1. Continuously wet concrete between the hours of 8:00 a.m. and sunset each day, including Saturday, Sunday, and Holidays, for the first 4 days, and not less than 3 times daily for the 3 remaining days until the concrete reaches design strength.

3.15 CONCRETE SLAB FINISH

A. Markings:

- 1. At expansion joints and elsewhere as indicated, mark slabs with a 1/4 inch radiused edging or marking tool. In textured work edge and mark slabs, after texturing, with a combination edging/smoothing tool approximately 1-1/2 inch wide.
- 2. Where saw cutting is indicated, time this operation so that it is performed as soon as concrete has hardened sufficiently to prevent aggregates being dislodged by the saw, but before shrinkage stresses have developed sufficiently to produce cracking.
- 3. Make marking lines straight, or curved as indicated, equally spaced and parallel to adjacent lines and/or walls, edges and other construction, and of uniform depth and cross section, with intersections accurately formed.

3.16 DEFECTIVE CONCRETE

A. Concrete work that is not formed as shown, is not true to intended alignment, not plumb and level where so shown, not true to line or grade, or which has irreparable voids or rock pockets, wood or debris embedded in it, or does not fully conform to these Specifications, will be deemed faulty material and workmanship.

- 1. Remove such work from Project Site and replace with concrete complying with requirements of these Specifications, at no extra cost to the District.
- B. If compressive tests of concrete cylinder specimens fail to show compressive strength specified, the Architect may require tests to be made of core samples taken from the placed concrete represented by the unsatisfactory test samples and shall be paid by the Contractor for testing.
 - 1. Take and test in accord with ASTM C42.
 - 2. If the results of core tests show that the compressive strength is less than specified, concrete will be deemed defective, and shall be replaced in a manner acceptable to the Architect, at no extra cost to the Owner.

END OF SECTION

SECTION 260000 GENERAL REQUIREMENTS FOR ELECTRICAL WORK

PART 1 GENERAL: Requirements of Division 00 and 01 apply to this Section.

1.01 WORK UNDER THIS SECTION: The work under this Section shall include all labor, materials and equipment required for the completion of electrical work as indicated on the drawings and as specified.

1.02 ELECTRICAL DRAWINGS

- A. For purposes of clearness and legibility, the electrical drawings are essentially diagrammatic. The size and location of the equipment is shown to scale wherever possible. The Contractor shall verify all conditions, data, and information as indicated on the drawings and in the specification sections where electrical is required.
- B. The electrical drawings show the required size and points of terminations of the conduits, the number and size of wires therein, and suggest the proper route for the conduit. However, it shall be the responsibility of the Contractor to install the conduits with a minimum number of bends in such a manner as to conform to the structure, avoid obstructions, preserve headroom, keep openings and passageways clear, and meet all applicable code requirements. The routing of conduits may be changed and approved by the Architect, providing the length of any conduit run is not increased or decreased more than 10% of the length shown on the drawings.
- C. It is intended that outlets be located symmetrical with architectural elements not-withstanding the fact that locations shown on the drawings may be distorted for clearness in representation.
- D. The Architectural and Structural Drawings take precedence over the electrical Drawings in the representation of the general construction work. The drawings of the various trades take precedence in the representation of the work of those trades. The Contractor shall refer to all drawings to coordinate the electrical work with the work of the other trades.

1.03 TERMINOLOGY

- A. The term "signal system" shall apply to the clock, bell, fire alarm, annunciator, sound, public address, buzzer, public telephone, television, intercommunication, and security systems.
- B. The term "low voltage" shall apply to systems operating at 600 volts and under.
- C. The term "provide" used on the drawings and elsewhere in the specifications shall be considered to mean "furnish and install".
- D. The term "UL" shall be considered to mean "Underwriters Laboratories, Inc."

1.04 ORDINANCES AND REGULATIONS

A. All electrical work shall meet the requirements of all legally constituted authorities having jurisdiction, including municipal and county building and County building and electrical ordinances, the California Code of Regulations; Title 24, the Safety Orders of the State Division of Industrial Safety, and the Fire and Panic Safety Standards of the State Fire Marshal. All new material and workmanship shall conform to the Regulations of the National Board of Fire Underwriters for Electrical Wiring and Apparatus and all new material Shall be listed by "UL" as inspected and approved.

1.05 PERMITS AND INSPECTIONS

A. The Contractor shall obtain and pay for all permits and inspections which are required for the electrical work by legally constituted authorities having jurisdiction, and shall deliver all certificates of inspection to the District. The permit number and the date received shall be filed with the District's Construction

Branch before the electrical work is started.

1.06 RECORD DRAWINGS

- A. The Contractor shall maintain a set of DSA approved prints in good condition at the filed office of the Architect, and immediately upon the installation of any electrical work which is different from the work shown on the contract drawings, the Contractor shall clearly indicate the change on the prints with fine line red ink. Work indicated on the Change Order drawings or called for on the Change Orders shall also be clearly indicated on the prints. The location and depth below finished grade of the ends of all underground conduit studs shall be fully dimensioned. Dimensions shall be given to the buildings or permanent landmarks. All additional pull and junction boxes not shown on the drawings shall be indicated on the prints.
- B. On or before the date of final inspection, the Contractor shall deliver the corrected and completed prints to the Architect. Delivery of prints will not relieve the Contractor of the responsibility of furnishing required information which may have been omitted from the prints.

1.07 MATERIAL LIST

A. The materials required by these specifications are designated descriptively. Within 35 calendar days after the award of the Contract, the Contractor shall submit to the Architect, for his approval and the approval of the Electrical Engineer, seven copies of the list of materials that the Contractor proposes to furnish. Each tem shall be identified by the manufacturer's name and catalog number. Two copies of the approved material list will be returned to the Contractor unless otherwise specified. All materials shall be new unless otherwise specified. For purposes of uniformity, only one make or brand of material will be accepted for each type of material to be used in the work.

1.08 SHOP DRAWINGS

- A. Within 35 calendar days after the Contract is awarded, the Contractor shall Submit to the Architect for approval, shop drawings for equipment. Seven copies of the drawings shall be furnished unless otherwise specified. The shop drawings shall be approved by the Architect and Electrical Engineer before construction of equipment shown on the drawings is started. Two copies of the approved drawings will be returned to the Contractor except as otherwise specified. See shop drawings requirements in the General Conditions for additional information.
- B. The drawings shall show completely the work to be done, but approval by the Architect or the Electrical Engineer shall not be construed as waiving any of the requirements of the contract, and particularly shall not be construed as relieving the Contractor of full responsibility for fitting his equipment into the spaces pro- vided and to the work of the various trades.
- C. In addition to other drawings called for herein, the following drawings will be required:
 - 1. New and Revised Switchboards: Including a front elevation showing the dimensions and the locations of the equipment on the switchboard, the make, kind, and size or capacity of all equipment and bussing, the location of each service conduit entering the switchboard, all barriers, nameplate inscription, finish, total weight and size, and locations of anchor bolts.
 - 2. Standard and Special Panelboards: Including a front elevation, cabinet dimensions, make, location, and capacity of equipment, size of gutters, type of mounting, finish, and catalog number of locks.
 - 3. Signal Terminal Cabinets: Including front elevations, cabinet dimensions, types of mounting, doors, barriers, catalog number of locks, and finishes.
 - 4. Lighting Fixtures: Including detailing and dimensioned working drawings showing kind, weight, and thickness of materials, method of fitting and fastening parts together, location and number of sockets, size of lamps, and complete details of the method of fitting and securing the fixtures in place in the building and connecting to the electrical outlets provided drawings shall contain sufficient information to enable a work- man to construct and install the fixtures without further instruction.
 - 5. Transformer: Including make, catalog number, dimensions, finish, type, insulation class, design temperature, taps provided, regulation at 50% and 100% of full load, no load loss, full load loss, percent efficiency, percent impedance, sound level, continuous capacity rating, and connection schematic.
 - Special Equipment (such as public address consoles, equipment racks, control panels, speaker baffles, clock and fire alarm system components etc.): The required number of shop drawings and the detail to be included thereon shall be as specified in another section.

1.09 STRUCTURAL CONDITIONS

- A. Where conduits are to pass through or interfere with any structural member, or where notching, boring, or cutting of the structure is necessary, or where special openings are required through walls, floors, footings, or other building elements to accommodate the electrical work, all such work shall be done as directed by the Architect or Structural Engineer and as approved by OSA.
- B. The placement of conduits in concrete slabs and structural members shall comply with the requirements of the applicable section of Title 24, Public Works, and shall be as directed by the Structural Engineer and approved by OSA.
- C. Where a concrete encasement for underground conduits as-builts a foundation wall or underground structure which the conduits enter, the encasement shall, except where another means to maintain its position in relation to the structure is indicated on the drawings, rest on a haunch integral with the wall or structure, or shall extend down to the footing projection, if any, or shall be doweled into the structure. Underground structures shall include manholes, pull boxes, vaults, and buildings.
- D. Holes required for conduit entrances into floodlight poles or other poles shall be drilled, and conduit nipple or coupling shall be welded to the poles. Welds shall be by the electric arc process, and shall be continuous around nipple or coupling.

1.10 CUTTING AND PATCHING

A. All cutting and patching of the rough and finish construction work shall be done as required for the installation of the work under this section. Patching shall be of the same materials, workmanship, and finish as, and shall accurately match the surrounding work. The work shall be done under the instructions of the Architect and/or the Structural Engineer and as approved by OSA.

1.11 EXCAVATIONS AND TRENCHES

- A. All excavations and trenches required to install the electrical work shall be done as specified hereinafter.
- B. Provide, install, and maintain sufficient shoring, bracing, or bulk heading where required to support any trenches or excavations.
- C. Before excavating any trench 5'-0" or more in depth, the Contractor shall submit to the District's Structural Engineer for approval, a detailed drawing showing the design of shoring, bracing, sloping, or other provisions to be made for protect-ion of workmen from the hazard of moving ground. If such design varies from the standards established by the Construction Safety Orders of the California Division of Industrial Safety, the drawing shall be prepared by a registered Civil or Structural Engineer. None of the aforementioned trenching shall be done be-fore the Contractor receives signed approval from the District.

- D. Trenches parallel to footings shall be not closer than 18" to the face of the footing or mudsill, and shall not be below a plane having a downward slope of two horizontal to no vertical from a line 9" above the bottom of the footing or mud-sill. Grade bottom of trenches to a uniform slope as required to prevent the foundation of pockets in the conduit.
- E. All plants, shrubs, turf, and granite surfacing which occur in the area of excavations and trenches shall be carefully removed, placed and protected from damage. After the excavations and trenches are filled, the plants, shrubs, turf, and surfacing shall be replaced under the direction of the Architect. Sidewalks, driveway, and other cement or asphalt surfaces which are damaged during excavation or trenching shall be repaired to match the adjacent work in material, thickness, grade, and finish.

1.12 BACKFILLING

- A. Trenches shall not be backfilled until after separate inspection and approval of the conduit and the concrete work by the Architect. Backfilling shall be done using the excavated native material or approved imported soil. Backfilling shall be done as soon as possible after inspection and approval. The backfill material shall be free of large clods, stones, and debris, and shall be evenly and carefully placed around and over the concrete encasement or the conduit, whichever applies.
- B. The fill shall be compacted to a density equal to that of the adjacent soil. Water shall be added to obtain optimum moisture content. Equipment used for compaction shall be power operated tampers or rollers of suitable design. Great care shall be used during the compaction of the bottom layers to prevent damage to conduits or other buried items. Hand tools shall be used to compact the backfill to a level 6" above the top of conduits without concrete encasement, where such conduits are permitted. Flooding of jetting shall consist of depositing the backfill in the trench or other excavation and continually filling with water to ensure complete saturation of the fill. Jetting shall consist of completely saturating the fill by introducing water through a jet pipe forced to the bottom of trench or excavation.
- C. All trenches or excavations for electrical installations outside of the barricaded working area, at existing sites, shall be backfilled within 72 hours after approval of the electrical installation by the Architect. Areas where asphaltic concrete or cement have been cut into shall be backfilled up to the existing grade. The required amount of soil shall be removed for patching the surfacing but only immediately prior to the patching. Excavations shall not be started until approval is obtained from the Architect.
- D. All trenches and excavations shall be kept free of water until backfilled. Any water accumulating in trenches or excavations shall be removed by pumping or other means approved by the architect. All excess soil resulting from trenches or excavations and not used in the site grading work shall be removed from the site.

1.13 BARRICADES

A. Trenches or other excavations required for the installation of electrical work, which are outside the barricaded work area, shall be barricaded at all times with continuous portable barricades and flashing warning fixtures. The barricades shall be constructed of not less than two 1" x 6" boards supported on triangular wood frames, spaced not to exceed 8'-0" apart. The top board shall be not less than 36" from the ground, and the open spaces between boards 12". Safely constructed and secured walkways through the barricades shall be provided as required by school traffic, if and where requested and approved by the Architect. At the completion of the work, the barricades shall be removed from the site.

1.14 CONCRETE WORK

A. Concrete, unless otherwise specified, shall be 2500 lb. concrete, proportioned and mixed in accordance with the requirements of Section 3A, "Concrete". Ex- posed concrete shall have a hand-troweled finish with neatly rounded corners and edges, and for patching shall accurately match the texture and finish of the adjacent existing surfaces. Concrete shall be cast in substantial unyielding forms where necessary or required. Forms shall be removed after the concrete has sufficiently set to permit their removal with safety. Calcium chloride shall not be used in concrete mix for underground conduits. For concrete encasements of more than one conduit, pea gravel shall be used in place of the 3/4" to 1" rock specified in Section 3A for the concrete mix.

1.15 STAGING AND LADDERS

A. Provide all staging, ladders, platforms, scaffolds, or similar facilities required to properly carry on the work under this section.

1.16 PROTECTION OF MATERIALS

A. Provide for the safety and good condition of all materials and equipment until final acceptance of the project by the Architect. Protect all materials and equipment from damage from any cause whatever, and provide adequate and proper storage facilities during the progress of the work. All damaged and defective work shall be replaced prior to final inspection.

1.17 CLEANING

- A. Exposed parts of the electrical work shall be left in a neat, clean, usable condition. Finished painted surfaces shall be unblemished and metal surfaces shall be polished.
- B. Thoroughly clean all parts of the apparatus and equipment. Exposed parts which are to be painted shall be thoroughly cleaned of cement, plaster, and other materials. Remove grease and oil spots with solvent. Such surfaces shall be wiped and all corners and cracks scraped out. Exposed rough metal work shall be smooth, free of sharp edges, carefully steel brushed to remove rust and other spots, and left in proper condition to receive finish painting.

C. The Contractor shall remove from the site all debris and rubbish occasioned by the building of dirt, debris, rubbish, marks, etc. caused by the performance of the work.

1.18 ELECTRICALLY OPERATED EQUIPMENT AND APPLIANCES

- A. Equipment and appliances furnished by the Contractor: The electrical work shall include furnishing and installing wiring enclosures for, and the complete connection of, all electrically operated equipment and appliances and any electrical control devices therefore, which are specified to be furnished and/or installed in this or other sections of the specifications, except electrical work specified or indicated to be in the mechanical work specification or drawings. All wiring enclosures shall be installed concealed except where exposed work is indicated on the electrical drawings.
- B. Equipment and appliances furnished by the District: Equipment and appliances shown on the drawings as "N.I.C" (Not in Contract), "Furnished by Others", or "Furnished by the District", will be delivered to the site by the District. Required electrical connections shall be made for all such equipment and appliances in accordance with accepted trade practices under the direction of the District's Inspector. Provide junction box where required unless otherwise indicated. Appliances will be furnished equipped with portable cord and cap. Pro- vide disconnect switch where required.

1.19 INSTALLATION OF EQUIPMENT AND APPLIANCES

- A. Conduit stubs for equipment shall be terminated in a coupling flush with the floor, and shall be extended with rigid conduit to a motor starter or junction box on the equipment.
- B. If the connection is from a flush wall-mounted junction box, install a weather-proof universal box extension and adapter by Bell Electric Company, and extend with rigid steel conduit to the motor starter or junction box on the equipment.
- C. All exposed final connections to equipment shall be by liquidtight, flexible metal conduit, unless otherwise indicated. A maximum of 24" of flexible metal conduit to a distance not less than 6" above the floor.
- D. Flexible conduit for all motors, shop and cafeteria equipment, and other equipment shall be liquid tight, flexible metal conduit, and shall contain a code size insulated green bond wire.
- E. All exposed conduit shall be run vertically and horizontally following the general configuration of the equipment, using cast, threaded, hub conduit fittings where required, and shall be clamped to the equipment with suitable iron brackets and one-hole pipe straps.
- F. Connectors for flexible steel conduit shall be the type which threads into the convolutions of the conduit. Connectors for liquidtight flexible metal conduit shall be approved for such use, and shall be installed to make a liquidtight connection.

G. All connections shall be made as necessary to completely install the equipment ready for use. The equipment shall be tested for proper operations and, if motorized, for proper rotation. If outlets of incorrect electrical characteristics or if any equipment fails to operate properly, the Contractor equipment fails to operate properly, the Contractor shall report to the Architect, in writing, listing the buildings and room in which located, the name, make, and serial number of the equipment, and a description of the fault.

1.20 CONDUIT MATERIALS

- A. Metallic conduit and tubing shall be manufactured under the supervision of UL, Factory Inspection and Label Service Program. Each 10' length of conduit and tubing shall bear the "UL" label and manufacturer's name.
- B. Rigid steel conduit shall be heavy wall, mild steel, zinc coated, with an inside and outside protective coating. Couplings, elbows, bends, and other fittings shall be the same materials and finish as the rigid steel conduit. Fittings, connectors, and couplings shall be threaded type.
- C. Electrical metallic tubing shall be steel tubing, zinc coated, with a protective enamel coating inside. Elbows and bends shall be the same material as the tubing. Fittings, connectors, couplings, etc., shall be gland compression type. Electrical metallic tubing is designated hereinafter as "EMT".
- D. Flexible steel conduit shall be of flexible interlocking steel strip construction with continuous zinc coating the strips. Connectors and couplings shall be approved fittings of the type which thread into the convolutions of the flexible conduit.
- E. Liquidtight flexible metal conduit shall be galvanized, heavy wall, flexible locked steel strip construction, with a smooth moisture and oil proof, abrasion resistant, extruded plastic jacket. Connectors shall be approved for use with liquidtight flexible conduit, and shall be installed to provide a liquidtight connection.
- F. Nonmetallic conduit shall be rigid PVC electrical conduit extruded to Schedule 40 dimensions of Type II, Grade 1, High Impact, Polyvinyl chloride. Sweeps, couplings, reducers, and terminating fittings shall be listed under the "UL" Re-examination Service and shall bear the manufacturer's listed marking.

1.21 CONDUIT INSTALLATION, GENERAL REQUIREMENTS

- A. Provide complete and continuous systems of rigid steel conduit, outlet boxes, junction boxes, fittings, and cabinets for all systems of electrical wiring including lighting, power, and signal systems, except as otherwise specified.
- B. Within all buildings EMT may be used in lieu of rigid steel conduit where permitted by ordinance except for the following: Exposed conduits in concrete, underground runs longer than 100", and feeders for all systems with conduit size 1 ¼" or greater.

- C. Flexible steel conduit shall be used, except where otherwise specified, for final connection of all motor terminal boxes, and shall be of sufficient length (not to exceed 36") only to allow full travel or adjustment of the motor on its base.
- D. All underground feeder distribution conduits for all systems may be nonmetallic conduit in lieu of rigid steel conduit except where otherwise specified or indicated.
- E. Conduit shall be concealed unless otherwise indicated. All conduits exposed to view, except those in attic spaces and under buildings, shall be installed parallel or at right angles to structural members, walls, or lines of the building. Conduits shall be routed to clear all access openings.
- F. Bends or offsets will be permitted unless absolutely necessary. The radius of each conduit bend or offset shall be as required by ordinance except for under-ground conduits, for public telephone conduits, and were otherwise indicated or specified. All bends and offsets shall be made with standard tools and equipment made especially for the purpose or may be factory made bends or elbows com-plying with the requirements for radius of bend specified herein. Public tele-phone conduit bends and offsets shall have a radius which is not less than 10 times the trade size of the conduit unless otherwise approved by the Telephone Company. Refer to "Underground Conduit Installation" for the radius of bends and offsets required for underground installations.
- G. Running threads will not be permitted. Provide approved conduit unions where union joints are necessary. Conduit shall be kept at least 6" from the covering on hot water and stem pipes and 18" from flues and breechings. The open ends of all conduits shall be kept closed with approved conduit seals during construction of the buildings and during construction of the buildings and during the installation of underground systems.
- H. The joints in all conduits installed in concrete, wet locations, exposed to the weather or underground shall be made liquidtight. The conduit threads shall be filled with approved pipe joint compound before screwing into couplings and threaded fittings.
- I. Where conduits are terminated in groups at panelboards, switchboards, and signal cabinets, etc., provide templates or spacers to hold the conduits in proper position and to preserve alignment. All conduits terminating at signal cabinets shall enter the cabinets in the following approved locations only. Conduits entering the top, side, and bottom of the cabinets shall be aligned in a single row, centered 2" from the rear of the cabinet. Conduits entering the back of the cabinet shall be aligned in a single row centered 2" from the top of the cabinet. Conduits shall not be spaced closer than 3" on centers.

- J. One inch and smaller conduits above metal lath ceilings shall be tied to the ceiling channels. One and one-quarter inch and larger conduits above metal lath ceilings shall be rigidly suspended with pipe hangers or pipe racks, or shall be secured to the superstructure with factory made pipe straps. Conduits in metal lath or steel stud partitions shall be tied to the furring channels or the stud. In ceiling spaces and in partitions, tie wires shall be spaced not more than 5' apart, shall hold the conduit tight against the channels and studs at the point of tie, and shall not bear any of the weight of the conduit. Tie wire shall be gauge galvanized double annealed steel tie wire.
- K. Where auxiliary supports, saddles, brackets, etc. are required to meet special conditions, they shall be made rigid and secure before the conduit is attached thereto.
- L. Conduit in ceiling spaces, in stud walls and under floors shall be supported with factory made pipe straps or shall be suspended with pipe hangers or pipe straps or shall be suspended with pipe hangers or pipe racks. The pipe straps shall be attached to, and shall hold the conduit tight at the point of support against the ceiling and floor joists, rafters, and wall studs, or 2" x 4" headers fitted between the joists or wall studs.
- M. Conduits installed on exposed steel trusses and rafters shall be fastened with factory made conduit straps or clamps which shall hold the conduit tight against the supporting member at the point of support.
- N. Conduits under the buildings shall be strapped with factory made conduit straps to the underside of concrete floor or joists, or wood floor joists, or shall be suspended with pipe hangers or pipe racks. Conduits under the buildings shall not rest on the ground but shall be suspended from the buildings or shall be buried below the surface of the ground. One inch and larger conduits under buildings shall be suspended with conduit hangers or racks.
- O. Pipe hangers for individual conduits shall be factory made, consisting of a pipe ring and threaded suspension rod. The pipe ring shall be malleable iron, split and hinged, and shall securely hold the conduit, or shall be springable, wrought steel. Rings shall be bolted to or interlocked with the suspension rods socket. Rods shall be 3/8" for 2" conduit hangers and smaller, and shall be ½" for 2 ½" conduit hangers and larger.
- P. Pipe racks for groups of parallel conduits and for supporting total weights not exceeding 500 pounds shall be trapezed type, and shall consist of a cross channels, Steel City Kindorf No. B-900, Unistrut No. P-1000 suspended with a 3/8" minimum diameter steel rod at each end. Each rod shall be fastened with nuts, top and bottom to the cross channel, and with square washer or top of the channel. Each conduit shall be clamped to the top of the cross channel with conduit clamps, Steel City Kindorf No. C-105 or Unistrut Nos. P-1111 through P-124. Conduits shall not be stacked one on top of the other, but a maximum of two tiers may be on the same rack providing an additional cross channel is installed. Where a pipe rack is to be longer than 18" or if the weight it is to sup-port exceeds 500 pounds, submit details of the installation to the Architect for approval.

- Q. Conduits which are suspended on rods more than 2' long shall be rigidly braced to prevent horizontal motion or swaying.
- R. Factory made pipe straps shall be one or two-hole formed galvanized clamps, heavy duty type, except as otherwise specified.
- S. Hanger straps, rods, or pipe supports under concrete shall be attached to inserts set at the time the concrete is poured; under wood use bolt or lag screws; under steel joists or trusses use beam clamps.
- T. Conduits shall be supported at intervals required by ordinance, but not to exceed 10'. One inch and smaller conduits installed exposed shall be fastened with one-hole malleable iron straps. Perforated strap and plumber's tape shall not be used in the support of conduits.
- U. Each conduit stubbed up through a roof or an arcade shall be flashed with a waterproof flashing which shall be constructed of 24 gauge galvanized sheet metal or of aluminum not less than .030" thick. The base of the flashing shall extend on the roof not less than 10" from the conduit. Flashing shall extend up the conduit not less than 6", and shall be in contact with the conduit for 1" at the top.
- V. Bushings for all sizes or rigid steel conduit shall be threaded insulating type. Set screw bushings are not acceptable.
- W. All flex conduits shall be cut square and not at an angle.

1.22 SLEEVES FOR CONDUITS

A. Provide sleeves where conduits pierce concrete wall, beams, and floors, except floor slabs on earth. Sleeves shall have ½" clearance around conduits. Sleeves shall not extend beyond the exposed surfaces of the concrete and shall be securely fastened to the forms. Where conduits pass through walls below grade, caulk with oakum and mastic between the conduit and the sleeve to obtain a watertight joint. Sleeves shall be adjustable type, of 26 gauge galvanized iron, Adjusto-Crete Co., "Adjust-to-Crete", or Jet Line Products, Inc., "Jet-Line".

1.23 SURFACE RACEWAY

A. Provide surface raceway as indicated on the drawings and paint to match surfaces where installed. The surface raceway shall be Wiremold #500 or approved equal, unless otherwise indicated. Provide toggle bolts or Red Head anchors to support surface raceway; plastic anchors are not acceptable. Single pole switch box shall be 4 1/8" long by 2" wide by 1 3/8" deep, by Wiremold. Surface raceway for single circuit outlets shall be three wire, grounded with outlets spaced 12' on center, Wiremold 20GB12. Two circuit outlet surface raceway shall be three wire, grounded, with outlets wire alternately spaced 30" on center, Wiremold 20GA30.

1.24 STUBS FROM PANELBOARDS

A. Install two 1" conduits from each flush mounted panelboard to accessible under floor space, and to accessible above ceiling space where these conditions occur. Cap the conduits with standard galvanized pipe caps.

1.25 FLOOR STUBS

A. At each point where floor stubs are indicated in open floor areas for connection to machines and equipment, the conduits shall be terminated with couplings, the tops flush with the finished floor. Stubs shall extend above the couplings the indicated distance. Where capped stubs are called for, the couplings shall be closed with iron plugs with screwdriver slots.

1.26 UNDERGROUND STUBS

A. Underground conduit stubs shall be terminated at the locations indicated, except if necessary, they shall extend 5' beyond building foundations, steps, arcades, concrete walks, and paving. Rigid steel conduit stubs and nonmetallic conduit stubs shall be capped installing a coupling flush in the end wall of the concrete encasement and plugging with an approved plug. The "Record Drawings" shall show the location of the ends of all underground conduit stubs fully dimensioned with reference to the buildings or permanent landmarks. These dimensions, including depth below finished grade, shall be marked on the "Record Drawings" in the presence of the District's Inspector before backfilling the trench. Where extending existing concrete encased stubs, clean, chip, and wire brush the end of the existing concrete and brush on a heavy coat of neat cement paste or epoxy bonding agent.

1.27 MARKERS FOR UNDERGROUND STUBS

A. Over the ends of individual underground conduit stubs and/or groups of conduit stubs, install 4" PVC x 18" deep filled with concrete, flush with finished grade in asphaltic concrete or lawns, and 2" above finished grade in planting areas. Cast a 3" x 3" brass plate engraved "ELECT" flush in the top of the concrete. Secure the plate to the concrete with brass dowels or other approval anchorage methods.

1.28 SEISMIC SEPERATIONS AND EXPANSION JOINTS

A. Where conduits embedded in masonry or concrete cross seismic separations between buildings, expansion joints, or at locations indicated, the Contractor shall provide a sliding or a sliding and deflecting fitting, as conditions require, in each conduit. Sliding fittings shall be O-Z Electrical Mfg. Co. Inc. Type "AX", with bonding strap and clamps. At exterior locations use O-Z Electrical Mfg. Co. Inc. type "EX".

1.29 CONDUITS SEAL FITTINGS

- A. Provide conduit seal fittings where indicated on the drawings. All conduit seals shall be of rigid galvanized steel. Seals in horizontal runs shall be Appleton Type ESU or Crouse Hinds Type EYS. Seals in vertical runs shall be Appleton Type SF, Crouse Hinds Type EYD, or equal, with continuous drain.
- B. Install sealing compound after wire has been installed. Insure drain is not blocked in vertical seals when installing compound. Where conduit seals are used in hazardous area applications, there shall be no conduit coupling, fitting, etc. between the seal and the boundary of the hazardous area.

1.30 CONDUIT PENETRATION IN FIRE RATED STRUCTURE

A. Provide any U.L. listed material used in accordance with U.L. design for making fire rated seals around penetrations through floors, walls, elevator shafts, etc.

1.31 CONDUIT IN SLABS ON EARTH

- A. Unless specifically approved by the State Office of Architecture and Construction, conduits 1 ¼" size and larger shall not be installed in structural concrete slabs. Where conduits are permitted, and are installed in concrete slabs on earth, the slabs shall be thickened at the bottom where conduits occur to provide 3" of concrete between the conduit and earth. The required excavation shall be part of the work of this Section. The concrete installation is specified under Section "Concrete".
- B. If the concrete slab is 5" or more in thickness with a moisture barrier plastic sheet between the earth and the slab, the 1" and smaller conduits shall be installed in the slab with a minimum of 1" concrete between the earth and conduit.

1.32 UNDERGROUND CONDUIT INSTALLATION

- A. All conduits installed underground shall be entirely encased in concrete 3" thick on all sides with multiple conduits spaced not less than 1 ½" apart, except where otherwise specified. Provide approved conduit spacers as required to prevent any deflection of the conduits when concrete is placed and to preserve the position and alignment of the spacers. Anchors shall be installed to prevent floating of conduits during pouring of concrete. Red concrete shall be used to encase conduits of systems operating above 600 volts.
- B. All underground conduits shall be buried to depth of not less than 24" below finished grade to the top of the concrete envelope, unless otherwise specified.
- C. Assemble the sections of conduit with approved fittings and stagger all joints. Cut ends of conduit shall be reamed to remove all rough edges. The joints in all conduits shall be made liquidtight. All bends at risers shall be completely below the surface where possible.
- D. Two or more conduit runs in a common trench shall be separated by at least 1 ½" of concrete. Electric conduit runs installed in a common trench with other utility lines shall be separated from such lines by at least 12" horizontally. Public tele-phone conduits shall be separated from electric conduits or other utility lines by not less than 3" of concrete.
- E. The District's Electrical Inspector shall be called to the site for approval of all underground installation before and during concrete pour. Where considered necessary by the District's Electrical Inspector, a mandrel shall be drawn through each run of conduit in the presence of the Inspector, before and after pouring concrete. The mandrel shall be 6" in length minimum, and have a diameter which is within ½" of the diameter of the conduit to be tested.

- F. Nonmetallic conduit installations shall comply with the following additional requirements: All joints in PVC conduit shall be sealed by means of approved solvent weld cement supplied by the conduit manufacturer. All nonmetallic conduit bends and deflections shall comply with the requirements of the applicable Electrical Code, except that the minimum radius of any bend or offset for conduits sized from ½" to 1½" inclusive shall not be less than 24". All bends at risers and the risers shall be rigid steel conduit, and shall comply with the requirements specified herein for underground rigid steel conduit installations. The radius of the curve of any bend or offset, in nonmetallic conduit for the Public Telephone Systems, shall not be less than 10 times the trade size of the conduit, unless otherwise specifically approved by the Public Telephone Company.
- G. Rigid steel conduit installations shall comply with the following additional requirements: Conduit threads shall be filled with approved pipe joint compound before screwing into couplings. The couplings, adjacent conduit on each side of couplings, and all wrench abrasions shall be painted with asphaltic compound. Where sweeps are specified or indicated, the radius shall not be less than 10'. The radius of the curve of the inner edge of any bend or offset shall not be less than is permitted in the "Conduit Bend Radii" table for rigid steel conduit field bends in the applicable Electrical Code, unmodified by any exceptions, bulletins, or amendments. The radius of the curve of bends or offsets for the Public Telephone Systems shall be not less than 10 times the trade size of the conduit, unless otherwise specifically approved by the Telephone Utility Company.

1.33 PULL WIRES

A. A 1/8" polypropylene cord shall be installed in each empty conduit. A 1/8" poly-propylene cord shall be installed in each underground service conduit unless otherwise required by the Utility Company.

1.34 BOXES, OUTLET, AND CONDUIT FITTINGS

- A. Outlet boxes used in concealed work shall be galvanized or sherardized steel, pressed or welded type, with knockouts. Provide extension rings to flush out with new or added finishes.
- B. In exposed work, outlet boxes and conduit fittings required where conduit runs change direction or size shall be cast metal with threaded cast hubs cast integral with the box or fitting. Boxes and fittings shall not have unused spare hubs except as otherwise indicated or specified. Route all exposed conduit to exterior A.C. units in such a manner to make possible the reroofing of the areas where they occur.
- C. Fittings shall be cast metal and non-corrosive. Ferrous metal fittings shall be cadmium plated or zinc galvanized. The casting shall be true to pattern, smooth, straight, with even edges and corners, of uniform thickness of metal, and shall be free of cracks, gas holes, flaws, excessive shrinkage and burnout sand.
- D. Covers for fittings shall be galvanized steel or noncorrosive aluminum, and shall be designed for the fitting with which used.

- E. Light fixture outlets shall be 4" octagon, 4" square or larger, depending upon the number of wires or conduits therein, and shall be equipped with 3/8" malleable iron fixture studs, and plaster rings. Plaster rings shall have round opening with two ears drilled 2023/32" center to center.
- F. For local switch outlets, use 4" square boxes for single gang, 5" square boxes for two-gang, and special solid gang boxes with gang plaster ring for more than two switches.
- G. For all receptacle, clock, bell, fire stations, speaker, thermostat, and telephone outlets, use 4" square boxes or larger, if necessary, with single gang plaster rings. For television outlets, use 4-gang deep boxes and 4-gang plaster rings. For buzzer, communication switch, and handset outlets, use 4" square boxes with 2-gang plaster rings.
- H. Plaster ring shall be provided on all flush mounted outlet boxes except where otherwise indicated or specified. All plaster rings shall be the same depth as the finished surfaces.
- In existing plywood wall or drywall construction, and where flexible steel conduit is finished into all the walls, one-gang and two-gang outlets for wiring devices may be rectangular steel boxes with plaster ears. Boxes shall be fastened to plywood with a flat head screw in each plaster ear screw hole. Boxes fastened to gypsum board shall be RACO "Gripite".
- J. Factory made knock-out seals shall be installed to seal all box knockouts which are not intact.
- K. At each location where flexible conduit is extended from flush outlet box, provide and install a weatherproof universal box extension adapter by Bell Electric Company.

1.35 JUNCTION AND PULL BOXES

- A. Junction and pull boxes, in addition to those indicated, shall only be used where absolutely necessary with the specified direction of the district's electrical inspector in each case.
- B. Interior and non-weatherproof boxes shall be constructed of blue or galvanized steel with ample laps, spot welded, and shall be rigid under torsional and deflected forces. Boxes shall have auxiliary angle iron framing where necessary to insure rigidity. Covers shall be fastened to the box with a sufficient number of brass machine screws to ensure continuous contact all around. Covers of surface type boxes shall line up accurately with the edges of the box. Covers of flush type boxes shall extend ¾" beyond the edges of the box all around. Flush type boxes shall be drilled and tapped for cover screws at the site if the boxes are not installed plumb. All surfaces of pull and junction boxes and covers shall be given one coat of metal primer, and one coat of aluminum paint.

- C. Weatherproof pull and junction boxes shall conform to the foregoing for interior boxes with the following modifications: The cover of flush mounting boxes shall have a watertight gasket cemented to and trimmed even with the cover all round. Surface or semi-flush mounting pull and junction boxes shall be "UL" approved as "Raintight" and shall be complete with threaded conduit hubs. All exposed portions of boxes shall be galvanized and finished with a prime coat and coat of baked-on grey enamel.
- D. All junction and pull boxes shall be rigidly fastened to the structure and shall not depend on the conduits for support.

1.36 INSTALLATION AND SUPPORT OF BOXES

- A. Outlet boxes shall be flush with finished surface of wall or ceiling. They shall be plumb and securely fastened to the structure independent of the conduit. Except where otherwise indicated factory made bar hangers shall be used to support out-let boxes.
- B. Outlet boxes installed in ceilings suspended or furred with steel runner and/or furring channels shall be supported, except where otherwise indicated, by a Unistrut No. P-4000 channel spanning the main ceiling runner channels. Each box shall be supported from its channel by a 3/8" 16-threaded steel rod with a Unistrut No. P-4008 nut and a Tomic No. 711-B "Adapta-Stud". The rod shall be tightened to a jamb fit with the channel and its nut. The box shall be locked to the rod by means of a ½" locknut on the stud, and a 3/8" 16 hex nut locking the stud to the rod.
- C. The heights of outlets and equipment indicated on the drawings shall govern, but in the absence of such indications, the following heights above finish floor shall be maintained. Heights are to centerline unless otherwise noted:
 - 1. Return-Call Buzzer, Communication Switch, Push Button, Interphone, Light Switch, Other Switches, and Fire Station Outlets: 48".
 - 2. Bell Outlets in Corridors: 12" below ceiling.
 - 3. Clock, Speaker and Bell Outlets in Classrooms and Offices: 8'-0", or as directed.
 - 4. Outside Bell and Yard Light Outlets: 4'-0" above the second floor level for two or more story buildings; 12" below the top plates level for one story buildings without covered porch or arcade, and 12" below covered porch and arcade ceilings.
 - 5. Desk Public Telephone, Television, Desk Interphones, and Receptacle Outlets: 12".
 - 6. Panel boards and Terminal Cabinets: 6'-6" to top.

1.37 WIRE – 600 VOLTS OR LESS

- A. Wire shall be NEC Type "THHN" or "THWN" in sizes #4 and smaller, and NEC Type "THWN" in sizes #2 and larger, unless otherwise indicated. All wire shall have copper conductors. Wires No. 8 and larger shall be stranded. Wire smaller than No. 12 gauge shall not be used in the light and power systems.
- B. Wire adjacent to ovens and boilers, in range hoods, and at other dry locations where the operating temperature of the wire may be expected to exceed 60 degrees C but not to exceed ??? degrees C shall be National Electric Code Standard Type "THHN". Where the temperature may be expected to exceed 90 degrees C, wire shall be a type approved by UL for the temperature and installed conditions involved.
- C. All wire shall be delivered to the site in unbroken packages and shall be inspected and approved by the district's inspector before opening.

1.38 INSTALLATION OF WIRE

- A. Wire shall not be installed until all plastering throughout the building is completed, and all debris and moisture removed from the conduits, boxes, and cabinets.
- B. Wire-pulling compounds used as lubricants in installing conductors in raceways shall only be talc or other compounds approved and listed by UL. No oil, grease, graphite, or similar substances may be used. Pulling of #1/0 or larger conductors shall be done with an approved cable pull machine. Other methods, e.g. using vehicles, and block and tackles to install conductors, are not acceptable.
- C. The District's Electrical Inspector shall be called to the site and shall supervise the installation of all feeder cables. The District's Construction-Inspection Branch shall be notified not less than two working days in advance of the proposed time of installation.
- D. All splices necessary to make the work of all systems complete shall be made and all splices for wire No. 8 and smaller shall be soldered and taped, except for signal wiring or as otherwise specified herein.
- E. Pressure cable connectors, pre-insulated "Scotchlok" Type "Y", "R", or "B", spring loaded twist-on type may be used for splicing No. 10 gauge or smaller conductors in lieu of soldered connectors for all wiring systems except the public address district-owned telephone system, or system clocks.
- F. All joints, splices, taps, and connections for cables, No. 6 gauge and larger, shall be made with high pressure cable connectors approved for use with copper conductors.
- G. Wire in switchboards, panel cabinets, pull boxes, and other cabinets, except public address, shall be neatly grouped and tied in bundles with nylon ties at 10" intervals. At switchboards, panels and terminal blocks, wires shall be fanned out to the terminals.

H. Each neutral conductor which is not color identified throughout its entire length shall be painted white or taped white wherever it appears in a switchboard, cabinet, gutter, or pull box.

1.39 FEEDER IDENTIFICATION

A. All lighting and/or power low voltage feeder wires and cables shall be identified at each point of termination and at each point the conduit run is broken by a cabinet, box gutter, etc. Identification shall be by means of wraparound type markers. "E-Z code", or Brady "perma-Code", and shall include the feeder designation, size, and destination.

1.40 TAPE

A. All splices, joints, and connectors joining conductors shall be covered with insulation equivalent to that on the conductors. Free ends of conductors connected to an energized source shall be taped. The voids in irregular connectors shall be filled with insulating compound before taping. Thermoplastic insulating tape approved by UL, Inc. for use as the sole insulation of splices shall be used, and shall be applied according to the manufacturer's printed specifications.

1.41 RECEPTACLES

- A. Duplex receptacles shall be specification grade, 15 amperes, 125 volts, 3 wire, side wired with binding screws, parallel slots, U-ground, plaster ears and captive mounting screws. Bode shall be phenolic, plastic, or bakelite. Receptacles shall have a heavy duty, three blasé current carrying contacts, and double wipe flat blade around contacts. Receptacles shall be Arrow-Hart 45242-SI, Sierra 1402, Slate 5242-IV, or Leviton 50141.
- B. Single receptacles shall be specification grade, grounding type, side wired, with binding screws. Receptacles shall have standard size ivory bakelite base. For circuits consisting of one single receptacle only, the ampere rating of the receptacle shall be the same as the circuit breaker or fuse. 15 ampere, 125 volt receptacles shall be NEMA 5-15R, Arrow-Hart 5251-I. 20 ampere, 125 volt receptacles shall be NEMA 5-20R, Arrow-Hart 5721-I.
- C. TL20A receptacles, so indicated on the drawings, 3-wire, side wired, with binding screws, rated 20 amperes at 250 volts, with grounding contact connected to supporting bridge, porcelain base, "Twist-Lock" devices, Hubbell Cat. No. 7310, and shall be used with 2-wire, 208 or 240-volt circuit only.
- D. Kiln receptacles and range receptacles shall be 4 pin, 4-wire, grounding type rated 50 amperes at 125/250 volts, polarized, Arrow-Hart Cat. No. 5754, and shall be provided with a 2-gang, stainless steel plate, Arrow-Hart Cat. No. 9336.
- E. Drier receptacles shall be 3-wire, non-grounding type, rated 30 amperes at 250 volts, polarized with "L" shaped and angled straight contacts and ivory bakelite base, Arrow-Hart Cat. No. 9344-I with a 2-gang stainless steel plate Arrow-Hart Cat. No. 9302-C.

- F. Ground fault interrupter type receptacles shall consist of a single receptacle and reset device manufactured in a standard configuration for use with a duplex plate. Receptacles shall be feed-thru, 15 ampere, NEMA 5-15R, ivory in color, and shall be Square "D" No. GFSR-1151C, or equal. Exterior mounted receptacles shall be weatherproof.
- G. Weatherproof receptacles shall, except where otherwise indicated or specified, consist of a duplex receptacle as specified herein, and a metal plate with die cast hinged lid and weatherproof mat, Arrow-Hart Cat. No.5252-WP. Receptacle shall be female, twist-lock, 4-wire type with equipment ground. Device shall be complete with plate and cover mounted on a weatherproof box. Device shall be Hubbell 7379 surface mounted.

1.42 LOCAL SWITCHES

- A. Local switches shall be tumbler type, specification grade, rated 20 amperes at 120 or 277 volts AC only, with plaster ears, binding screws for side wiring, and standard size composition cups which fully enclose the mechanism. Switches shall be approved for use at currents up to the full rating on resistive, inductive, tungsten-filament lamp and fluorescent lamp loads, and for up to 80% of the rating for motor loads. Switches shall be single pole, double pole, 3-way, 4-way, non-lock type, and lock type as indicated.
 - 1. No-lock type switches shall have ivory handles.
 - 2. All lock type switches shall have metal or nylon key guides with ON/OFF indication, and shall be operable by the same key. Keys for lock type switches shall be forked type, cut from 1/16" stock. Fork dimensions shall be: External 1/4" internal 5/323", depth 3/16", and radius 5/64".
- B. Key switches shall be Hubbel #120IL Single Pole.
- C. Rotary lock switches shall incorporate a tumbler type lock to prevent unauthorized operation. Lock shall be pin tumbler type by P & F Corbin, keyed to a HH-41 key. Lock switch shall be installed with pin tumblers facing downward. Key shall be removable in all positions. Each device shall be complete with two keys. Keys shall be delivered only to the District's Electrical Inspector. Switches shall be rated at 20 amperes, 120.277-volt AC. Switches shall be as follows: Single pole switches shall be Arrow-Hart 1182; 3-way switches shall be Arrow-Hart 1193. Switch plates shall be stainless steel, engraved with "ON" and "OFF" positions. Switch plates of two or more gang, provide special order plates equal to the single gang plate.
- D. Pilot light switches shall be rated 20 amperes and shall conform to the specifications for "local switches". The switches shall have red, rugged Lexan handles that are lighted by long-lasting neon lamps. Pilot light shall light when load is on. Single pole, 120 volt switches shall be by Hubbell 1221-PL.
- E. Remote control switches for mechanically held contactors arranged for 3-wire control shall be tumbler type, momentary contact single pole, 3-position with center "Off", rated 20 amperes at 120/277 volts AC only, with plaster ears, binding screws for side wiring, standard size composition cups which fully enclose the mechanism, and ivory handles, Arrow-Hart Cat. No. 1995-I. Lock type switches shall be Arrow-Hart Cat. No. 1995-I.

1.43 TIME SWITCHES

- A. All time switches shall be synchronous electric motor driven, and shall have sheet steel enclosure unless built into a panel or a switchboard. Contracts shall be rated for 35 amperes of tungsten lamp load at 240 volts, and shall have the number of poles and the throw indicated. Time switches shall have "Skip-A-Day" feature, and reserve spring power, electrically rewound. Switches for 2-wire control circuits or direct load switching shall be single throw and for 3-wire control circuits shall be double throw.
- B. For lighting control, time switches shall have astronomic dial. All time switch motors shall be 120 volts unless otherwise indicated or specified. Time switches shall be 3 poles, double throw. Tork #7120 ZL with astronomic dial, or equal by Paragon.

1.44 LIGHTING FIXTURES, LAMPS, AND COMPONENTS

- A. Furnish, install, and connect the lighting fixtures on the light outlets as indicated on the drawings and as specified herein. The fixtures shall be complete with lamps and all required fittings and accessories necessary for their complete and correct installation, and shall be clean and in perfect condition at the completion of the work.
- B. Each lighting fixture shall be the type indicated on the drawings and as specified herein. Fixtures of the same type shall be of identical make, design, and appearance. The size of each lighting fixtures shall be as specified herein for the lamp or fixture wattage indicated on the drawings.
- C. The design of all lighting fixtures, accessories, and supports, as well as the method of hanging fixtures, shall comply with all requirements for earthquake resistant construction of the State of California.
- D. For fluorescent fixtures installed in continuous rows, provide No. 12 gauge, 600 volt, Type "THHN" circuit wires through the fixture wiring channels as necessary to provide for the proper connection of the fixtures to the circuits in the outlets.
- E. Fluorescent ballasts shall be specifically designed to save energy while maintaining full light output. Average input wattage shall be 62 watts when operating 32 watt lamps. Operating temperature shall not exceed 90 degrees C. Ballasts shall be Class "P", with thermal protectors, and guaranteed against service failure for two years. The Contractor shall indicate the installation date on each ballast by inscribing the month, day, and year on the housing. Ballasts shall be 1430 milliampere, noiseless, high power factory type and shall be TL certified under CBM standards and UL, Inc. approved.

1.45 PLATES

A. Provide a plate on each new switch, plug, pilot light, buzzer, interphone, public telephone, and television outlet, and on existing and reset outlets where so indicated. Plates shall be of stainless steel unless otherwise specified. Public telephone, interphone, and buzzer outlet plates shall have single bushed openings. Sectional plates will not be accepted.

- B. Flush wiring device and signal system outlets indicated to be blank covered shall be covered with blank stainless steel plates. Flush lighting outlets to be capped shall be covered with Wiremold No. 5736 steel covers, painted to match the surrounding finish. Surface-mounted outlets indicated to be capped shall be covered with blank stainless steel covers.
- C. Switch and receptacle plates shall be provided with engraved designations under anyone of the following: (a) Three gang and larger gang switches. (b) Lock switches. (c) Pilot switches. (d) Switches so located that the operator cannot see one of the fixtures or items for equipment controlled with his hand on the switch. (e) Switches not in the same room with the fixtures or items of equipment con-trolled, exterior lights, and emergency circuit. (f) Switches for all unit heaters, air curtains, fly fans, exhaust fans, and GTC. (g) Receptacles operating at other than 120 volts. (h) Where so indicated on the drawings. (i) Switches operating on 277 volts.
- D. The designations shall be as indicated on the drawings or as specified, and shall be engraved in the plates with 3/16" high block type letters filled with black enamel. Where the wording of the designation is not indicated or specified, it will be given later and for estimating purposes, may be assumed average not more than 10 letters per gang.

1.46 SWITCHES, EXTERNALLY OPERATED

- A. Switches shall be 480 volt or 600 volt totally enclosed, externally operated, with quick-make, quick break operating mechanism, interlock cover, and provisions for locking cover in closed position and locking switch in "ON" and "OFF" positions. Switches shall be single throw unless otherwise indicated or specified. Switches controlling direct current loads shall be DC rated.
- B. Switch enclosures shall be general purpose, NEMA Type 1 for indoor locations and rain tight, NEMA 3R for outdoor locations and rain tight, NEMA Type 3R for outdoor locations, except where otherwise specified. Switches shall be fusible or non-fusible as indicated on the Drawings. Fusible switches shall accept cartridge fuses. Current ratings of switches shall accept cartridge fuses. Current ratings of switches, number of poles, solid neutral facilities, and the current rating of the fuses shall be as indicated on the Drawings. Switches shall have the proper horsepower rating equal to or greater than the horsepower of the motor controlled. Only the lower horse-power rating of dual rated switches will be accepted as a switch rating.
- C. Padlocking device shall lock the operating handle and cover with one padlock regardless of "on" or "off" position. Switches shall be "heavy Duty" type, Cutler-Hammer "K" series. Furnish one padlock and two keys with each switch. Padlock shall be Corbin 66 keyed to Corbin CAT 60 key.

1.47 SWITCH ASSEMBLIES

F. Each assembly of externally operated switches, motor starters, control devices shall be installed on a ¾" thick plywood backboard mounted on the wall where indicated, using lag screws, expansion anchors, and machine bolts, or toggle bolts as required. Wood plugs will not be accepted. Provide standard wiring gutters and short nipples to connect switches, starters, control devices, and conduits. The backboard shall have dimensions approximately 6" greater than the maximum height and width of the assembly, and shall be maximum height and width of the assembly, and shall be painted grey before the installation of switches or other devices.

1.48 PANELBOARDS, LIGHTING, AND APPLIANCES

- A. Lighting and appliance panelboards shall be wall mounted enclosed safety type with 120/240 volt, 3-wire, S.N., 277/480 volt, 4-wire, or 120/208 volt, 4-2i43 S.N. mains as indicated on the Drawings or specified elsewhere herein. Panel-boards shall be provided with main and/or sub feeder circuit breakers where so indicated or specified.
- B. Single pole branches for 120/240 volt or 120/208 volt panels shall be molded case, thermal magnetic circuit breakers with inverse time delay, trip free, quick make, quick-break mechanism, and silver alloy contacts. Circuit breakers shall be rated 20 amperes, 120 volts, AC except where otherwise indicated on the Drawings, the ampere rating marked on the handle, and shall indicate "ON-OFF" and tripped positions. Single pole branches for 277/480 volt panels shall be the same as for 120/208 volt panels, except they shall be thermal interrupters shall be incorporated into circuit breakers where indicated. They shall be listed by UL as a ground fault device.
- C. Two and three pole branches shall be enclosed, thermal magnetic type with inverse time delay, single handle common trip, quick-make, quick-break mechanism with silver alloy contacts. Circuit breakers shall be rated 20 amperes. 240 volts AC, unless otherwise indicated on the Drawings.
- D. Main and subfeeder circuit breakers shall be enclosed, thermal magnetic type with inverse time delay, single handle common trip, quick-make, quick-break mechanism, corrosion-resistant bearings and silver alloy contacts. Ampere frame size and trip rating shall be indicated on the drawings. Breakers over 225 amperes shall have interchangeable trip units. Main circuit breakers shall be non-automatic type unless otherwise indicated. The handles of main and subfeeder circuit breaker shall be under the cabinet door. Voltage rating shall be 240 volts AC, unless otherwise indicated on the drawings.
- E. Circuit breakers controlling direct current loads shall comply with the requirements specified herein and in addition, single pole breakers shall be rated 120 volts AC and 125 volts, DC, and 2 pole breakers shall be rated 240 volts AC and 125/250 volts DC.
- F. All circuit breakers shall be one piece, "bolt-on" type, and shall meet the short circuit interrupting capacity requirements shown ion the plans. All 1 pole, 2 pole, 3 pole circuit breakers shall be rated for 10,000 A.I.C.

- G. Panelboards supplied by conductors having overcurrent protection greater than 200 amperes shall be protected on the supply side by overcurrent devices having a rating not greater than that of the panelboard. All internal connections shall be made with plated copper bus bars and the busses shall extend for the full length of the space available for branch circuit breakers. Feeder cable connectors shall be installed at point of feeder entrance. All terminals and connectors shall be approved for use with copper conductors.
- H. Except where otherwise indicated, circuit breakers shall be in two vertical rows connected to the bus bars in a distributed phase arrangement. Two pole branches shall be balanced on the busses. Each single pole branch shall be numbered adjacent to its circuit breakers with odd numbers on the left and even numbers of the right.
- I. All specified circuit breaker spaces shall include necessary hardware required for future installation of the circuit breakers.
- J. Provide padlocking devices for each individual circuit breaker. Padlocking device shall be permanently secured to the panel dead-front plate. Clip-on type shall not be used unless specifically approved by the District's Electrical Engineer.

1.49 PANELBOARDS, POWER

A. Power panelboards shall conform to the specification for lighting and appliance panelboards where applicable, except that the mains shall be bussed 240 or 408 volt, 3 phase, or as required, and that the branches shall be enclosed, quick-make, quick-break, thermal-magnetic circuit breakers with inverse time delay trip, of the frame size and trip rating indicated, and with corrosion-resistant bearings, silver alloy contracts, and single handle, common trip, trip-free operation. Breakers over 225 ampere size shall have interchangeable trip units. All branch circuit breakers shall be 3 pole. Mains shall be automatic or non-automatic as indicated. All circuit breakers shall be one piece, bolt-on type.

1.50 PANELBOARD CABINETS

- A. Panelboard cabinets shall be code gauge galvanized steel or blue steel; and fronts, doors, and trims shall be code gauge furniture steel. Cabinets shall have at least 6" high gutters at top and bottom where feeder cable size exceeds #4, or where feeder cables pass throughout the cabinet vertically. Cabinets shall have top and bottom gutters sizes as required by the inspection department having jurisdiction, but never less than 6" where more than one feeder enters the top or the bottom of the cabinets. Side gutters shall not be less than 4" wide. The width of the cabinets shall be 20".
- B. Doors shall be cut true, accurately fit opening, and shall finish smooth across the joints. Rabbets shall be inside. The hinges shall be entirely concealed except for barrels and pins. Hinge flanges shall be welded to the door and trim. Each door shall be welded to the door and trim. Each door shall be equipped with flush type lock, spring latching, Corbin lock for metal door, keyed to a Corbin CAT 60 key.

- C. Where contractors, time switches, and other control devices are specified or indicated to be installed within panelboard cabinets, a separate compartment and door shall be provided at the top of the cabinet for such devices. The door shall be sized as required to permit removal for the contactor and other devices intact. Utters shall be provided at the sides and top of the compartment.
- D. Fronts shall be flush type unless otherwise indicated, and shall be fastened to the cabinets with ½"-20, 30-32 nickel plated oval headed machine screws and cup washers. Sufficient screws shall be installed to prevent buckling or warping of the panel front. Flush type fronts shall be aligned plumb and square, and cabinet shall be drilled and tapped for cover screws at the job to accomplish this if necessary.
- E. All surfaces of flush mounting panelboard cabinets shall be galvanized. The fronts shall be given two coats of metal primer and shall not be installed in the cabinets until after the finish coats of paint have been applied to the wall and the cabinet fronts, and they are thoroughly dry. Screws and cup washers shall not be painted.
- F. All surfaces of surface mounting cabinets and fronts shall be given one coat of metal primer and a finish coat of gray enamel baked on.
- G. Panelboard cabinets shall be rigidly supported in place independent of the conduits.

1.51 PANELBOARD SCHEDULES

A. The Contractor shall prepare a neatly typewritten schedule with the number or name of the room or area or the machine served by each panelboard circuit. The room numbers or names used shall be determined at the site, and shall not necessarily be those used on the drawings. The schedule shall also indicate the panel designation, voltage and phase, the buildings and distribution panel or switchboard from which fed. The schedule shall be mounted in a frame under transparent plastic 1/32" thick on the inside of each panelboard cabinet door.

1.52 TERMINAL CABINETS, SIGNAL

- A. All signal terminal cabinets shall conform in every respect to the specifications for "Panelboard Cabinets", except as modified herein.
- B. All terminal cabinets shall be flush type, with 2" trim and separate door with lock over each section, unless otherwise indicated or specified. Cabinets shall be provided with barriers to separate each system. Sections over 24" in width shall be provided with double door and locks. Each terminal cabinet, or section of a terminal housing a separate system, shall measure 12" long x 18" high x 5-3/4" deep, unless otherwise indicated on the Drawings. Trims for sectional cabinets shall be of one-piece construction.
- C. All public telephone terminal cabinets shall be equipped with ½" thick plywood backboards within the cabinets, and fastened in place with machine screws. Backboards shall be the largest size the cabinet and conduit terminations will permit.

D. Flush mounting terminal cabinets shall be finished as specified for flush mounting panelboard cabinets. Surface and semi-flush mounting terminal cabinets shall be finished as specified for surface mounting panelboards cabinets.

1.53 CONTACTORS

A. The contactor for control of lighting and/or fractional horsepower motors shall be magnetically operated, magnetically held, unless otherwise indicated or specified, and shall be capable of controlling up to its ampere rating Type "C" lamp loads, capacitive and inductive loads, and motor loads, without pitting the contacts. The number of poles, the throw, voltage ratings, and ampere rating shall be as specified or as indicated. The contactor shall be mounted on live rubber sound dampers without rigid contact between the contactor and the cabinet. The contactors shall be fed from a separate panel circuit. Contactors shall be designed for three wire control circuits unless otherwise indicated or specified. Contactors shall be provided with an auxiliary relay for two wire control where so indicated or required.

1.54 FUSES

- A. Plug fuses shall be tamper-resisting, time delay type with clear mica window through which the elements may be reviewed, Type S complete with proper adapters. Plug fuses shall be 20 ampere and fuse holder adapters 20 ampere only, unless otherwise specified.
- B. Cartridge fuses shall be the appropriate type for the loads supplied either single element or dual element non-renewable type, and shall provide adequate interrupting capacity, time lag, and thermal protection. Fuses for motor circuits shall be dual element, time lag type, sized for not less than 125% nor more than 150% of the motor full load current.
- C. All fuse holders and clips connected to under this contract shall be equipped with and serviceable fuses at the time of acceptance of the work.
- D. All grounding shall be as approved by the State of California, Division of Industrial Safety.
- E. All grounding electrodes shall be "made electrodes" as specified herein. Within every building the main switchboard or panel shall be bonded to the 1" or larger cold water line with minimum of 1" conduit with one #6 wire. All metallic piping systems (gas, fire, sprinkler, etc.) shall be bonded to the cold water line with 3/4" conduit with one #8 wire.
- F. Noncurrent-carrying metal parts of all high voltage, light and/or power, and signal conduit systems, supports, cabinets, switchboards, enclosures, fixed equipment, portable equipment, and motor frames shall be permanently and effectively grounded. Each transformer shall have an independent ground rod.
- G. Metallic or semi-conducting shields and lead sheaths of all cables operating at high voltage shall be permanently and effectively grounded at each splice and termination.

- H. Service neutral conductors of light and/or power alternating current systems shall be grounded if the maximum voltage to ground does not exceed 150 volts. Higher voltage service neutrals shall be grounded where so indicated on the Drawings or required by the Utility Company.
- I. Secondary neutral conductors of light and/or power alternating current systems shall be grounded. Neutrals shall be grounded at supply side of first switch controlling the system. Where no switch controls the entire system, the neutral shall be grounded at the transformer.
- Provide a "made electrode" bonded to the equipment enclosure at each J. separate building, including portable buildings, for each light and/or power system. Grounded (neutral) conductors shall be terminated at the neutral bus of the first panel or switchboard encountered within the building and the neutral bus, equipment enclosure, and "made electrode" shall be bonded together. Madeelectrodes shall be approved copper clad steel ground rods a minimum of 3/4" in diameter. Rods shall be driven to a depth of not less than 8'-0". Electrodes shall have a resistance to ground of not more than 5 ohms if practicable. If the resistance exceeds 5 ohms, two or more electrodes connected in parallel shall be provided. The minimum number and size of ground rods shall be as required by the state Electrical Safety Orders. Each electrode shall be separated from each other electrode by not less than 6'-0". Paralleled electrodes shall be connected together with approved fittings and approved grounding conductors in galvanized rigid steel conduit, buried not less than 12" below finished grade.
- K. Grounding electrodes shall be located in the nearest usable planning area, where not otherwise indicated on the Drawings and each electrode terminate within a concrete yard box installed flush with the finish grade, except in planting area, the concrete yard box shall be 2" above planting surfaces.
- L. Electrical continuity to ground of all metal raceways and enclosures, isolated from the equipment ground by use of non-metallic conduit or fittings, shall be provided with a green insulated grounding conductor of approved size within each raceway connected to the isolated metallic raceways or enclosures at each end in an approved manner. Each flexible conduit over 6 feet in length shall be provided with a green insulated grounding conductor of approved size.
- M. Yard boxes shall be precast concrete and shall be approximately 14" wide, 19" long, and 12" deep (outside dimensions, or larger, if necessary to obtain the required clearances. Boxes shall be equipped with bolt-down, checkered, cast iron covers, and cast iron frame cast into the box. Yard boxes shall be Brooks 36.
- N. Provide grounding facilities for public address systems consisting of a ½" conduit and a #10 TW wire connecting the main public address terminal cabinet, and where so indicated, other terminal cabinets, to a separate made electrode, complying with the requirements specified herein. An approved clamp shall be used to connect the conduit and wire to the electrode. The wire shall have a 4' free end in the terminal cabinet.
- O. Provide grounding facilities for public address systems consisting of a 3/4" C #6 Cu conduit only form the main telephone terminal to an accessible, approved grounding electrode.

1.55 NAME PLATES

- A. The following equipment shall be provided with nameplate unless otherwise specified: Switchboards, unit substations, motor control centers, control panels, push button stations, time switches, contactors, motor starters, motor switches, lighting panelboards, power panelboards, and terminal cabinets.
- B. Name plates shall adequately describe the function, voltage, and phase of the particular equipment involved. Where name plates are detailed or described on the Drawings, the inscription and size of letters shall be as indicated. For lighting and power panels, the name plate shall indicate the panel designation, voltage, and phase of the panel. For terminal cabinets, the name plates shall indicate the system housed therein.
- C. Name plates shall be black and white nameplate stock of bakelite with characters cut through the black exposing the white. Plates shall have beveled edges and shall be securely fastened in place with No. 4 Phillips head, cadmium plasted steel, self-tapping screws. Characters shall be 3/16" high unless otherwise indicated.

1.56 MARKING, EQUIPMENT, AND CONTROLS

A. All surfaces mounted starters, circuit switches, disconnect switches, contactors, and other devices controlling motors shall be identified. Abbreviations accept-able to the District's Electrical Inspector, along with an identifying number, shall be used. All markings shall be done with locking type stencils using paint of a contrasting color. Figures shall be 23/8" high unless otherwise required. Dymo Industries, Inc., self-sticking plastic labels, having embossed characters made with a typewriter, may be used, in lieu of stencils and paint.

1.57 WARNING SIGNS

- A. Provide a warning sign on the outside of each door or gate all rooms or enclosures containing high voltage equipment. The signs shall read: 'DANGER –HIGH VOLTAGE KEEP OUT". Signs shall be 7" x 14" with all lettering 1" high except the word "DANGER" which shall have 1-1/2" high letters.
- B. Provide a warning sign on each high voltage non-load break disconnect and fused cutout (not oil filled). The signs shall read: "DO NOT OPEN UNDER LOAD". Lettering shall be 1" high.
- C. Signs shall be of standard manufacturer, No. 18-gauge steel, with porcelain enamel finish. Letters shall be red on white background.

1.58 KEYS AND LOCKS

A. The Contractor shall provide two keys with each door lock furnished, including cabinet door locks, switchboard locks, etc.; and shall provide two keys for each lock switch on a switchboard or control panel; and shall provide one key with interlock or other lock switch the Contractor furnishes. Deliver all keys to the District's Inspector. Unless otherwise specified, all keys shall be Corbin 60.

1.59 VOLTAGE CHECKS

- A. The Contractor shall set the taps on all transformer, which are a part of this Con-tract, as necessary to provide satisfactory operating voltages with all present loads energized, including the new loads and any existing loads. A check shall be made in the presence of the District's Electrical Inspector at a panel fed from each transformer which is the farthest from the transformer. Voltages at the transformers ranging from 118 to 122 volts inclusive for 120 volt systems and proportionately equivalent for high voltage systems are acceptable.
- B. The Contractor shall provide all instruments and accessories required to perform the checks. Voltmeters shall be accurate within ¾ of 1% and shall have scales permitting the voltage readings to be made on the upper half of the scale. Calibration of the meters shall be satisfactory to the district. Voltmeters shall be Western Model 433 approved.

1.60 TESTS

- A. All systems of wiring shall be so installed that when completed, the systems will be free from short circuits and from grounds, other than required grounds. The Contractor shall provide all instruments for testing and shall demonstrate in the presence of the District's Electrical Inspector that each system of wiring meets the following minimum requirements for insulation resistance:
 - 1. For circuit of No. 12 or smaller wires: 1,000,000 ohms.
 - 2. For circuits of No. 10 or larger conductors, a resistance based on the allowable current-carrying capacity of conductors as fixed in the Los Angeles Electrical code as follows:

25 to 50 amperes inclusive: 250,000 ohms 100,000 ohms 101 to 200 amperes inclusive: 50,000 ohms 25,000 ohms 401 to 800 amperes inclusive: over 800 amperes inclusive: 5,000 ohms

- 3. The above values shall be obtained with all switchboards, panelboards, fuseholder, switches, and overcurrent devices in place and connected, and all switches closed.
- 4. If lampholders, receptacles, fixtures, and appliances for a system are also connected, the minimum insulation resistance permitted shall be one-half the values specified above.
- B. The Contractor shall provide a "megger" insulation tester which applies a minimum of 500 volts direct current for the tests when requested by the District's Electrical Inspector.
- C. High voltage wiring systems shall comply with the minimum requirements for insulation resistance specified above and in addition, shall meet the requirements specified elsewhere in this Section for such systems.

1.61 CONDITIONS AT THE SITES

A. The Contractor shall carefully examine the sites and existing buildings, shall compare the Drawings with the existing electrical installations, and shall thoroughly familiarize himself with all existing conditions within the scope of this work. By the act of submitting a bid, the Contractor will be deemed to have made such examination, and to have accepted such conditions, and to have made allowances thereof in preparing his figures.

1.62 MATERIALS

A. Existing materials replaced with new or which are removed and not indicated to be removed nor indicated to remain the property of the District shall become the property of the Contractor, and shall be removed from the site by the Contractor.

1.63 PROTECTION

A. The Contractor shall be responsible for all existing structures, pipelines, and improvements on the school property, shall repair any damage done to same to the satisfaction of the District, and shall take precautions at all times to avoid injury or damage to persons or property. Contractor shall also protect and preserve the work from damage or accident from any cause whatsoever, including the elements, and shall be entirely responsible for the completion of the work in accordance with the Drawings and Specifications.

1.64 COORDINATION OF NEW AND EXISTING WORK

A. The Contractor shall make all necessary alterations to coordinate and connect the existing with the new electrical work to the end that when the work is complete and in a satisfactory operating condition. The Drawings show the work which is to be in place at the completion of the installation. Existing work not indicated to be changed shall remain in use.

1.65 WORK DURING SCHOOL SESSIONS

A. The work will be used for school or business purposes while the work of this Contract is being performed. The work shall be arranged as to cause no unnecessary inconvenience and danger to students, faculty, or staff in their activities. The Contractor shall schedule his work in advance in cooperation with the District's Electrical Inspector.

1.66 MAINTENANCE OF SERVICE

A. All new electrical work shall be installed without interfering with the existing electrical systems at the sites while in use for school purposes. Light and power services, feeders, subfeeders, signal, and fire alarm systems and heating and ventilating systems, including any refrigerated equipment, shall not be disconnected while school is in session. If necessary the Contractor shall furnish and install temporary jumpers, switchbanks, and other equipment needed to maintain service herein specified. The Contractor shall remove all such temporary installations after the permanent connections have been made.

END OF SECTION

SECTION 260050 INTEGRATED COMMUNICATION SYSTEMS

PART 1 – GENERAL

1.01 GENERAL REQUIREMENTS

A. Related Documents: Drawings and General Provisions of Contract, including General and Supplementary conditions and Division 0 and Division 1 Specification Sections, apply to work of this Section.

B. General:

- 1. All bids shall be based on the equipment as specified herein. The System is designed to connect to the district wide Single Wire Informacast system. Any other system must be approved by the Owner's Representative prior to bid.
- 2. Bidders wishing to submit alternate equipment shall submit to the specifying authority, at least 10 days prior to bid opening, the equipment proposed to provide a precise functional equivalent system to meet specifications. Bidder shall provide adequate information prior to bid date such as specification sheets, working drawings, shop drawings, and a demonstration of the system. Bidder shall provide a "line by line" comparison between the specified system and the alternate system. Any alternate system must be able to provide 100% of the specified functions. It shall be the Bidders responsibility to provide enough information so the specifying authority can assure the Owner that the alternate system "meets or exceeds" the specified system. The bidder shall also provide the FCC registration number of the proposed system. Alternate supplier-contractor must also provide a list to include six installations of the identical system proposed which have been in operation for a period of two years including school name, school address, contact person, and telephone number. Requests for pre-approval that do not include all of the above information will be sent back "REJECTED" without comment.
- 3. Final approval of the alternate system shall be determined at the time of job completion. Failure to provide the "precise functional equivalent" shall result in the removal of the alternate system at the contractor's expense.

1.02 SCOPE OF WORK

- A. Furnish and install all equipment, accessories, and materials in accordance with these specifications and drawings to provide a complete and operating Integrated Communications System.
- B. Provide, terminate and test enhanced Cat 6a and Cat 6 cabling per specifications.
- C. Provide, terminate and test 9/125M fiber optic cabling per specifications.

- D. Provide subterminals with racks, patch panels, wire minders, cabling routes (ladder racks, ducting, Velcro straps, etc.), and other components as indicated herein and on the plans provided.
- E. Document and label all work per specifications.
- F. Verify exact location and mounting height of equipment, drops and raceway with Owner's Representative prior to installation.
- G. Provide pull lines, with a minimum test rating of 200 lb., required in all conduits after use to facilitate future cable installation.
- H. Provide grounding and bonding as required to support the communications infrastructure.
- I. The contractor shall provide all equipment, labor, and material necessary for satisfactory operating per plans and specifications. Systems shall be installed and wired in conduit or wire hold as shown on plans.
- J. Under this specification, the system shall provide a complete data system campus wide operation.

1.03 SUBMITTALS

- A. A complete set of manufacturer's Specification Sheets shall be submitted on all items including cable types.
- B. Submit outline drawing of system control cabinet showing relative position of all major components.
- C. Submit wiring diagrams showing typical connections for all equipment.
- D. Submit a certificate of completion of installation and certification for all programming, testing for all connections for cables, fiber from the manufacturer.

PART 2 - PRODUCTS

2.01 SERVICE AND MAINTENANCE

- A. The contractor shall provide a one-year warranty of the installed system against defects in material and workmanship. All labor and materials shall be provided at no expense to the owner during normal working hours. The warranty period shall begin on the date of acceptance by the owner/engineer.
- The system manufacturer shall maintain engineering and service departments capable of rendering advice regarding installation and final adjustment of the system.

2.02 QUALITY ASSURANCE

- A. All items of equipment shall be designed by the manufacturer to function as a complete system and shall be accompanied by the manufacturer's complete service notes and drawings detailing all interconnections.
- B. The contractor shall be an established communications and electronics contractor that has had, and currently maintains, a locally run and operated business for at least five years. The contractor shall be a duly authorized distributor of the equipment supplied with full manufacturer's warranty privileges.
- C. Except where specifically noted otherwise, all equipment supplied shall be the standard product of a single manufacturer of known reputation and experience in the industry. The supplying contractor shall have attended the manufacturer's installation and service school. A certificate of this training shall be provided with the contractor's submittal.

2.03 CONTRACTOR QUALIFICATIONS

- A. The bidder shall submit at least the following information to verify that the bidder has the necessary experience and qualifications to perform the specified work:
- B. A detailed brochure describing the firm's capabilities, present agreements with specified manufacturer's that they are authorized to install the specified equipment.
- C. Certify that all work shall be performed by an experienced communications system contractor having at least 10 years' direct experience with the components, devices and equipment specified herein and of similar scope.
- D. Certify that the contractor shall have been a factory authorized engineering contractor for all products specified herein for at least the last 5 years at the time of the bid.
- E. Certify that the contractor shall maintain a staff of qualified technicians able to respond to service requests. At least one staff technician shall have a minimum of 5 years experience servicing the products specified herein at the component level.
- F. Certify that the contractor shall be a licensed California contractor holding a C-7 class license.
- G. Certify that the contractor shall have on staff a registered communications designer (RCDD) who shall approve and stamp the final drawings and supervise the installation of the systems.
- H. Certify that the contractor shall have on staff, an experienced engineer with at least 5 years direct experience with the scope of the system design and shall possess a degree in Electrical Engineering with direct experience in system work at the construction level. In lieu of a formal degree, the engineer must have experience on at least 5 projects of similar scope where a licensed Electrical Engineer has been required.

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL WESTSIDE UNION SCHOOL DISTRICT

I. And certify that all installation technicians have at least 3 years' direct experience with systems installations of similar scope.

2.04 WIRING

- A. System wiring and equipment installation shall be in accordance with good engineering practices as established by the EIA and the CEC. Wiring shall meet all state and local electrical codes. All wiring shall test free from all grounds and shorts.
- B. All wiring shall be listed for the intended purpose.
- C. All interior wiring shall be in accordance with new construction guidelines suggested by the Manufacturer; including the speaker and the call-in switch and/or telephone handset.
- D. All CAT 6 and CAT 6a shall be color coded as shown at both ends, this includes the patch panel.

2.05 PROTECTION

- A. The contractor shall provide all necessary transient protection on the AC power feed and on all station lines leaving or entering the building.
- B. The contractor shall note in his system drawings, the type and location of these protection devices as well as all wiring information.

2.06 MATERIAL AND SYSTEM FUNCTIONS AND OPERATIONS

- A. Acceptable Manufacturers:
 - 1. The intent is to establish a standard of quality, function and features. It is the responsibility of the bidder to ensure that the proposed product meets or exceeds every standard set forth in these specifications.
 - 2. The functions and features specified are vital to the operation of this facility; therefore, inclusion in the list of acceptable manufacturers does not release the contractor from strict compliance with the requirements of this specification.

2.07 WIRE AND CABLE

- A. Station Cabling Single Sheath Category 6a:
 - 1. Four (4) pair, unshielded twisted pair (UTP) cable shall meet or exceed the installation, testing and performance specifications of ANSI/TIA 568-C.0, C.1,

C.2, and C.3. Three such cables shall be placed to each horizontal outlet. All cable sheaths must be imprinted with the Category 6a destinations.

2. For identification during installation, it is required that each sheath be of a district color. The Owner currently uses white (for voice), blue (for data1) and green (for data2) as its three colors.

Materials are:

Belden 10GX13 Multi-Conductor, Catalog #10GX13 00xx000, Plenum-rated. (xx=Blue, White and Green for color of cable sheath), Plenum -rated.

Berk-Tek, LANMark-XTP UTP Plenum Category Ga. Or Equal.

B. Fiber Innerduct: Fiber innerduct shall be provided from the main terminal to each sub terminal within the conduit routes identified. Innerduct shall have measured pull lines supplied by manufacturer, or inserted by Contractor during placement.

Materials are:

Carlon "Flex-Plus" non-metallic tubing, three-quarter inch (1") diameter #12007AAY series, or equal.

1. All innerduct shall be provided with male end adapters for future attachment into fiber panel boxes.

Materials are:

Carlon "Flex-Plus" non-metallic tubing yellow three-quarter inch (3/4") diameter male adapters, #A243E series.
Or Equal.

C. Fiber Components:

- 1. Fiber riser cable shall be placed in innerduct between the main terminal and each sub terminal.
- 2. Fiber cable provided and/or installed under this specification shall be in equal quantities for both multi-mode and single-mode fiber.
- 3. Provide single-sheath composite cable containing both multi-mode and single-mode fibers, each group with its own sub-sheath or wrap.

Materials are: Single mode 9/125M Berk-Tek PDR12B024-012CB3510/25-012AB1010 Siecor 12MM/125M fiber cable Or Equal.

4. Fiber Buffer tube break out kits: Each inside fiber cable shall be prepared for termination using buffer fan-out kits appropriate for 6 or 12 fibers.

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL WESTSIDE UNION SCHOOL DISTRICT

INTEGRATED COMMUNICATION SYSTEMS 260050-5 Materials are:

Siecor 6 or 12 Fiber Buffer Tube Fan-Out (8TF) Assembly Part Siecor FAN-BTXX-YY or Coring equivalent

BICC General Splitter Break-Out for dual-tube multi-fiber cables 2-6 fibers (For non-Siecor cable).

LC-type connector shall be attached, in the field, to the multi-mode fiber cable.

Materials are:

Corning Anaerobic Connector, LC, 50 μm multimode (OM2), part 95-051-98-SP.

Or Equal.

6. SC-type connector shall be attached, in the field, to the single-mode fiber cable.

Materials are:

Corning Anaerobic Connector, SC, singlemode (OS2), part 95-201-41-SP. Or Equal.

7. All terminated fibers shall be attached, and tested, to connectors mounted within wall-mount or rack-mount termination panels. Reference shall be made to the subterminal drawing detail for use of wall-mount or rack-mount panels.

Acceptable Rack-Mount materials are: Leviton 500i SDX Rack Mount Enclosures Or Foual

For LC connectors, use Leviton DSX molded plate, part 5F100-2EL For SC connectors, use Leviton DSX molded plate, part 5F100-2VC Or Equal.

8. Spare fiber cable shall be protected at each termination location with a plexiglass sheet and stand-off bracket assembly.

2.08 STATION JACKS

A. All modular jacks are RI-45 jacks meeting or exceeding the testing and performance specifications of ANSI/TIA 568C-5. All modular jacks at wall plates must be individually insertable and removable at the wall plate. The electrical contacts of the jack must be fully enclosed on the backside. Spring tension inserts may NOT be used to secure modular jacks to plate. The modular RJ45 jacks must be colored coded to match the Cat 6a station cables.

Materials are:

Leviton eXtreme series, Catalog #6110G-RW6 (WT), -RV6 (GR), -RL6 (BL). Hubbell NEXTSPEED Ascent C6A Series, White, Blue and Green. Or Equal.

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL WESTSIDE UNION SCHOOL DISTRICT

INTEGRATED COMMUNICATION SYSTEMS 260050-6

2.09 HORIZONTAL WALL PLATES

A. Wall Plates: Two-gang wall plates are required on all Horizontal drops.

Metallic Materials are: AMP 4-Port Dual-Gang, Flush Mount Cat #. Hubbell, SSF Stainless Steel Plate, Double Gang, Cat #SSF204 Or Equal

2.10 SUBTERMINAL BACKBOARD CABLE GUIDE MATERIALS

A. Cable Rings: Cable rings, preferably metallic D-Rings or C-Hooks, suitable for routing and grouping multiple cables on the backboards shall not exceed four inches (4") in height or four inches (4") in width. Mounting shall be by two screw holes only.

Materials are: Hubbell, Cat #MCCPSRA4 Panduit Cable Management D-Rings, CMD Series Or Equal

Note: This rack is used to mount up to 6 RMU of rack mount equipment flush to the wall. Ideal for small or tight spaced installations. Supports 150 lb. Made of strong, lightweight aluminum.

B. Relay Rack: Floor-mounted equipment rack shall be used within specified subterminal locations. The equipment rack shall be UL rated and typically supports 42U of 19"W rack mounted equipment.

Materials are:

Chatsworth Two-Post Floor-Mounted Relay Rack, 78"H x 19"W, Cat #55054-503 Or Equal

Note: This UL rated 2-post relay rack is used to mount up to 45U of rack mount equipment. It is made of strong lightweight aluminum.

2.11 SUBTERMINAL PATCH PANELS

A. Forty-eight (48) Port Category 6a Panels: Patch panels will be forty-eight (48) port, nineteen-inch (19") panels meeting or exceeding the testing and performance specifications of ANSI/TIA 568C-5.

Materials are:

Leviton eXtreme/Cat 6a Flat 110-Style Patch Panel, Cat #6A586-U48

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL WESTSIDE UNION SCHOOL DISTRICT

Hubbell NEXTSPEED Ascent Category 6a Patch Panel, 48 Port Cat 6a, Cat #HP6A48
Or Equal

- B. Cable Management/Cord Organizers: Wire-minders or cord organizers are required in each subterminal location to support and organize the patch cables placed on the front of the patch panels. The number and capacity of wire minders, and the distribution within the swing gate should be sufficient to evenly support and distribute the full capacity of the patch panels.
 - 1. One cable management panel is recommended for each patch panel.
 - 2. The use of 1U wire-minders may be used after consultation and approval from the Owner's Representative.

Materials are:

Homaco Series Cable Manager, 2U, Cat #HFM-19-2 Hubbell Cable Manager, 2U 3.5" Ring Depth, Cat #HC219M53N Or Equal

- 3. Data 1 circuit patch panels shall consist of forty-eight (48) RJ-45 jacks on a single nineteen-inch (19") panel. All jacks shall meet the specifications of TIA 568-B.1, and B.3 for Category 6a performance. These panels shall be designated "Data 1". All "Data 1" patch panels shall be located within the communications subterminals.
- 4. Patch panels shall be placed in the following order, top to bottom, starting at the top-most position of the relay rack:
 - a. Fiber optic
 - b. Voice
 - c. Data 1
 - d. Data 2
- C. Twisted Pair Modules and Panels:
 - 1. It is recommended that the Contractor pre-test all fiber to be placed in the project prior to placement within the innerduct to assure conformance to Owner and manufacturer specifications.
 - 2. Multiple Fiber Riser Cable (MIC) shall be routed through flexible innerduct and Panduit tray sections from the entrance into the subterminal through termination.
 - A minimum of twenty feet (20') of spare fiber cable shall be provided at each end of a fiber riser cable, coiled and secured and protected by a raised plexiglass shield.

4. All multi-mode fiber shall be terminated on LC-type connectors with strain relief and entrance sleeve and attached to LC couplers in the termination cabinet.

PART 3 - EXECUTION

3.01 GENERAL

- A. Maintain a competent supervisor and supporting technical personnel during the entire installation. Change of supervision during the project is not acceptable without prior approval from the Owner.
- B. Furnish and install all materials, devices, components, and equipment required for complete, operational systems.
- C. Perform the Work of this specification in accordance with acknowledged Professional and Industry standards and practices.
- D. Interpret any errors or conflicts discovered in the Drawings or specifications so as to accomplish the intent of the Drawings and specifications, and furnish and install all items necessary to complete the interpretation of these Specifications Documents to the satisfaction of the Owner without additional expense to the Owner. In all cases where a device or part of equipment is referred to in these specifications in singular number, each such reference shall apply to as many such devices or parts as are required to complete the installation.

3.02 INSTALLATION

- A. The conduit, outlets, terminal cabinets, etc., which form a part of the rough-in work shall be furnished and installed complete by the Electrical Contractor.
- B. The balance of the system, including installation of the communication equipment, making all connections, etc., shall be performed by the manufacturer's authorized representative, and the entire responsibility of the system, its operation, function, testing and complete maintenance for one (1) year after final acceptance by the Owner, shall be the responsibility of this subcontractor.

3.03 TESTING

- A. At the completion of the project, provide all testing required to satisfy the Architect that the general performance criteria of paragraph 2.01 herein has been met.
- B. Submit written test reports, graphs and plans attesting to the compliance to this criteria.

3.04 OPERATION, MAINTENANCE INFORMATION AND TRAINING

A. Upon completion of work, the electronics contractor shall submit all record drawings, including system single line block diagrams and wiring diagrams, etc.

RELOCATION OF (3) 24'X40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL WESTSIDE UNION SCHOOL DISTRICT

INTEGRATED COMMUNICATION SYSTEMS 260050-9

- B. The Electronics Contractor shall also provide a complete set of manufacturer's specification sheets on all major items of equipment, including operating instruction, where relevant.
- C. Additionally, the Electronics Contractor shall dedicate no less than 16 working hours, upon completion of system to thoroughly familiarize owner's representative and staff with all aspects of the system operation.

3.05 WARRANTY

- A. In addition to the warranties required under General conditions and under Section 017740, provide the warranty described following:
- B. All equipment provided under this specification shall be warranted to be free from defects in materials and workmanship for a period of 12 months from the notice of completion.
- C. The Electronics Contractor shall maintain, regular service facilities and provide a qualified technician familiar with the work of this specification at the site, within 8 hours of receipt of a notice of malfunction from the Owner. The Electronics Contractor shall provide the Owner with the number of a telephone attended 24 hours a day and 7 days a week, to be called in the event of a malfunction. As part of this warranty, the sound contractor shall provide, at no expense to the Owner, and at the Owner's request, all material, devices, equipment, and personnel necessary and shall endeavor to provide alternate facilities, services, and system for the duration of repairs to any defective work of this section.
- D. All repairs and service under warranty shall be at the jobsite unless in violation of manufacturer's warranty, wherein contractor shall provide substitute equipment for the duration of repairs. Transportation of substitute or test equipment and personnel to and from the jobsite shall be at no expense to the owner.
- E. All repair and service work under warranty work, except emergency repairs can be performed during regular working hours of regular working days. Emergency repairs shall be made when a system or component malfunctions during use, and shall be performed on an immediate basis. All work shall be performed by personnel in the employ of contractor, having specific experience in the work of this specification and shall not be subcontracted or assigned to another company for service, unless Owner has approved such assignment in writing, in which event contractor shall nevertheless be responsible to the Owner for such work.

END OF SECTION

SECTION 260533 RACEWAYS AND BOXES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

1. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this and the other sections of Division 26.

1.2 DESCRIPTION OF WORK

- 1. Extent of raceway work is indicated by drawings and schedules.
- 2. Types of raceways specified in this section include the following:

Electrical metallic tubing (EMT). Flexible metal conduit. Liquid-tight flexible metal conduit. Underground plastic utilities duct. Rigid metal conduit. Rigid nonmetallic conduit. Surface metal raceways.

1.3 QUALITY ASSURANCE

- 1. Manufacturers: Firms regularly engaged in manufacture of raceway systems of types and sizes required, whose products have been in satisfactory use in similar service for not less than 5 years.
- 2. Installer's Qualifications: Firm with at least 3 years of successful installation experience on projects with electrical raceway work similar to that required for this project.

3. Codes and Standards:

- A. NEMA Compliance: Comply with applicable requirements of NEMA Standards Publications pertaining to raceways.
- B. UL Compliance and Labeling: Comply with applicable requirements of UL safety standards pertaining to electrical raceway systems. Provide raceway products and components which have been UL-listed and labeled.
- C. CEC Compliance: Comply with applicable requirements of CEC pertaining to construction and installation of raceway systems.

1.4 SUBMITTALS

1. Product Data: Submit manufacturer's technical product data, including specifications and installation instructions, for each type of raceway system required. Include data substantiating that materials comply with requirements.

PART 2 - PRODUCTS

2.1 METAL CONDUIT AND TUBING

- General: Provide metal conduit, tubing and fittings of types, grades, sizes and weights (wall thicknesses) for each service indicated. Where types and grades are not indicated, provide proper selection determined by Installer to fulfill wiring requirements, and comply with applicable portions of CEC for raceways.
- 2. Rigid Steel Conduit: Provide rigid steel, zinc-coated, threaded type conforming to FS WW-C-581, ANSI C80.1 and UL 6.
 - A. Provide zinc coating fused to inside and outside walls.
- 3. Intermediate Steel Conduit: Intermediate steel conduit shall not be used on this project.
- 4. Flexible Metal Conduit: FS WW-C-566 and UL 1. Formed from continuous length of spirally wound, interlocked zinc-coated strip steel.
- 5. Liquid-tight Flexible Metal Conduit: Provide liquid-tight flexible metal conduit; construct of single strip, flexible, continuous, interlocked, and double-wrapped steel; galvanized inside and outside; coat with liquid-tight jacket of flexible polyvinyl chloride (PVC).
- 6. Rigid Metal Conduit Fittings: Cast malleable iron, galvanized or cadmium plated, conforming to FS WW-F-408.
 - A. Use Type 1 fittings for raintight connections.
 - B. Use Type 2 fittings for concrete tight connections.
 - C. Use Type 3 fittings for other miscellaneous connections.
- 7. Flexible Metal Conduit Fittings: Provide conduit fittings for use with flexible steel conduit of threadless hinged clamp type.
 - A. Straight Terminal Connectors: One-piece body, female end with clamp and deep slotted machine screw for securing conduit, and male threaded end provided with locknut.

- B. 45 deg. or 90 deg. Terminal Angle Connectors: Two-piece body construction with removable upper section, female end with clamp and deep slotted machine screw for securing conduit, and male threaded end provided with locknut.
- 8. Liquid-tight Flexible Metal Conduit Fittings: FS W-F-406, Type 1, Class 3, Style G. Provide cadmium plated, malleable iron fittings with compression type steel ferrule and neoprene gasket sealing rings, with insulated, or non-insulated throat.
- 9. Electrical Metallic Tubing (EMT): FS WW-C-563, ANSI C80.3 and UL 797.
 - A. Provide zinc coating fused to inside and outside walls.
- 10. EMT Fittings: FS W-F-408.
 - A. Use Type 1 fittings for raintight connections.
 - B. Use Type 2 fittings for concrete tight connections.
 - C. Use Type 3 set screw, steel insulated throat-type fittings for miscellaneous connections.
 - D. Insulated throat bushings shall be used for terminating conduit smaller than 1-1/4".

2.2 NONMETALLIC CONDUIT AND DUCTS

- 1. Provide nonmetallic conduit and fittings of types, sizes and weights for each service indicated. Where types and grades are not indicated, provide proper selection determined by Installer to fulfill wiring requirements which comply with provisions of CEC for raceways.
- 2. Bituminous Fiber Duct and Fittings: Shall not be used. Class 1200 for direct burial in heavy traffic areas, Class 2000 for extremely heavy traffic areas.
- 3. Asbestos-Cement Conduit and Fittings: Shall not be used.
- 4. Electrical Plastic Conduit:
 - A. Heavy Wall Conduit: Schedule 40, 90 C, UL-rated, construct of polyvinyl chloride and conforming to NEMA TC-2, for direct burial, UL-listed and in conformity with CEC Article 347.
 - B. Extra Heavy Wall Conduit: Schedule 80, UL-rated, construct of polyvinyl chloride compound C-200 PVC, and UL-listed in accordance with CEC Article 347 for direct burial, and for conduit risers.
- 5. PVC Conduit Fittings: NEMA TC 3, mate and match to conduit or tubing type and material.
- 6. Underground PVC Plastic Utilities Duct: Shall not be used. Type II for direct burial.

- 7. Conduit Accessories: Provide conduit, accessories of types, sizes, and materials, complying with manufacturer's published product information, which mate and match with conduit.
- 8. Conduit Bodies: Provide galvanized cast-metal conduit bodies of types, shapes and sizes as required to fulfill job requirements and CEC requirements. Construct conduit bodies with threaded- conduit-entrance ends, removable covers, either cast or of galvanized steel, and corrosion-resistant screws.
- 9. Available Manufacturers: Subject to compliance with requirements, manufacturers offering conduit bodies which may be incorporated in the work include, but are not limited to, the following:

Appleton Electric; Div of Emerson Electric Co.

Arrow-Hart Div; Crouse-Hinds Co. Bell Electric Div; Square D co.

Gould, Inc.

Killark Electric Mfg. Co.

O-Z/Gedney Div; General Signal Co.

Spring City Electrical Mfg. Co.

2.3 SURFACE METAL RACEWAYS

- 1. Boxes for Surface Raceways: Designed, manufactured and supplied by raceway manufacturer for use with specified raceway.
- 2. Available Manufacturers: Subject to compliance with requirements, manufacturers offering surface metal raceways which may be incorporated in the work include, but are not limited to, the following:

B-Line Systems, Inc.

Midland-Ross Corp.

Power-Strut Div; Youngstown Sheet and Tube Co.

Panduit Company

Wiremold Company

Hubbell

PART 3 - EXECUTION

3.1 INSPECTION

 Examine areas and conditions under which raceways are to be installed, and substrate which will support raceways. Notify Contractor in writing of conditions detrimental to proper completion of the Work. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Installer.

3.2 INSTALLATION OF RACEWAYS

- 1. General: Install raceways as indicated; in accordance with manufacturer's written installation instructions, and in compliance with CEC, and NECA's "Standards of Installation". Install units plumb and level, and maintain manufacturer's recommended clearances.
- 2. Coordinate with other work including wires/cables, boxes, and panel work, as necessary to interface installation of electrical raceways and components with other work.

3.3 INSTALLATION OF CONDUITS

- 1. General: Install concealed conduits either in walls, slabs, or above hung ceilings. Use surface metal raceways.
 - A. Mechanically fasten together metal conduits, enclosures, and raceways for conductors to form continuous electrical conductor. Connect to electrical boxes, fittings and cabinets to provide electrical continuity and firm mechanical assembly.
 - B. Avoid use of dissimilar metals throughout system to eliminate possibility of electrolysis. Where dissimilar metals are in contact, coat surfaces with corrosion inhibiting compound before assembling.
 - C. Install miscellaneous fittings such as reducers, chase nipples, 3-piece unions, split couplings, and plugs that have been specifically designed and manufactured for their particular application. Install expansion fittings in raceways every 200' linear run or wherever structural expansion joints are crossed.
 - D. Use roughing-in dimensions of electrically operated unit furnished by supplier. Set conduit and boxes for connection to units only after receiving review of dimensions and after checking location with other trades.
 - E. Provide nylon pull cord in empty conduits where indicated.
 - F. Test all conduits required to be installed, but left empty, test with ball mandrel. Clear any conduit which rejects ball mandrel. Pay costs involved for restoration of conduit and surrounding surfaces to original condition.
- 2. Conduit Installation: Provide rigid steel zinc-coated conduit where exposed on walls, installed outdoors or subject to physical damage. Follow minimum requirements in other areas as follows:
 - A. Use rigid steel zinc-coated conduit in mechanical equipment rooms, electrical equipment rooms, for exposed exterior conduit runs, wherever subject to physical damage, and for main feeder circuits.
 - B. Use steel zinc-coated EMT in all areas unless noted otherwise.

- C. Use flexible conduit from outlet boxes to recessed lighting fixtures, and final 24" of connection to motors, or control items subject to movement or vibration.
- D. Use liquid-tight flexible conduit where subjected to one or more of the following conditions:
 - 1. Exterior location.
 - 2. Moist or humid atmosphere where condensate can be expected to accumulate.
 - 3. Subjected to water spray or dripping oil, water or grease.
 - 4. Use plastic conduit where buried in earth.
- 3. Cut conduits straight, properly ream, and cut threads for heavy wall conduit deep and clean.
- 4. Field-bend conduit with benders designed for purpose so as not to distort nor vary internal diameter.
- 5. Size conduits to meet CEC, except no conduit smaller than a 3/4-inch diameter shall be used.
- 6. Fasten conduit terminations in sheet metal enclosures by 2 locknuts, and terminate with bushing. Install locknuts inside and outside enclosure.
- 7. Conduits are not to cross pipe shafts, or ventilating duct openings.
- 8. Keep conduits a minimum distance of 6" from parallel runs of flues, hot water pipes or other sources of heat. Wherever possible, install horizontal raceway runs above water and steam piping.
- 9. Use of running threads at conduit joints and terminations is prohibited. Where required, use 3-piece union or split coupling.
- 10. Complete installation of electrical raceways before starting installing of cables/wires within raceways.
- 11. Concealed Conduits:
 - A. Metallic raceways installed underground or in floors below grade, or outside are to have conduit threads painted with corrosion inhibiting compound before couplings are assembled. Draw up coupling and conduit sufficiently tight to ensure watertightness.
 - B. For floors-on-grade, install conduits under concrete slabs.
 - C. Install underground conduits minimum of 24" below finished grade.
- 12. Conduits in Concrete Slabs:

- A. Place conduits between bottom reinforcing steel and top reinforcing steel.
- B. Place conduits either parallel, or at 90 degrees, to main reinforcing steel.
- C. Separate conduits by not less than diameter of largest conduit to ensure proper concrete bond.
- D. Conduits crossing in slab must be reviewed for proper cover by Engineer.
- E. Embedded conduit diameter is not to exceed 1/3 of slab thickness.
- 6. Install conduits as not to damage or run through structural members. Avoid horizontal or cross runs in building partitions or side walls.

7. Exposed Conduits:

- A. Install exposed conduits and extensions from concealed conduit systems neatly, parallel with, or at right angles to walls of building.
- B. Install exposed conduit work as not to interfere with ceiling inserts, lights or ventilation ducts or outlets.
- C. Support exposed conduits by use of hangers, clamps, or clips. Support conduits on each side of bends and on spacing not to exceed following: up to 1": 6'-0"; 1-1/4" and over: 8'-0".
- D. Run conduits for outlets on waterproof walls exposed. Set anchors for supporting conduit on waterproof wall in waterproof cement.
- E. Above requirements for exposed conduits also apply to conduits installed in space above hung ceilings, and in crawl spaces.

15. Non-Metallic Conduits:

- 1. Make solvents cemented joints in accordance with recommendations of manufacturer.
- 2. Install PVC conduits in accordance with CEC and in compliance with local utility practices.

16. Conduit Fittings:

- Construct locknuts for securing conduit to metal enclosure with sharp edge for digging into metal, and ridged outside circumference for proper fastening.
- 2. Insulated throat bushings shall be used for terminating conduits smaller than 1-1/4".

- 3. Install insulated type bushings for terminating conduits 1- 1/4" and larger. Bushings are to have flared bottom and ribbed sides. Upper edge to have phenolic insulating ring molded into bushing.
- 4. Bushing of standard or insulated type to have screw type grounding terminal.
- 5. Miscellaneous fittings such as reducers, chase nipples, 3- piece unions, split couplings, and plugs to be specifically designed for their particular application.

3.4 INSTALLATION OF RACEWAYS

- General: Mechanically assembly metal enclosures, and raceways for conductors to form continuous electrical conductor, and connect to electrical boxes, fittings and cabinets as to provide effective electrical continuity and rigid mechanical assembly.
 - A. Avoid use of dissimilar metals throughout system to eliminate possibility of electrolysis. Where dissimilar metals are in contact, coat all surfaces with corrosion inhibiting compound before assembling.
 - B. Install expansion fittings in all raceways wherever structural expansion joints are crossed.
 - C. Make changes in direction of raceway run with proper fittings, supplied by raceway manufacturer. No field bends of raceway sections will be permitted.
 - D. Properly support and anchor raceways for their entire length by structural materials. Raceways are not to span any space unsupported.
 - E. Use boxes as supplied by raceway manufacturer wherever junction pull or devices boxes are required. Standard electrical "handy" boxes, etc. shall not be permitted for use with surface raceway installations.

3.5 INSTALLATION OF CONDUIT

- 1. Underground conduit.
 - A. Keep interior of conduit clean and clear. Clean underground conduits by pulling a mandrel through conduit run followed with a swab before pulling wire.
 - B. Reroute conduit from locations shown on the Drawings where it is necessary to clear obstructions.

- C. Provide junction or pull boxes where required for pulling conductors due to excessive number of bends or length of conduit runs.
- D. Bury underground conduit, except those under buildings, a minimum of 24 inches below finished grade. Conduits under roadways shall be a minimum of 36 inches below finished grade. Conduit runs 3/4 inch and smaller in slabs shall be located above vapor barriers. Bury conduit runs larger than 3/4 inch to a minimum depth of 12 inches below floor slabs.
- E. Standard factory ells shall not be used in underground service conduits or other long underground runs. Field bends shall not be flattened or kinked and shall not materially reduce the internal diameter of the conduit. Bends in long underground runs shall be made in long sweeping bends. Do not bend at couplings. Approved conduit bending methods shall be used.
- F. All conduit runs shall have a code size insulated grounding conductor.
- G. Properly separate two or more conduits installed underground in a common concrete envelope with approved factory made conduit spacers.
- H. Locate conduit stub-outs dimensionally from building or curb lines on Record Drawings.
- I. Pull wires shall be installed in empty conduits including telephone conduits and stub-outs, No. 12 AWG, type "THWN" insulated copper wire or 1/8-inch polyethylene rope shall be used.

2. Exposed/Concealed Conduit:

- A. Provide secure mounting facilities for conduits. Wire or plumbers tape shall not be used for hanging conduit. Strap shall be factory made of the one-hole malleable iron or two hole galvanized clamp type.
- B. Provide expansion couplings wherever conduits cross expansion joints.
- C. Run conduit at right angles or parallel to structural members, walls, floors and ceilings. Where several conduits are run together or suspended, they shall be hung on Unistrut trapezes with minimum 3/8-inch rod hangers.
- D. Cut ends of conduit square and ream to remove burrs or sharp edges. Terminate conduits properly with bushings, locknuts, etc. Terminate one (1) inch and larger conduits with insulated bushings.
- E. Render conduits projecting through the roofing watertight by proper flashings. Securely fasten a sheet metal cap and tighten bank or storm collar to the conduits. Extend flashing a minimum of six (6) inches in all directions. Coordinate and install roof flashing for conduits to the satisfaction of the Project Manager.
- F. All conduit runs shall have a code size insulated grounding conductor.

- G. Pull wires shall be installed in empty conduits including telephone conduits and stub-outs, No. 12 AWG, type "THWN" insulated copper wire or 1/8-inch polyethylene rope shall be used.
- H. Flexible conduit connections shall comply with CEC Section 350-22.
- I. Provide wrapped, rigid, galvanized, steel conduit for all 90's and stub-ups. Wrapping shall extend at least 12" above grade for all stubups.

END OF SECTION

BID SET FOR

RELOCATION OF (3) 24'x40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL

40641 PEONZA LANE

PALMDALE, CA 93551

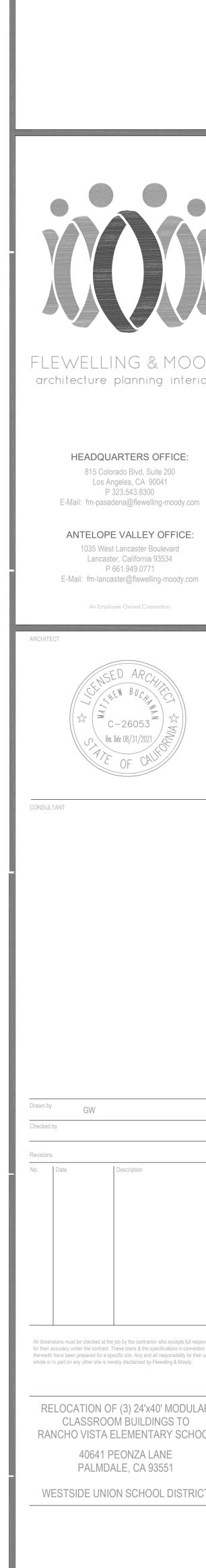
WESTSIDE UNION SCHOOL DISTRICT

THE SCOPE OF WORK UNDER THIS CONTRACT SHALL INCLUDE THE COMPLETE AND FULLY COMBINED SCOPE OF WORK INCLUDED IN THE CONTRACT DOCUMENTS FOR:

- FM2869 "RELOCATION OF (1) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL" (A#03-120742)
- FM2913 "RELOCATION OF (2) 24'x40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL" (A#03-121031)

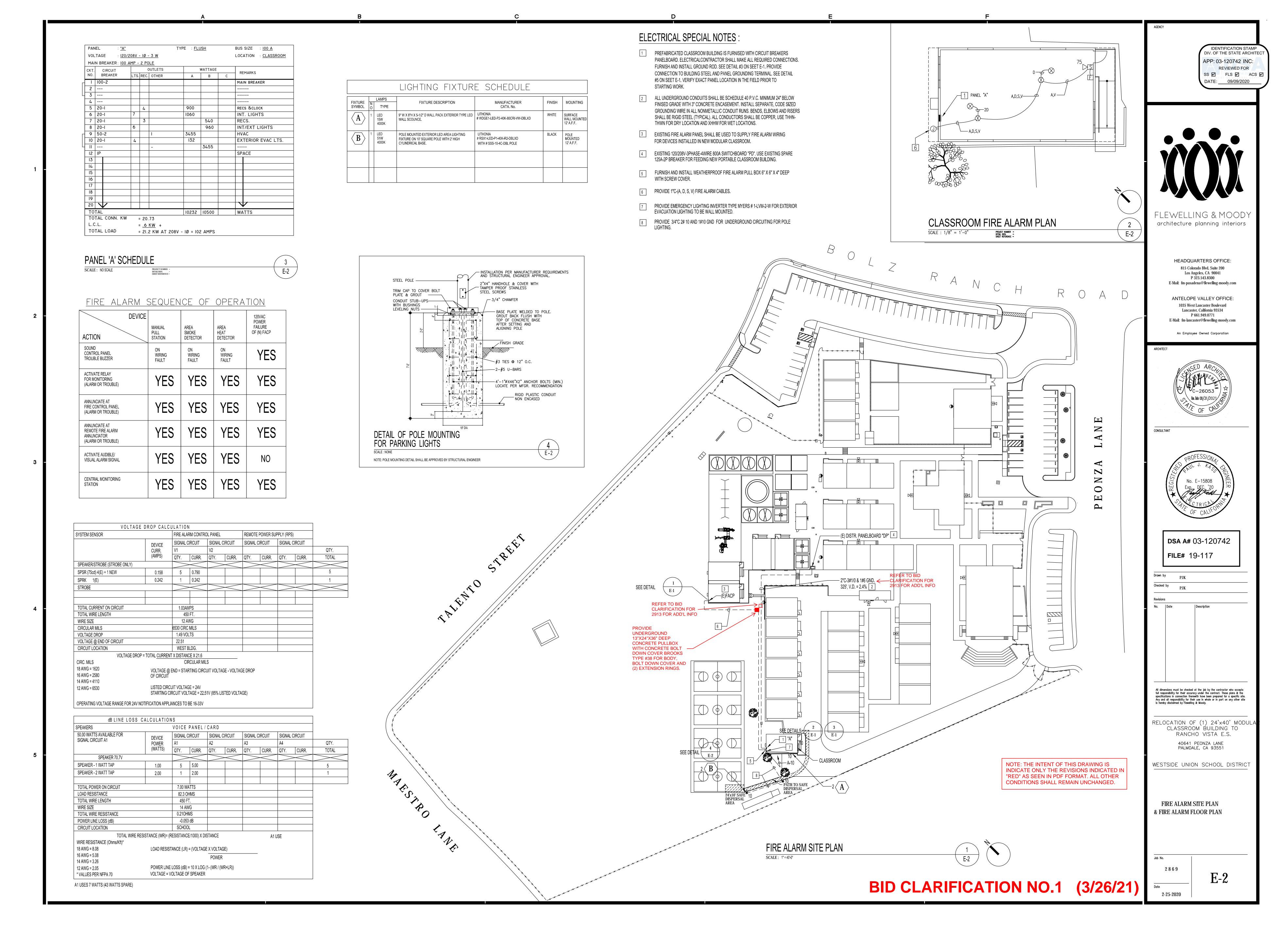
ALL DOCUMENTATION REQUIRED BY DSA SHALL BE SUBMITTED TO DSA SPECIFIC TO EACH INDIVIDUAL APPLICATION / APPROVAL.

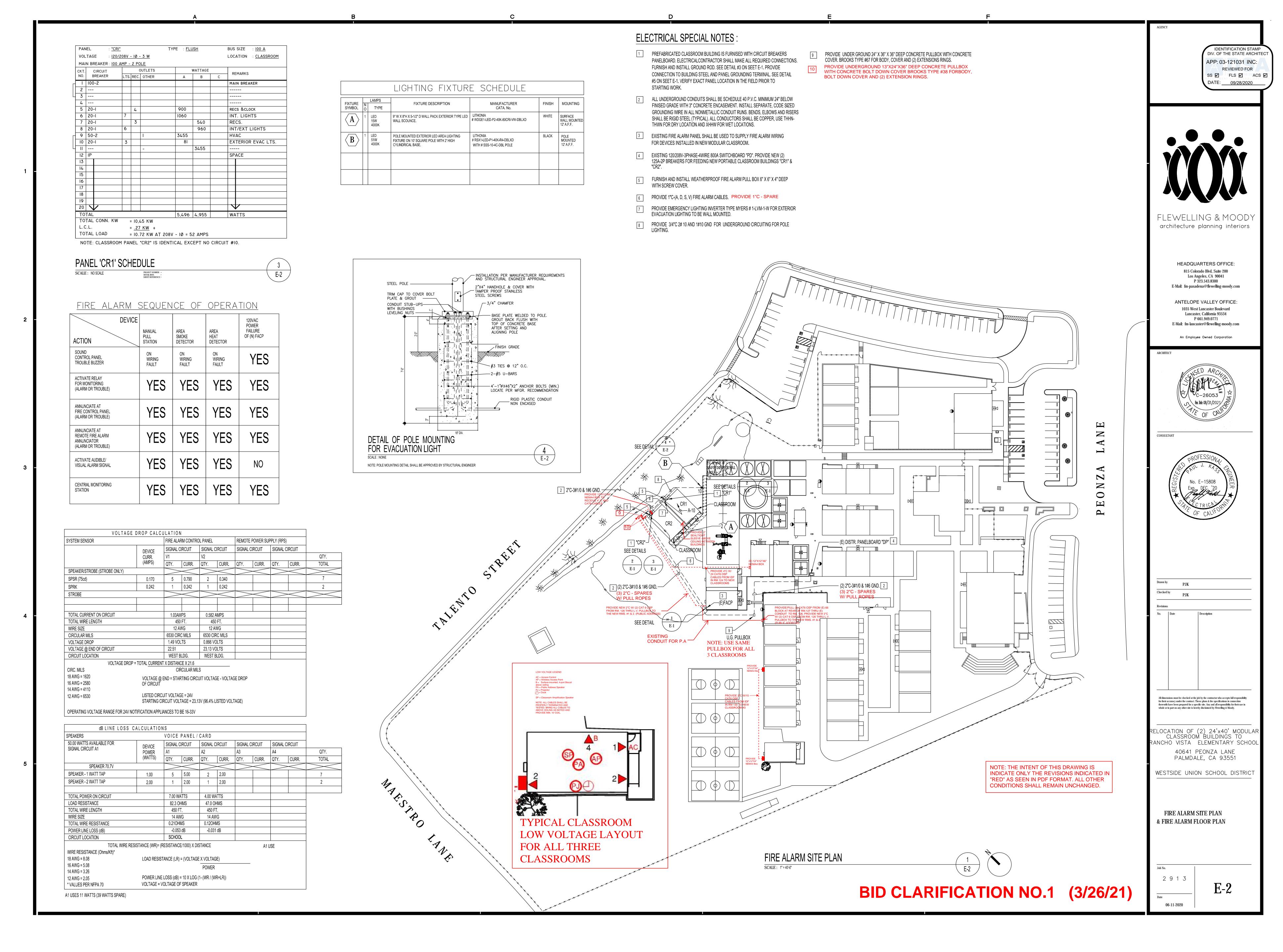
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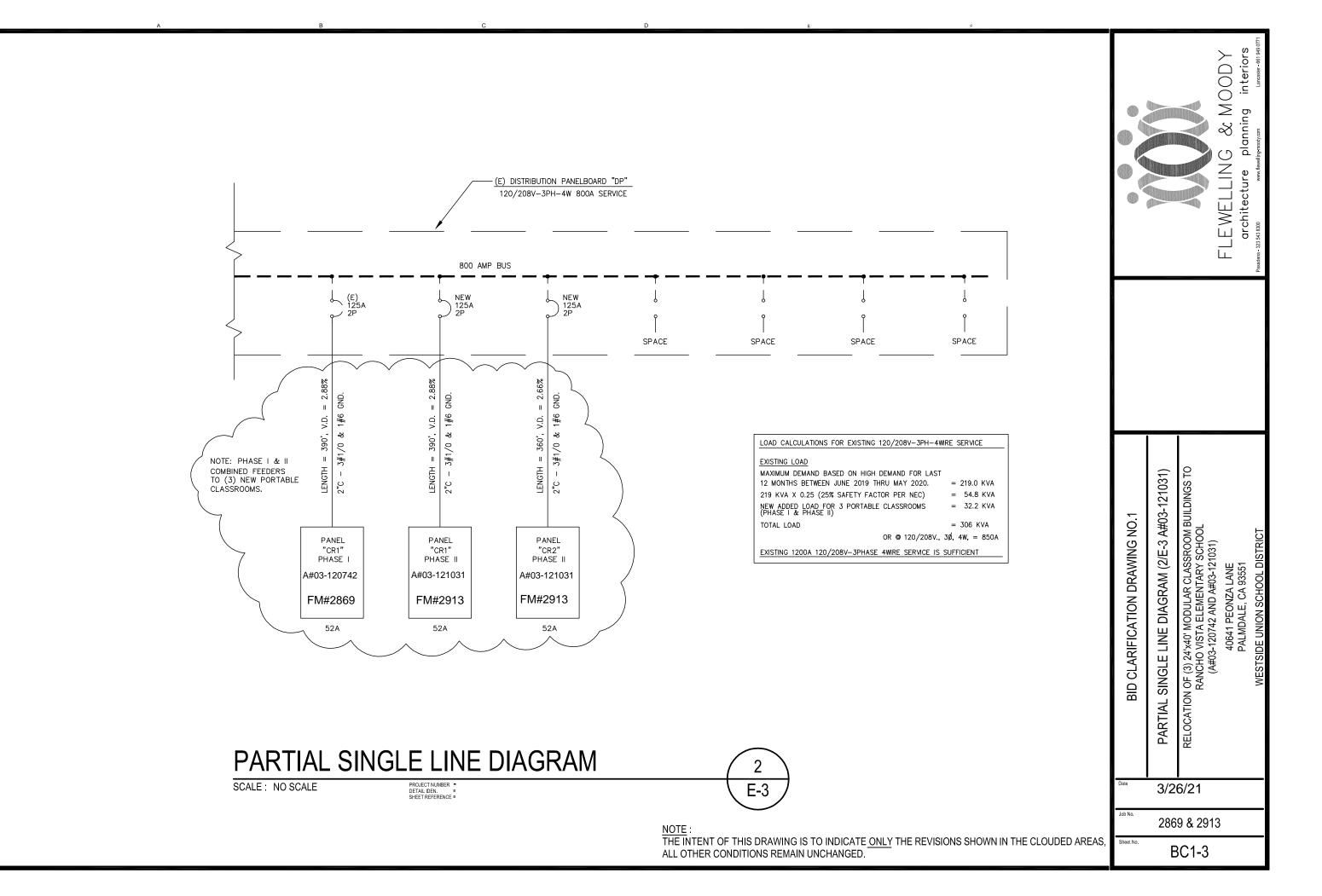


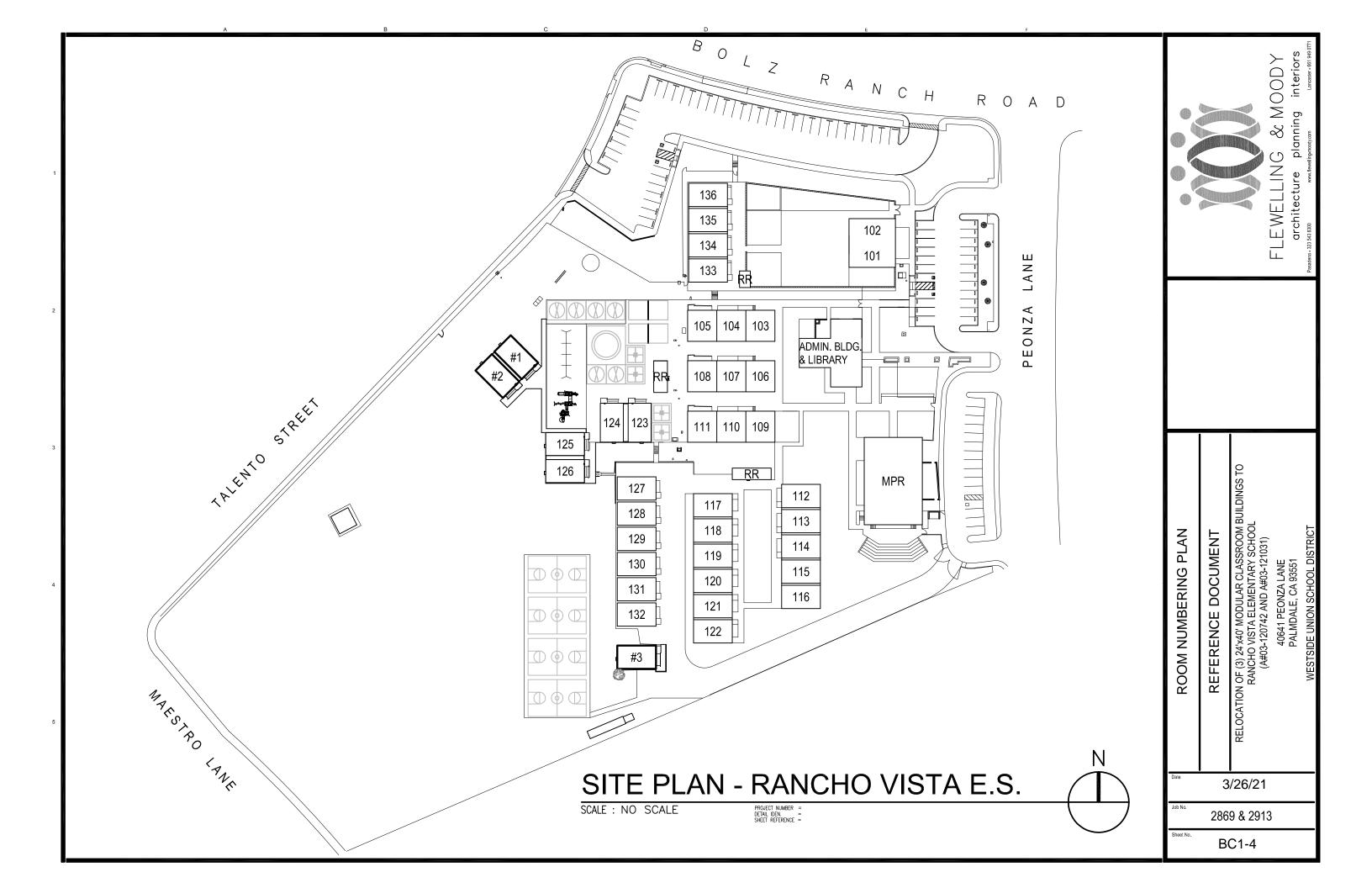
Date 01-26-2021

BID SET COVER SHEET

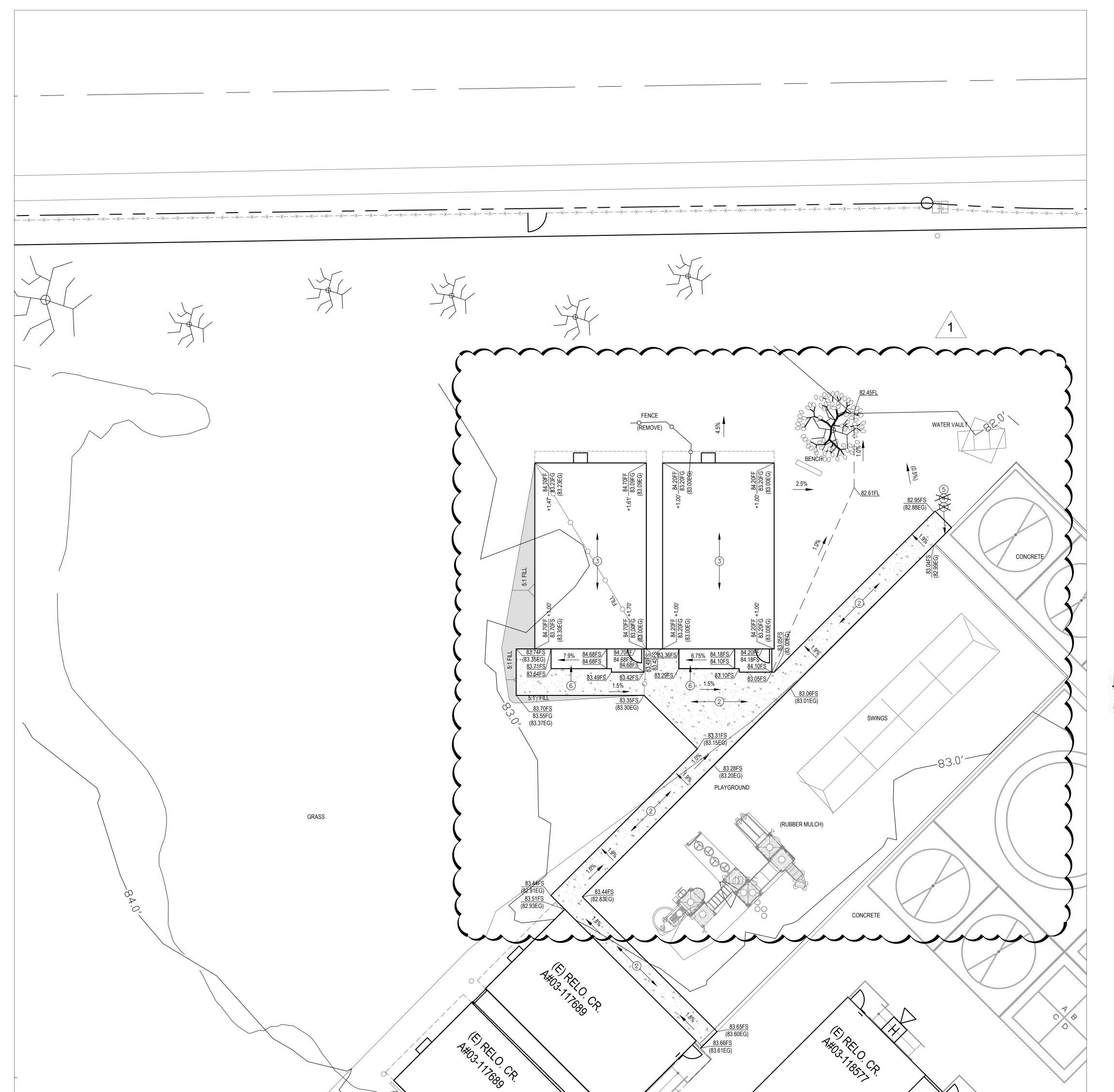






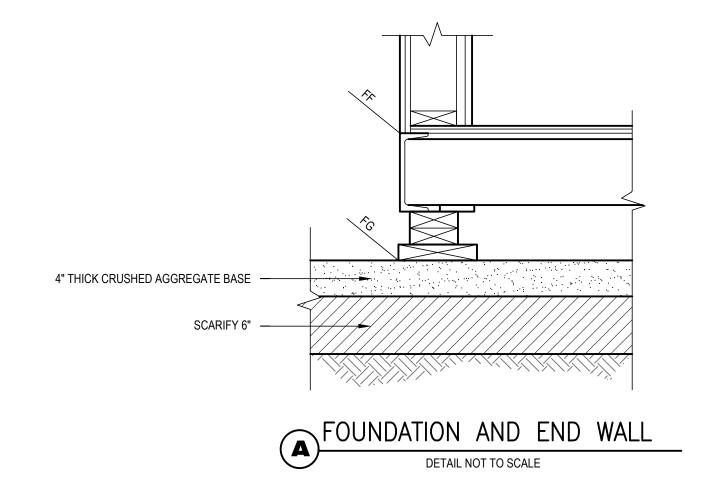


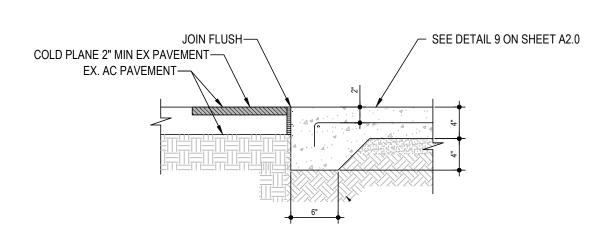
RANCHO VISTA ELEMENTARY 4064 PEONZA LN, PALMDALE, CA 93551



CONSTRUCTION NOTES

- REMOVE 2" THICK SECTION OF EXISTING A.C. PAVEMENT BY COLD PLANING AND CONSTRUCT 2" MIN. THICK A.C. PAVEMENT OVERLAY TO BLEND. SEE DETAIL 'B' HEREON.
- 2 CONSTRUCT 4" THICK CONCRETE WALK PER ARCHITECT PLAN (SEE DETAIL 12 ON SHEET A2.0)
- BUILDING PAD SHALL BE 4" A-BASE OVER 6" OF SCARIFIED AND RECOMPACTED NATIVE SOIL TO MIN. 90% REL. COMPACT (U.N.O).
- 4 SAW CUT AND REMOVE EXISTING 1' OF A.C. PAVEMENT AND BASE.
- 5 CONCRETE THICKENED EDGE PER ARCHITECT PLANS (SEE DETAIL 9 ON SHEET A2.0)
- 6 INSTALL RAMP PER ARCHITECT PLANS. (SEE DETAIL 7 ON SHEET A2.0)

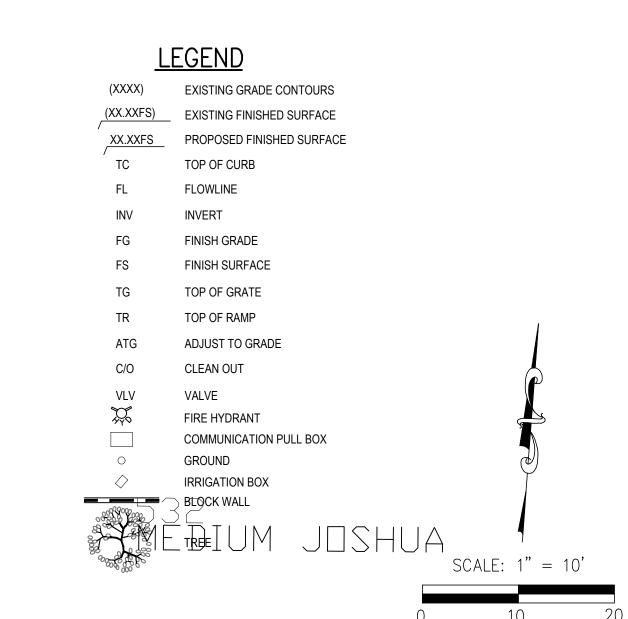




CONCRETE PAVING AT (E) PAVING

DETAIL NOT TO SCALE

NOTE:
THE INTENT OF THIS DRAWING IS TO INDICATE ONLY THE REVISIONS SHOWN IN THE CLOUDED AREAS, ALL OTHER CONDITIONS REMAIN UNCHANGED.



UNDERGROUND SERVICE ALERT

BID CLARIFICATION NO.1 (3/26/21)



C1.01

3-18-2020

RELOCATION OF (1) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL

40641 PEONZA LANE PALMDALE, CA 93551

WESTSIDE UNION SCHOOL DISTRICT

GENERAL NOTES VICINITY MAP APPLICABLE CODES SCOPE OF WORK PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL 20. CONSTRUCTION AREA OVERLAPS ACTIVE SERVICE AREAS NECESSARY FOR THE 2019 California Building Standards Administrative Code, Title 24 C.C.R. THE PROJECT SCOPE OF WORK CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING EXISTING AND PROPOSED CONSTRUCTION, PIPING, CONDUITS, CLEAN-OUTS, PULL NORMAL DAILY OPERATION OF THE SCHOOL. CONTRACTOR SHALL AT ALL TIMES RANCHO VISTA E.S BOXES, ETC. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE 2019 California Building Code, Title 24 C.C.R. MAINTAIN AND ALLOW ACCESS ON SITE FOR EMERGENCY VEHICLES, TRASH Part 2 40641 PEONZA LANE RELOCATION OF (1) 24'x40' MODULAR BUILDING (STOCKPILE A#67715). PALMDALE, CA 93551 (2015 International Building Code of the International Code Council, with California DISTRICT AND ARCHITECT PRIOR TO COMMENCING WORK. COLLECTION, LANDSCAPE, GENERAL SCHOOL MAINTENANCE AND FOOD SERVICE DELIVERY. CONTRACTOR SHALL COORDINATE CLOSELY WITH DISTRICT FOR ALI CONSTRUCTION OF METAL RAMP PER PC 04-116740. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL GRADES ELEVATIONS, NECESSARY ACCESS. 2019 California Electrical Code, Title 24 C.C.R. Part 3 DIMENSIONS, AND CONDITIONS OF INSTALLATION PRIOR TO PROVIDING BID. ANY PROVIDE CONCRETE LANDING AND PAVING. TOWN CTR DR. AVE. O (2014 National Electrical Code of the National Fire Protection Association, NFPA) DISCREPANCIES DISCOVERED BY THE CONTRACTOR DURING THE ABOVE 21. CONTRACTOR SHALL PROVIDE AND MAINTAIN FOR THE DURATION OF THE CONTRACT OPAQUE VINYL SCREENS (TARP OR SIMILAR) PROPERLY SECURED TO ALL INVESTIGATIONS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT. THE UPDATE (E) ACCESSIBLE PARKING STALLS AND PROVIDE NEW SIGNAGE. Part 4 2019 California Mechanical Code, Title 24 C.C.R. CONTRACTOR BY MEANS OF OFFERING A BID SHALL THEREBY CERTIFY THAT THE TEMPORARY CONSTRUCTION FENCING AND GATES AS WELL AS ALL EXISTING (2015 Uniform Mechanical Code of the International Association of Plumbing and ABOVE STATED REQUIREMENTS HAVE BEEN MET FENCING THAT DEFINES A PERIMETER OF ANY DESIGNATED CONSTRUCTION AREA. REMOUNT (E) PLUMBING FIXTURES AND ACCESSORIES TO MEET CURRENT A.D.A. CLEARANCES AT (E) MODULAR TOILET BUILDING (A#60120). Mechanical Officials, IAPMO) SCREENING SHALL BE MINIMUM 6'-0" HIGH AND SHALL BE BLACK, GREEN OR TAN IN GENERAL CONTRACTOR SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, AND TRANSPORTATION NECESSARY FOR THE COMPLETE AND PROPER EXECUTION OF 2019 California Plumbing Code, Title 24 C.C.R. REPLACE (E) DRINKING FOUNTAIN W/ ACCESSIBLE HI-LO TYPE DRINKING FOUNTAIN. (2015 Uniform Plumbing Code of the International Association of Plumbing and 22. DUE TO THE ON-GOING OPERATION OF THE ACTIVE SCHOOL SITE DURING Mechanical Officials, IAPMO) PROVIDE ELECTRICAL AND FIRE ALARM SYSTEM TO RELOCATED BUILDING THE ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY AVE. P TO HWY. 14 2019 California Energy Code, Title 24 C.C.R. SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND HAS NOT AND PARKING SHALL BE SHARED AND SHALL NOT SCHEDULE ANY DELIVERIES AS BEEN CONSIDERED BY THE ARCHITECT AND / OR STRUCTURAL ENGINEER. PROJECT DATA 2019 California Historical Building Code, Title 24 C.C.R. DURING THE PERIODS REQUIRED FOR STUDENT DROP-OFF AND PICK-UP. VICINITY MAP CONTRACTOR SHALL COORDINATE WITH DISTRICT FOR ALL TIME OFF OPERATION ALL WORK SHALL CONFORM TO THE "APPLICABLE CODES" AS LISTED HEREON Part 9 FOR THE SITE. 2019 California Fire Code, Title 24 C.C.R. : 960 S.F. (2015 International Fire Code of the International Code Council) **BUILDING AREA** CONTRACTOR SHALL REMOVE FROM SITE AND DISPOSE OF IN A LEGAL MANNER ALL EXCESS DIRT / SOIL AND DEBRIS RESULTANT OF THE CONSTRUCTION ACTIVITIES 23. FOR THE DURATION OF THE CONTRACT, THE CONTRACTOR SHALL BE RESPONSIBLE ASSOCIATED WITH THIS PROJECT. FOR STRICT COMPLIANCE WITH LOCAL AGENCY HAVING JURISDICTION FOR ALL, Part 10 2019 California Existing Building Code, Title 24 C.C.R. TYPE OF OCCUPANCY CONSULTANT SHEET INDEX (2015 International Existing Building Code of the International Code Council, with FUGITIVE DUST AND SHALL BE RESPONSIBLE FOR ALL PENALTIES, FINES, ETC. IF THE PROJECT SHOULD BE CITED FOR VIOLATIONS. TYPE OF CONSTRUCTION CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FOR ALL WORK THAT OCCURS IN ANY PUBLIC RIGHT-OF-WAY AND / OR 2019 California Green Building Standards Code (CALGreen Code), Title 24 C.C.R. **COVER SHEET** EASEMENT. FEES FOR REQUIRED PERMITS SHALL BE PAID FOR DIRECTLY BY **BUILDING AREA CALCULATION** 24. DUE TO THE SITE CONSTRAINTS OF THE ACTIVE SCHOOL SITE, THE CONTRACTOR FIRE ACCESS PLAN ONE (1) NEW 24'x40' MODULAR BUILDING = 960 S.F. CONTRACTOR AND SHALL BE REIMBURSED BY THE DISTRICT 1:1. MAY BE REQUIRED TO STAGE IN VARIOUS AVAILABLE AREAS ON SITE AND MAY BE Part 12 2019 California Referenced Standards Code, Title 24 C.C.R. 960 S.F. TOTAL BUILDING AREA, 9,000 S.F. BASIC ALLOWABLE AREA **CIVIL - COVER SHEET** REQUIRED TO MOVE OR RELOCATE STAGING DURING THE COURSE OF PROPERLY REMOVE ALL DEMOLISHED ITEMS AND MATERIALS FROM THE SITE AND **CIVIL - GRADING PLAN** CONSTRUCTION IN ORDER TO ACCOMMODATE CONSTRUCTION AND SCHEDULE PARTIAL LIST OF APPLICABLE STANDARDS **CIVIL - HORIZONTAL CONTROL** DISPOSE OF ALL IN A LEGAL MANNER. CONTRACTOR SHALL FACTOR IN ALL NECESSARY MEASURES TO ACCOMMODATE THE THE REQUIRED FIRE FLOW AVAILABILITY ON (E) FIRE HYDRANT PER 2016 CALIFORNIA FIRE SITE PLAN AND DETAILS TIMELY COMPLETION OF THIS CONTRACT REPAIR OR REPLACE EXISTING WALKS, UTILITY LINES, LANDSCAPING, ETC. THAT ARE 2019 California Building Code (for SFM) Referenced Standards Chapter 35 1,500 GPM AT 20 PSI FOR DURATION OF 2 HOURS **DETAILS** DAMAGED DURING CONSTRUCTION. PROTECT ALL EXISTING CONSTRUCTION **SPECIFICATIONS** 25. CONTRACTOR SHALL NOT INTERRUPT ANY UTILITY SERVICE TO ACTIVE SCHOOL SITE 2019 Edition DESIGNATED TO REMAIN. NFPA 13 Automatic Sprinkler Systems (California Amended) **SPECIFICATIONS** WITHOUT EXPRESSED PERMISSION AND PRIOR SCHEDULING WITH DISTRICT. Standpipe Systems (California Amended) 2019 Edition MODULAR BUILDING NOTES NOTES, SYMBOLS, DETAILS, DIAGRAM AND CALCULATIONS NFPA 17 Dry Chemical Extinguishing Systems 2019 Edition FIRE ALARM SITE PLAN AND FLOOR PLAN 10. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY 26. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CONTRACTOR NFPA 17A Wet Chemical Extinguishing Systems 2019 Edition **EVACUATION EMERGENCY LIGHTING** AN ADDENDA OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE SUBMITTALS OF DOCUMENTS TO THE DSA BOX. NFPA 20 (1) 24'x40' MODULAR CLASSROOM BUILDING BY DESIGNED FACILITIES CONSTRUCTION, INC. DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338 PART 1, TITLE 2019 Edition Stationary Pumps THE PROJECT INSPECTOR (PI) IS TO WITNESS AND VERIFY GROUNDING. NFPA 24 2019 Edition STOCKPILE A#67715, S/N: 1906 / 7 - 'CR.1 Private Fire Service Mains (California Amended) 24, CCR. 27. CONTRACTOR MAY UTILIZE EXISTING ELECTRICAL SERVICE IN YARD FOR TEMPORARY NFPA 72 National Fire Alarm and Signaling Code (California Amended) 2019 Edition POWER. ALL TEMPORARY POWER INSTALLATION SHALL ADHERE TO APPLICABLE THE FOLLOWING DOCUMENTS SHALL BE ON THE JOB SITE PRIOR TO INSTALLATION (Note: See UL Standard 1971 for "Visual Devices") INDEX / COVER SHEET 11. A DSA CERTIFIED CLASS II PROJECT INSPECTOR EMPLOYED BY THE DISTRICT OF THE UNITS, INCLUDING THE SERIAL NUMBERS FOR EACH UNIT. Fire Door and Other Opening Protectives FLOOR PLAN 2019 Edition (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL a. IN-PLANT FINAL VERIFIED REPORT NFPA 253 Critical Radiant Flux of Floor Covering Systems 2015 Edition **ROOF PLAN** PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR b. LABORATORY VERIFIED REPORT: Clean Agent Fire Extinguishing Systems (California Amended) ARE DEFINED IN THE SECTION 4-342 PART 1, TITLE 24, CCR. 2015 Edition **EXTERIOR ELEVATIONS** THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE c. WELDING VERIFIED REPORT. INTERIOR ELEVATIONS ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH FINISH SCHEDULE 12. D.S.A. APPROVED TESTING LABORATORY DIRECTLY EMPLOYED AND PAID FOR BY THE TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS SUCH "DETERIORATION OR EXISTING NON-COMPLIANT CONSTRUCTION - IF ANY DISTRICT SHALL CONDUCT ALL REQUIRED TESTS AND INSPECTIONS FOR THE AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT ARCHITECTURAL DETAILS CONDITION IS DISCOVERED WHICH, IF LEFT UNCORRECTED, WOULD MAKE THE ARCHITECTURAL DETAILS COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT BUILDING NON-COMPLIANT WITH THE REQUIREMENTS OF THE EDITION OF THE CBC REFLECTED CEILING PLAN COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE **BIDDING NOTES** IN FORCE AT THE TIME OF ORIGINAL CONSTRUCTION, THE CONDITION MUST BE CONTRACTOR SHALL NOTIFY DISTRICT AND ARCHITECT IN WRITING UPON DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND **CEILING DETAILS** CORRECTED IN ACCORDANCE WITH CURRENT CODE REQUIREMENTS. A COMPLETION OF SITE PREPARATION. WOOD FOUNDATION SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND WOOD FOUNDATION DETAILS DIVISION OF THE STATE ARCHITECT BEFORE PROCEEDING WITH THE WORK. REFERENCE: SPECIFICATIONS DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL PRE-BID JOB WALK ASSUMED SOIL BEARING CAPACITY PER SOILS REPORT. SECTION 4-317 (C), CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1 WOOD FOUNDATION DETAILS NOTES BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR MANDATORY PRE-BID JOB WALK WILL BE HELD ON DATE AND TIME STATED IN FLOOR FRAMING PLAN TITLE 24, CCR) "NOTICE TO CONTRACTOR" AT THE PROJECT SITE. ALL PROSPECTIVE 15. PATCH AND REPAIR ALL SURFACES AFFECTED BY CONTRACT WORK AND BY FLOOR FRAMING PLAN (CENTER) BIDDERS ARE ADMONISH TO ATTEND. SELECTIVE DEMOLITION TO A "LIKE NEW" CONDITION OR TO MATCH EXISTING S2.0 **ROOF FRAMING PLAN** MODULAR BUILDING(S) SHALL HAVE TAGS TO IDENTIFY THE DSA APPLICATION S2.1 ADJACENT FINISHES. ROOF FRAMING PLAN (CENTER) NUMBER AND THE BUILDING SERIAL NUMBER WHEN DELIVERED TO THE SITE. THE DISABLED VETERAN BUSINESS ENTERPRISES (DVBE) STRUCTURAL DETAILS PLAN AFFIDAVIT IS ALSO REQUIRED. THE REQUIREMENTS OF THIS PROJECT ARE SUCH THAT ALL BIDDERS MUST 16. FIRE SAFETY DURING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE IN STRUCTURAL DETAILS COMPLY WITH THE STATE REQUIREMENTS FOR DVBE CONTRACTOR ACCORDANCE WITH 2019 CFC CHAPTER 7, 11 AND 33. STRUCTURAL DETAILS SOLICITATION, PROJECT ADVERTISEMENT AND SUBSEQUENT STRUCTURAL DETAILS STATEMENT OF GENERAL CONFORMANCE DOCUMENTATION FAILURE TO PROPERLY COMPLY WITH ALL NECESSARY 17. ALL CONTRACTORS ARE ADVISED THAT CERTAIN PORTIONS OF THE WORK MAY NOT WALL FRAMING REQUIREMENTS AND SUBSEQUENT DOCUMENTATION MAY BE GROUNDS BE EASY AND MAY EXCEED THE ASSUMED STANDARD OF THE INDUSTRY, INCLUDING WALL FRAMING DETAILS FOR SCHOOL BOARD ACTION TO REJECT A BID AS INVALID AND/OR NON-MEANS AND METHOD, OPERATIONAL STAGING, SCHEDULING AND COORDINATION OF STRUCTURAL DETAILS THESE DRAWINGS AND / OR SPECIFICATIONS AND / OR CALCULATIONS FOR THE ITEMS RESPONSIVE. FOR ADDITIONAL INFORMATION REFER TO PROJECT MANUAL WORK, AS WELL AS TIME AND DURATION OF ACTIVITIES NECESSARY TO ELECTRICAL PLAN DESIGNATED WITH A ////// HAVE BEEN PREPARED BY OTHER DESIGN ✓ M1.0 SATISFACTORILY COMPLETE THE PROJECT IN ACCORDANCE WITH THIS CONTRACT MECHANICAL PLAN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND / OR AUTHORIZED TO FINGERPRINTING CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, MATERIALS AND FINGERPRINTING AND BACKGROUND CHECKS IN ACCORDANCE WITH PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR: OPERATIONAL SUPPORT NECESSARY TO COMPLETE THE PROJECT AS REQUIRED ACCESSIBLE RAMPS / LANDINGS / STAIRS BY TMP SERVICES PC 04-116740 DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENT CURRENT LAWS AND REGULATIONS SHALL BE REQUIRED FOR ALL WORKERS UNDER THIS CONTRACT WHO WILL BE PERFORMING WORK OUTSIDE OF THE ESTABLISHED OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT COVER SHEET SPECIFICATIONS PREPARED BY ME, AND CONSTRUCTION BARRICADES (MINIMUM 6' HIGH FENCE) DURING HOURS 18. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER NECESSARY FOR ACCESSIBLE RAMP ELEVATIONS AND DETAILS THAT THE ADJACENT CAMPUSES ARE OCCUPIED SIMULTANEOUSLY BY COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE CONSTRUCTION. WATER CAN BE MADE AVAILABLE ON-SITE VIA EXISTING HYDRANT ACCESSIBLE RAMP DETAILS AND NOTES FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT THE STUDENTS. ANY WORKER FOUND TO BE IN VIOLATION OF THESE AND SHALL BE PROPERLY METERED THROUGH LOCAL WATER AGENCY. **DETAILS AND NOTES** THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING REQUIREMENTS WILL BE ASKED TO LEAVE THE PROJECT SITE UNTIL THE ACCESSIBLE RAMP SWITCHBACK DETAILS ME OF MY RIGHTS, DUTIES AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF APPROPRIATE DOCUMENTATION IS PROVIDED. 19. CONTRACTOR MAY ONLY STAGE AND PERFORM WORK IN AREAS SPECIFICALLY STAIRS OPTIONAL THE EDUCATION CODE AND SECTIONS 4-336, 4-341 AND 4-344" OF TITLE 24, PAMRT 1. (TITLE IDENTIFIED FOR THIS CONTRACT. ALL WORK REQUIRED TO BE PERFORMED OUTSIDE ACCESSIBLE RAMP OPTIONAL ALUMINUM DECK 24, PART 1, SECTION 4-317 (b)) QUESTIONS DURING BID OF THE DESIGNATED AREAS SHALL REQUIRE MONITORING BY ASSIGNED DISTRICT ACCESSIBLE RAMP ELEVATIONS AND PLAN VIEWS ALL QUESTIONS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT USING STAFF OR SHALL BE PERFORMED DURING NON-SCHOOL HOURS. ALL REQUESTS FOF FEBRUARY 25, 2020 THE ATTACHED "BID R.F.I." FORM. ALL "BIDDING R.F.I.'S" SHALL BE SUBMITTED MONITORED WORK SHALL BE MADE IN WRITING 48 HOURS IN ADVANCE BY GENERAL NO LATER THAN FIVE (5) CONSECUTIVE CALENDAR DAYS PRIOR TO Matthew C. Buchanan, AIA Date CONTRACTOR AND SCHEDULING SHALL BE SUBJECT TO APPROVAL BY DISTRICT. SCHEDULED BID OPENING. AUGUST 31, 2021 C-26053 TOTAL NUMBER OF DRAWING SHEETS: 45 License Number **Expiration Date** CIVIL ENGINEER **ELECTRICAL ENGINEER** DUKE ENGINEERING PJK ENGINEERING 7010 WEST AVENUE E-4 7050 CHIMINEAS AVENUE LANCASTER, CA 93536 RESEDA, CA 91335

G:\Project\2869—0000—WUSD—RanchoVista—Relo\DWG\A0_0_COVER.dwg; Last Saved By: GWibowo — May 20, 2020 — 3:12pm Last Printed By: GWIBOWO — Jun 02, 2020, 8:25am;

(661) 992-8199

CONTACT: RYAN DUKE

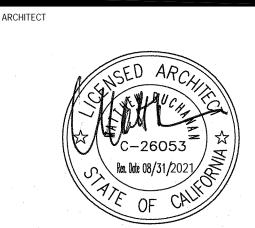
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ANTELOPE VALLEY OFFICE: 1035 West Lancaster Boulevard Lancaster, California 93534 P 661.949.0771 E-Mail: fm-lancaster@flewelling-moody.com



DSA A# 03-120742 FILE# 19-117 GW

(818) 344-8272 (818) 344-4786 FAX

CONTACT: PAUL KASS

for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

RELOCATION OF (1) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL 40641 PEONZA LANE

WESTSIDE UNION SCHOOL DISTRICT

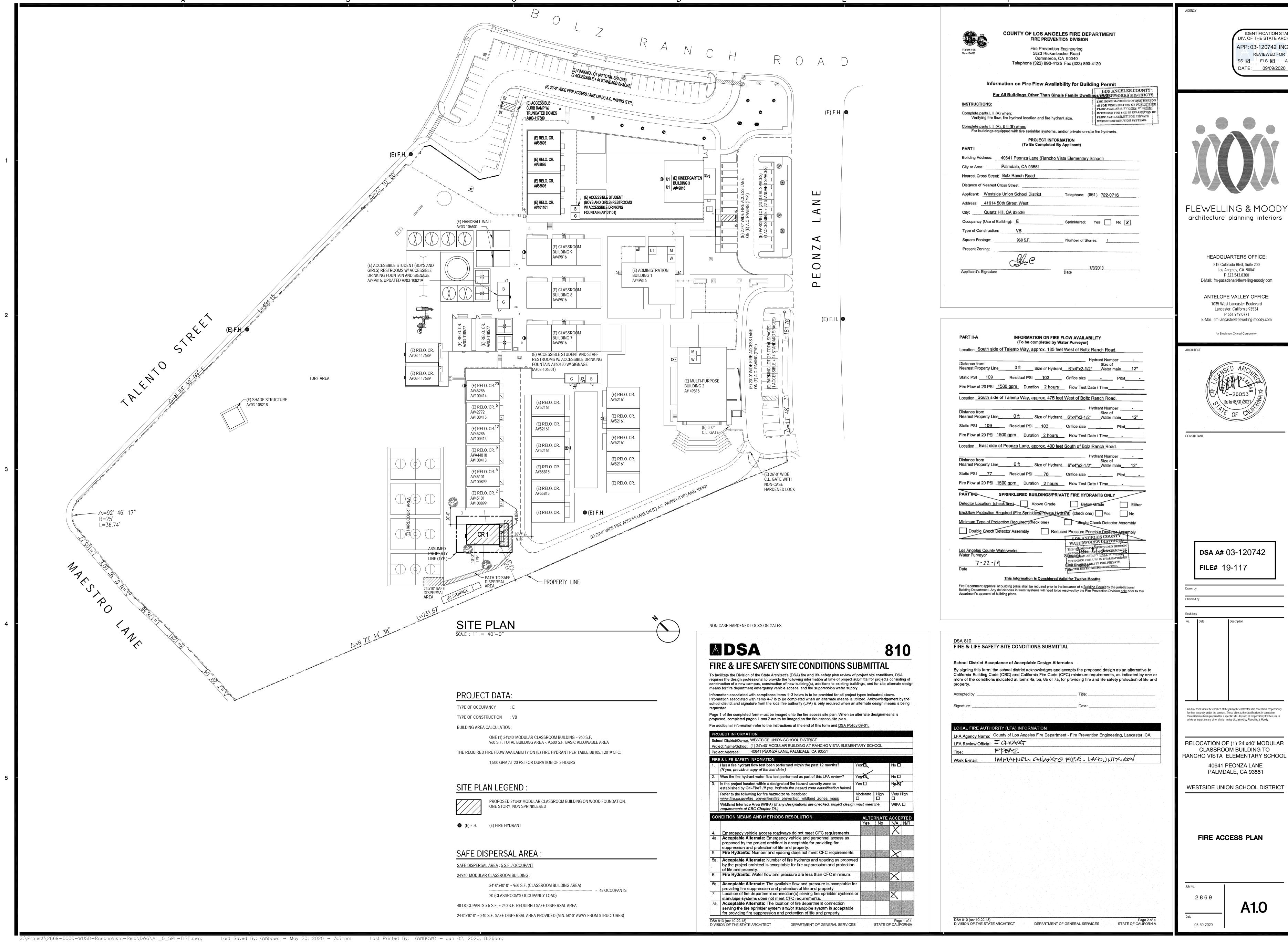
PALMDALE, CA 93551

COVER SHEET

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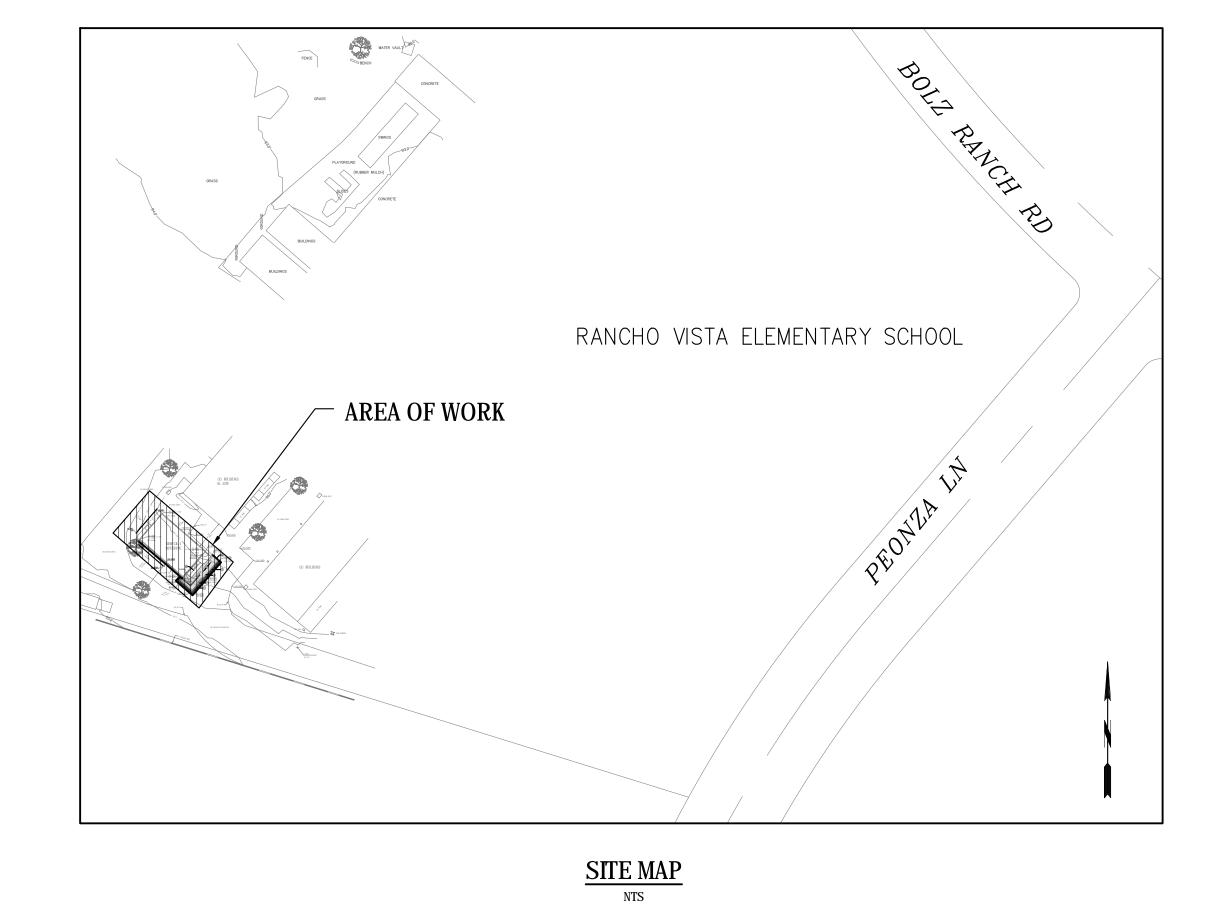
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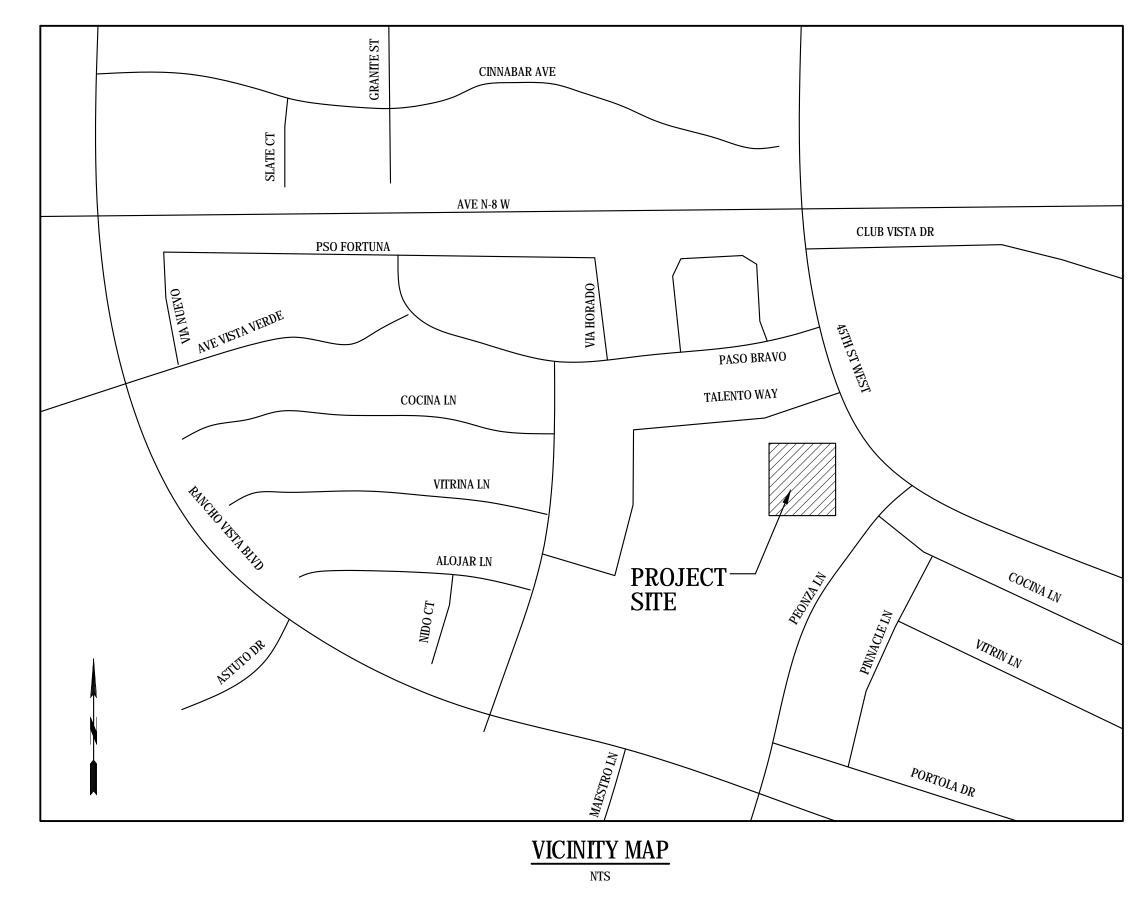
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RANCHO VISTA ELEMENTARY 4064 PEONZA LN, PALMDALE, CA 93551





BENCH MARK

BASIS OF BEARINGS MAPS IN THE CITY OF PALMDALE, COUNTY OF LOS

THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA: LOT 155 OF TRACT NO 34724 AS PER MAP RECORDED IN BOOK 1081, PAGES 83 TO 95 INCLUSIVE OF MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID

C1.00 COVER SHEET C1.01 GRADING PLAN

TBM USED: C-NAIL ON TOP OF ASPHALT PER TOPOGRAPHIC

BY RANDM SERVICES CAD AND SURVEYING.

LEGAL DESCRIPTION

APN 3001-036-900

ADDRESS: 40641 PEONZA LN

SHEET INDEX

C1.02 HORIZONTAL CONTROL

44732 YUCCA AVENUE LANCASTER, CA 93534 ryan.duke@duke-engineering.com

FLEWELLING & MOODY

architecture planning interiors

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DSA A# 03-120742 FILE# 19-117

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

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WESTSIDE UNION SCHOOL DISTRICT

COVER SHEET

2869.0000

3-18-2020

C1.00

ENGINEER'S/SURVEYOR'S STATEMENT REGARDING THE PRESENCE OF MONUMENTS WITHIN PROJECT LIMITS

I HEREBY ATTEST THAT I HAVE LOCATED AND REFERENCED ON THESE PLANS THE MONUMENT

EXISTING PRIOR TO CONSTRUCTION TO ENSURE PERPETUATION OF THEIR LOCATION IN ACCORDANCE WITH SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE. I FURTHER ATTEST THAT I HAVE PERFORMED A RECORD SEARCH AND FIELD INSPECTION TO IDENTIFY EXISTING MONUMENTS; SHALL SET SUFFICIENT CONTROLLING, WITNESS, AND PERMANENT MONUMENTS; AND SHALL FILE THE REQUISITE CORNER RECORD OF RECORD OF SURVEY OF THE REFERENCES WITH THE COUNTY SURVEYOR.



ENGINEER'S/SURVEYOR'S STATEMENT REGARDING PRIVATE/UTILITY EASEMENT

"AS CIVIL ENGINEER/LAND SURVEYOR OF THIS PROJECT, I HAVE IDENTIFIED THE LOCATION OF ALL EASEMENTS WHICH ARE DEPICTED ON THESE PLANS. I HAVE REVIEWED THE EASEMENT DOCUMENTS AND VERIFIED THE PROPOSED CONSTRUCTION DOES NOT CONFLICT OR INTERFERE WITH THE INTENDED EASEMENT USE.



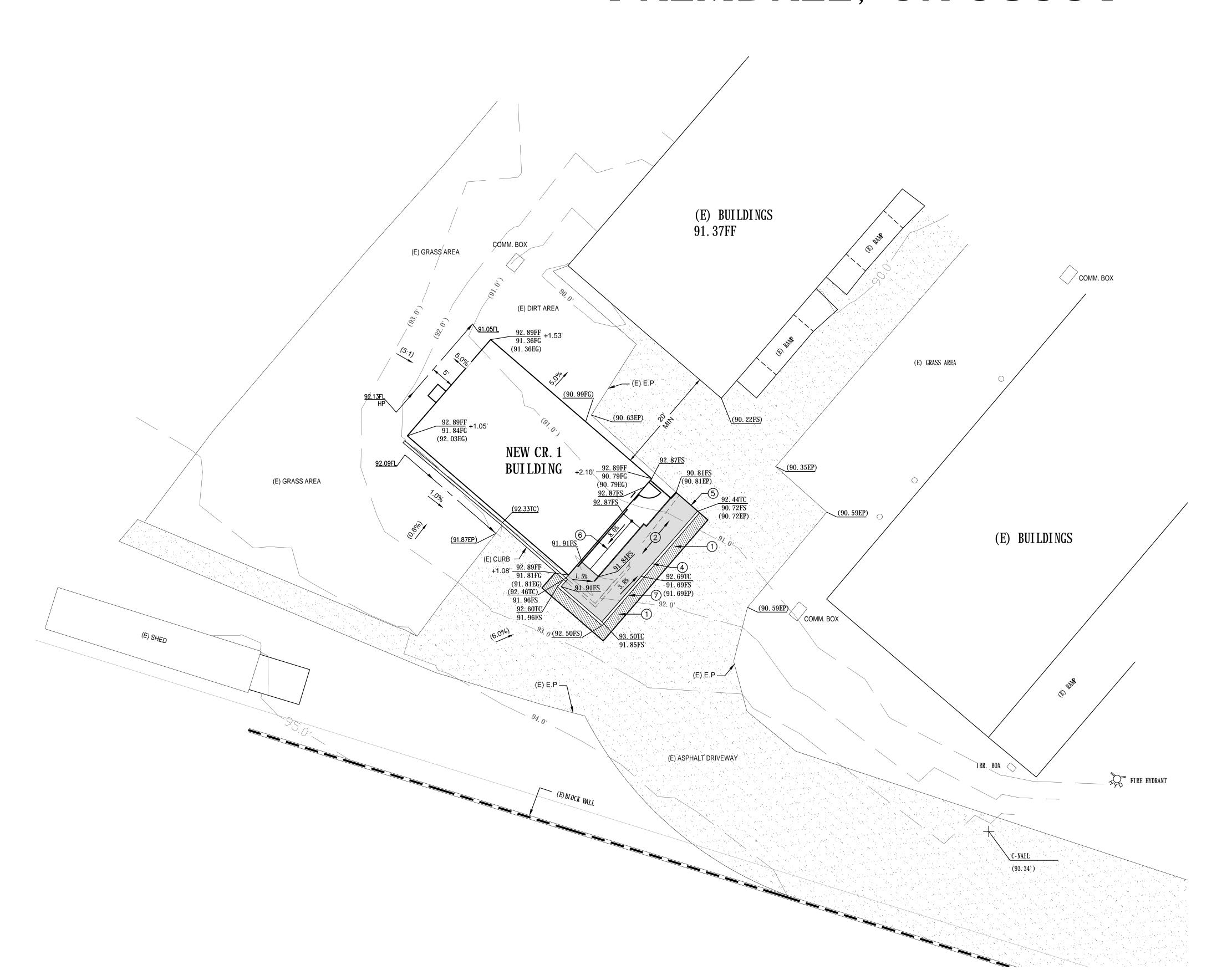
PRIVATE ENGINEER'S NOTICE TO CONTRACTORS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND ANY DISCREPANCY BETWEEN THE PLANS SHALL BE BROUGHT TO THE

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR ALSO AGREES TO DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

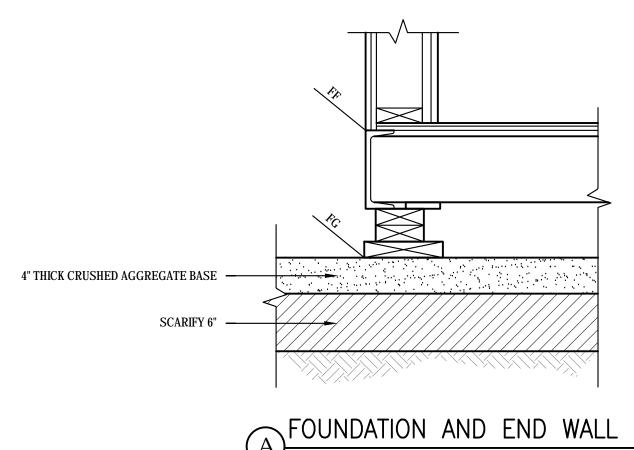


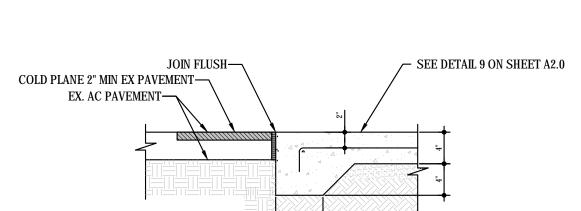
RANCHO VISTA ELEMENTARY 4064 PEONZA LN, PALMDALE, CA 93551



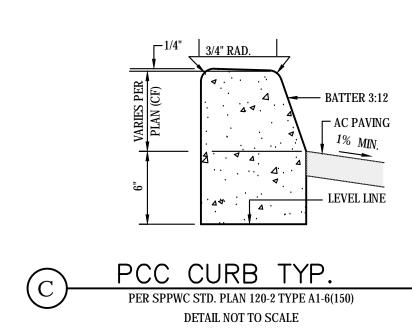
CONSTRUCTION NOTES

- (2) CONSTRUCT 4" THICK CONCRETE SLAB. PER ARCHITECT PLAN (SEE DETAIL 9 ON SHEET A2.0)
- BUILDING PAD SHALL BE 4" A-BASE OVER 6" OF SCARIFIED AND RECOMPACTED NATIVE SOIL TO MIN. 90% REL. COMPACT (U.N.O).
- (5) CONCRETE THICKENED EDGE PER ARCHITECT PLANS (SEE DETAIL 11 ON SHEET A2.0)
- 7 PCC CURB PER SPPWC 120-2, A1-6 (150). SEE DETAIL 'C' HEREON.



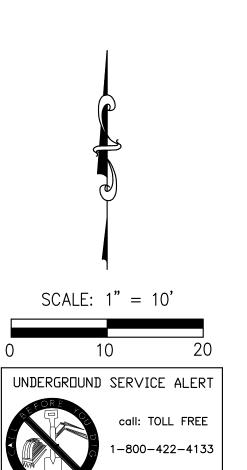


CONCRETE PAVING AT (E) PAVING DETAIL NOT TO SCALE



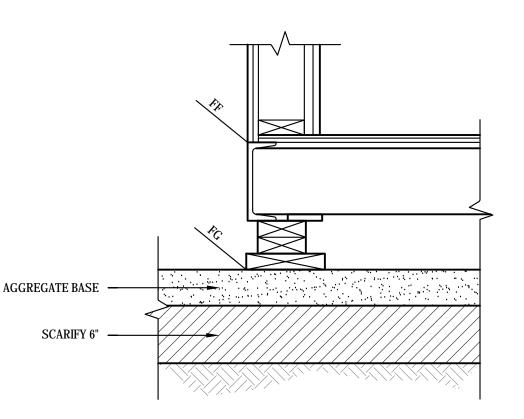
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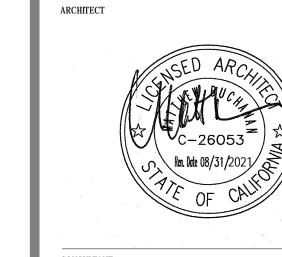
<u>LEGEND</u> EXISTING GRADE CONTOURS (XX.XXFS) EXISTING FINISHED SURFACE PROPOSED FINISHED SURFACE FINISH SURFACE TOP OF GRATE





- (4) SAW CUT AND REMOVE EXISTING 1' OF A.C. PAVEMENT AND BASE.
- (6) INSTALL STEEL RAMP PER ARCHITECT PLANS.







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Checked by

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RELOCATION OF (1) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL 40641 PEONZA LANE PALMDALE, CA 93551

WESTSIDE UNION SCHOOL DISTRICT

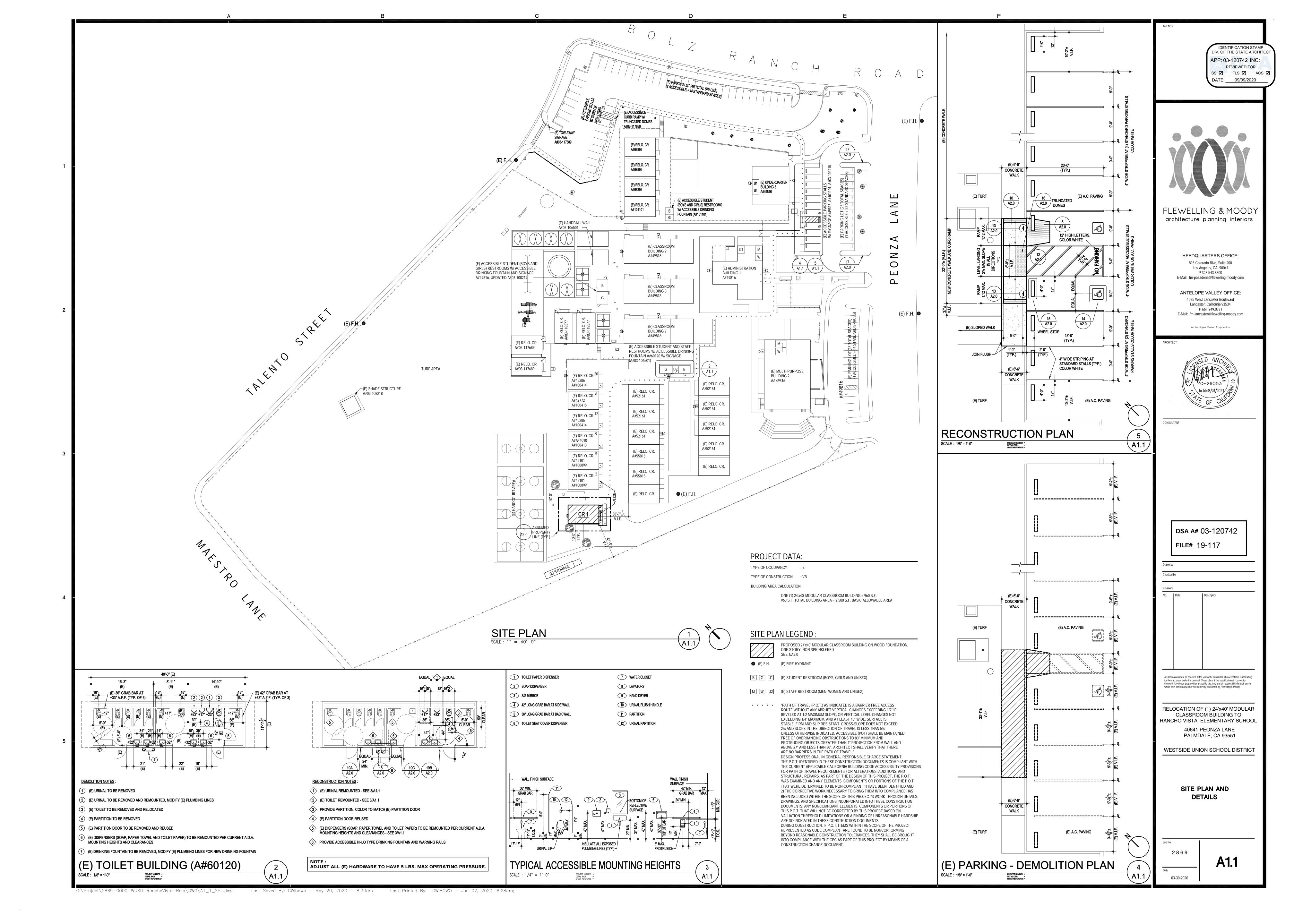
GRADING PLAN

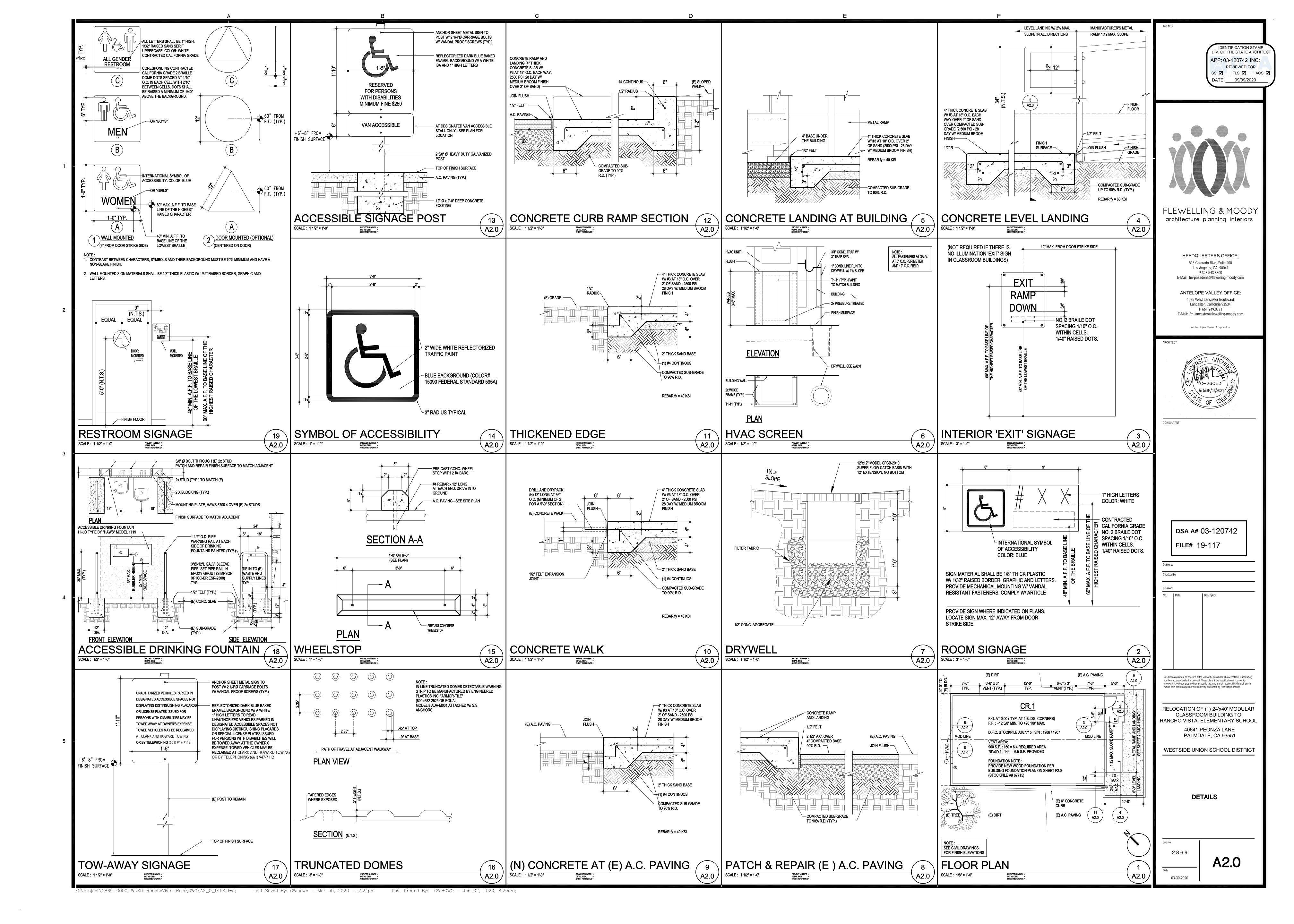
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3-18-2020

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IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-120742 INC: REVIEWED FOR RANCHO VISTA ELEMENTARY SS 🗹 FLS 🗹 ACS 🗹 4064 PEONZA LN, PALMDALE, CA 93551 FLEWELLING & MOODY architecture planning interiors HEADQUARTERS OFFICE: 815 Colorado Blvd, Suite 200 Los Angeles, CA 90041 P 323.543.8300 E-Mail: fm-pasadena@flewelling-moody.com ANTELOPE VALLEY OFFICE: 1035 West Lancaster Boulevard (E) BUILDINGS 91.37FF Lancaster, California 93534 P 661.949.0771 E-Mail: fm-lancaster@flewelling-moody.com (E) GRASS AREA An Employee Owned Corporation (E) GRASS AREA NEW CR. 1 (E) GRASS AREA 661-952-7918 44732 YUCCA AVENUE LANCASTER, CA 93534 ryan.duke@duke—engineering.com (E) BUILDINGS СОММ. ВОХ DSA A# 03-120742 (E) E.P — FILE# 19-117 (E) ASPHALT DRIVEWAY FIRE HYDRANT All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody. RELOCATION OF (1) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL 40641 PEONZA LANE PALMDALE, CA 93551 WESTSIDE UNION SCHOOL DISTRICT HORIZONTAL CONTROL 2869.0000 C1.02 3-18-2020





1.00 GENERAL

1.01 SCOPE: FURNISH MATERIALS AND PERFORM LABOR REQUIRED TO EXECUTE THIS WORK AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS NECESSARY TO COMPLETE THE CONTRACT, INCLUDING, BUT NOT LIMITED, THESE MAJOR ITEMS:

PROTECTION OF EXISTING WORK TO REMAIN.

BARRICADES, LIGHTS, SIGNS AND SAFETY PRECAUTIONS REQUIRED BY THE GOVERNING CODE. NOTE THE REQUIREMENTS FOR MOVEMENT TO ACCOMMODATE PHASING.

REMOVAL AND DISPOSITION OR SALVAGE (WHERE SPECIFIED) OF ALL SURPLUS MATERIAL RESULTING FROM THIS WORK.

REMOVAL OF UTILITY LINES (GAS, WATER, ELECTRIC, SEWER), AND STRUCTURES INDICATED FOR ABANDONMENT, AND SUCH LINES AND STRUCTURES NOT SHOWN BUT ENCOUNTERED IN THE COURSE OF THE WORK.

REMOVAL OF VEGETATION, INCLUDING IRRIGATION SYSTEM.

G. CUTTING AND REMOVAL OF SLABS, FOOTINGS, WALKS, PAVING, CURBS, GUTTERS, PITS AND OTHER UNDERGROUND STRUCTURES.

REMOVAL OF LIGHT STANDARDS, SIGN POSTS, FENCES, AND MISCELLANEOUS STRUCTURES. 1.02 GENERAL REQUIREMENTS

A. CODES: PERFORM ALL WORK IN ACCORDANCE WITH THE BUILDING CODE OF THE GOVERNING BODY HAVING JURISDICTION, THE GOVERNING STATE INDUSTRIAL SAFETY ORDERS, AND THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND

B. NOISE CONTROL: CARRY ON ALL WORK IN A MANNER WHICH WILL PRODUCE THE LEAST AMOUNT OF NOISE. INSTRUCT ALL WORKMEN IN NOISE CONTROL PROCEDURES. ADHERE TO ALL LOCAL ORDINANCES WITH REGARDS TO WORK HOURS. 2.00 MATERIALS

2.01 BARRICADES

CHAIN LINK FENCING, SIX FEET HIGH MINIMUM WITH SCREENING FABRIC.

3.00 EXECUTION 3.01 DUST CONTROL

A. USE WATER AS REQUIRED TO ALLAY DUST IN EARTH AREAS. USE NO OTHER AGENT WITHOUT THE SPECIFIC APPROVAL OF THE ARCHITECT. COMPLY WITH

3.02 PROTECTION OF WORK TO REMAIN

ALL LOCAL DUST CONTROL ORDINANCES.

A. USE STAKES, BARRICADES, AND SUCH OTHER MEANS OF PROTECTION AS REQUIRED TO PREVENT DAMAGE TO EXISTING WORK THAT IS INDICATED TO REMAIN.

3.03 CLEAN-UP

A. ALL MATERIAL RESULTING FROM THESE OPERATIONS, EXCEPT SALVAGE. BECOMES THE PROPERTY OF THE CONTRACTOR, AND SHALL BE REMOVED FROM THE SITE, PROMPTLY.

B. REMOVE MATERIALS AND DEBRIS PROMPTLY, AS GENERATED. BURNING OR BURYING OF DEBRIS ON THE SITE IS PROHIBITED. DISPOSE OF DEBRIS IN A LEGAL MANNER.

END OF SECTION

SECTION 05 50 00 MISCELLANEOUS METALS

1.00 GENERAL

1.01 SCOPE: FURNISH MATERIALS AND PERFORM LABOR REQUIRED TO EXECUTE THIS WORK AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS NECESSARY TO COMPLETE THE CONTRACT, INCLUDING, BUT NOT LIMITED TO, THESE MAJOR ITEMS: A. SHAPES, SLEEVES, ANCHORS, CONNECTORS, PLATED, BACKING PLATES.

SUPPORTS, AND FASTENING REQUIRED, BUT WHICH ARE NOT SPECIFIED IN OTHER SECTIONS.

GATES TO TRASH ENCLOSURE; ORNAMENTAL FENCES WITH GATES.

HANDRAILS AND GUARD RAILS.

D. SIGN STANDARDS.

1.02 GENERAL REQUIREMENTS

A. CODES: MATERIALS AND WORK SHALL CONFORM TO THE GOVERNING BUILDING CODE. IN CASE OF CONFLICT BETWEEN THESE SPECIFICATIONS AND THE BUILDING CODE, THE MORE STRINGENT SHALL GOVERN.

B. SHOP DRAWINGS: SUBMIT IN ACCORDANCE WITH SECTION 013323. SHOWING IN COMPLETE DETAIL ALL INFORMATION REQUIRED FOR FABRICATION, FINISHING AND INSTALLATION OF THIS WORK.

2.00 PRODUCTS

2.01 MATERIALS (AS REQUIRED)

A. STEEL SHAPES: ASTM A36.

B. PIPE FOR RAILINGS: ASTM A53 OR A120. USE STAINLESS STEEL PIPE WHERE INDICATED.

GALVANIZING: ASTM A123.

BOLTS, NUTS, SCREWS: ASTM A307, GRADE A

STEEL TUBING: ASTM A501.

F. PAINT-SHOP PRIME COAT FOR FERROUS METAL: AS SPECIFIED UNDER PAINTING SECTION.

2.02 GALVANIZING A. GALVANIZE ALL EXTERIOR ITEMS AND THOSE INTERIOR ITEMS SO

SPECIFIED. USE THE HOT DIP PROCESS, CONFORMING TO ASTM A123. 2.03 FABRICATION

A. GENERAL: USING SKILLED MECHANICS, FORM AND FABRICATE ITEMS OF WORK AS INDICATED AND AS REQUIRED TO MEET INSTALLATION CONDITIONS. MAKE PROVISIONS TO CONNECT WITH OR RECEIVE THE WORK OF OTHER TRADES.

B. CONNECTIONS: UNLESS OTHERWISE INDICATED, WELDED OR BOLT CONNECTIONS BETWEEN MEMBERS. WHERE POSSIBLE, CONCEAL CONNECTIONS IN THE FINISHED WORK. WHERE EXPOSED SCREW FASTENINGS ARE REQUIRED, USE PHILLIPS OVALHEAD SCREWS TO MATCH PARENT MATERIAL. FIT OR MITER EXPOSED JOINTS TO HAIRLINE TOLERANCE OR USE WELDED JOINTS. ON FINISHED FACES, GRIND ALL WELD SMOOTH AND SLUSH WITH BASE METAL.

EMBEDDED ITEMS: WHERE ITEMS ARE TO BE EMBEDDED IN CONCRETE, PROVIDE WELDED-ON ANCHORS OR LUGS AS INDICATED OR REQUIRED. 3.00 EXECUTION

3.01 INSTALLATION

INSTALL ALL ITEMS PLUMB, LEVEL AND SQUARE, SECURELY AND RIGIDLY ATTACHED TO SUPPORTING CONSTRUCTION AND AS DETAILED.

END OF SECTION

SECTION 06 40 00 ROUGH CARPENTRY

1.00 GENERAL

1.01 SUMMARY

A. PRINCIPAL WORK IN THIS SECTION:

 WOOD STRUCTURAL FRAMING AND PARTITION FRAMING. EXTERIOR SHEATING.

3. WOOD GROUNDS, NAILERS AND BLOCKING.

4. MISCELLANEOUS ROUGH CARPENTRY ITEMS AS INDICATED AND REQUIRED FOR COMPLETE INSTALLATION.

1. ALSC, AMERICAN LUMBER STANDARDS COMMITTEE: SOFTWOOD LUMBER

1.02 GENERAL REQUIREMENTS

A. GENERAL NOTES ON THE DRAWINGS ARE PART OF THIS SECTION.

1.03 QUALITY ASSURANCE A. REFERENCE STANDARDS: APPLICABLE PROVISIONS OF THE FOLLOWING GOVERN THE WORK OF THIS SECTION.

3. NFPA, NATIONAL FOREST PRODUCTS ASSOCIATION.

2. AWPA, AMERICAN WOOD PRESERVERS' ASSOCIATION.

4. PS-1, PLYWOOD GRADING RULES.

5. CALIFORNIA STATE BUILDING CODE, TITLE 24 CCR.

2.00 PRODUCTS 2.01 MATERIALS

A. LUMBER: MANUFACTURED, GRADED AND GRADE-MARKED IN COMPLIANCE WITH THE FOLLOWING REFERENCE SPECIFICATIONS AND GRADING RULES. GRADES AND SPECIES AS HEREINAFTER SPECIFIED OR NOTED ON THE DRAWINGS.

DOUGLAS FIR: GRADE IN COMPLIANCE WITH ONE OF THE FOLLOWING:

UBC STANDARD 23-1.

2. DOUGLAS FIR, LARCH OR HEMLOCK STRUCTURAL AND FRAMING LUMBER SHALL BE GRADED IN ACCORDANCE WITH THE "STANDARD GRADING RULES NO. 17" OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB) OR THE "STANDARD GRADING RULES" OF THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) LATEST EDITIONS.

C. PLYWOOD: U.S. DEPARTMENT OF COMMERCE, PRODUCT STANDARD PS 1, GRADE AND GRADE-MARKED BY THE AMERICAN PLYWOOD ASSOCIATION.

D. BOLTS: ASTM A 307, GRADE A SQUARE OR HEXAGONAL HEAD, SIZES AND SPACING AS REQUIRED BY THE DRAWINGS. ALL HEADS AND NUTS BEARING ON WOOD SHALL BE FITTED WITH WASHERS.

1. BOLTS, NUTS AND WASHERS FOR USE IN LOCATIONS SUBJECT TO MOISTURE, FOR OUTSIDE USE OR IN PORTIONS OF THE STRUCTURE, WHICH ARE NOT COMPLETELY ENCLOSED, OR ELSEWHERE AS SPECIFIED OR INDICATED. GALVANIZED IN COMPLIANCE WITH ASTM A 153.

E. NAILS: COMMON NAILS, SIZES AND TYPE INDICATED, SPECIFIED, OR AS REQUIRED FOR THE PURPOSE, IN COMPLIANCE WITH FS FF-N-105A.

F. TIMBER CONNECTORS: ICBO APPROVED CONNECTORS, SIMPSON OR EQUAL.

3.00 EXECUTION

3.01 CARPENTRY INSTALLATION

A. WORKMANSHIP: PERFORM WORK IN ACCORDANCE WITH THE BEST STANDARDS OF PRACTICE RELATING TO THE TRADES AND CAREFULLY PLAN AND LAY OUT THE WORK AS REQUIRED. PROPERLY ACCOMMODATE THE WORK OF OTHER TRADES, ACCURATELY SAW-CUT AND FIT LUMBER INTO THE RESPECTIVE LOCATIONS. TRUE TO LINE, GRADE, AND LEVEL, AS INDICATED OR REQUIRED, AND PERMANENTLY SECURE IN PROPER POSITION WITH SPIKES, NAILS, LAG SCREWS, BOLTS, HANGERS, OR OTHER FASTENINGS TO MAKE THE WORK SUBSTANTIAL AND RIGID IN ALL PARTS AND CONNECTIONS.

B. CONNECTION: MAKE CONNECTIONS BETWEEN MEMBERS TIGHT ACCURATE AND SECURE. PLACE FASTENINGS WITH OUT SPLITTING WOOD: PREDRILL WHEN REQUIRED. DRILL BOLT HOLE SAME SIZE AS BOLT DIAMETER. DRILL HOLE FOR LAG SCREWS SAME AS THREAD ROOT DIAMETER: AND CANTERBURY, SAME DEPTH AND DIAMETER AS SHANK. TURN LAG SCREWS INTO PLACE; DO NOT DRIVE. PROVIDE BOLTS AND LAG SCREWS WITH WASHERS UNDER EVERY HEAD AND NUT BEARING ON WOOD. TIGHTEN BOLTS AND LAG SCREWS AT INSTALLATION; CAREFULLY RETIGHTEN JUST PRIOR TO CLOSING, OR AT COMPLETION OF THE PROJECT.

3.02 CLEAN-UP

A. COMPLY WITH THE REQUIREMENTS OF SECTION 01740. DISPOSE OF PRESSURE-TREATED WOOD IN AN AUTHORIZED DISPOSAL AREA. DO NOT BURN TREATED WOOD. DO NOT BURY WOOD OF ANY TYPE ON THE JOBSITE. END OF SECTION

SECTION 07 92 00 JOINT SEALANTS

1.00 GENERAL

1.01 SUMMARY

A. THIS SECTION INCLUDES JOINT SEALANTS FOR THE FOLLOWING LOCATIONS:

1. EXTERIOR JOINTS IN VERTICAL SURFACES AND NON-TRAFFIC HORIZONTAL SURFACES AS INDICATED BELOW:

a. CONTROL AND EXPANSION JOINTS IN CAST-IN-PLACE CONCRETE.

b. JOINTS BETWEEN DIFFERENT MATERIALS LISTED ABOVE.

2. EXTERIOR JOINTS IN HORIZONTAL TRAFFIC SURFACES AS INDICATED BELOW: a. CONTROL, EXPANSION AND ISOLATION JOINTS IN CAST-IN-PLACE CONCRETE SLABS.

b. JOINTS BETWEEN DIFFERENT MATERIALS LISTED ABOVE.

1.02 SUBMITTALS

A. PROCEDURE: IN ACCORDANCE WITH SECTION 01340.

1.03 JOB CONDITIONS

A. DO NOT INSTALL SEALANTS UNDER ADVERSE WEATHER CONDITIONS, OR WHEN TEMPERATURES ARE BEYOND MANUFACTURER'S RECOMMENDED LIMITS.

B. PROCEED WITH THE INSTALLATION ONLY WHEN FORECASTED WEATHER CONDITIONS ARE FAVORABLE FOR PROPER SEALANT CURE AND DEVELOPMENT OF EARLY BOND STRENGTH.

2.00 PRODUCTS

2.01 MATERIALS

A. COLORS: MATCH SEALANT COLOR TO COLOR OF ADJACENT MATERIALS AS CLOSELY AS POSSIBLE USING COLORS SELECTED FROM THE MANUFACTURER'S STANDARD PALETTE. AS APPROVED BY THE ARCHITECT.

B. COMPATIBILITY: VERIFY THAT SELECTED SEALANTS WILL NOT CAUSE STAINING. DEGRADATION AND PREMATURE AGING OF THE ADJACENT SURFACES AND THE SEALANT ITSELF WHEN IN CONTACT WITH THESE SURFACES.

1. FOR ALL OTHER EXTERIOR APPLICATIONS:

A. GENERAL ELECTRIC CORP.: SILPRUF. b. DOW CORNING CORP.: 123, 790 OR 795.

c. PECORA CORP.: 90 OR 895.

d. TREMCO CORP.: SPECTREM I OR SPECTREM II

e. OR APPROVED EQUAL.

C. MISCELLANEOUS MATERIALS:

1. JOINT CLEANER, PRIMER AND SEALER: AS RECOMMENDED BY THE SEALANT MANUFACTURER, FOR THE SURFACES TO BE CLEANED, PRIMED OR SEALED.

2. SEALANT BACKER ROD:

a. COMPRESSIBLE ROD STOCK FORMED OF CLOSED-CELL POLYETHYLENE FOAM, POLYETHYLENE JACKETED POLYURETHANE FOAM, BUTYL RUBBER NEOPRENE FOAM OR OTHER FLEXIBLE, PERMANENT, DURABLE NON-ABSORPTIVE MATERIAL RECOMMENDED BY THE SEALANT MANUFACTURER.

3.00 EXECUTION

3.01 INSTALLATION

1.00 GENERAL

A. COMPLY WITH SEALANT MANUFACTURER'S PRINTED INSTRUCTIONS AND ASTM C 1193, EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE SPECIFIED HEREIN. AT THE ARCHITECT'S OPTION, ASTM C 1193 MAY ALSO BE USED FOR REJECTION OF UNACCEPTABLE INSTALLATIONS.

END OF SECTION

1.01 DESCRIPTION

PAINTING AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING, BUT NOT LIMITED TO THESE MAJOR ITEMS:

B. EXTERIOR SURFACES NOT TO BE PAINTED.

1. CONCRETE PAVING AND BASE, INCLUDING METAL INSERTS.

3. GRATINGS, CHECKER PLATE OR CAST IRON COVERS AND FRAMES. 4. ALUMINUM WITH ANODIC (COLOR) FINISH, OR CLEAR ANODIZE.

1.02 RELATED WORK SPECIFIED ELSEWHERE AS REQUIRED

A. SHOP PRIMED METAL.

C. SIGNAGE

ELASTOMERIC COATING

1.05 PROTECTION

A. PROTECT FLOORS AND ALL ADJACENT SURFACES FROM PAINT SMEARS, SPATTERS, AND DROPPINGS. USE DROP-CLOTHS TO PROTECT FLOORS. COVER FIXTURES AND REMOVE HARDWARE NOT TO BE PAINTED. MASK OFF AREAS WHERE

2.00 PRODUCTS

2.01 GENERAL

A. MATERIALS SHALL CONFORM TO GOVERNING REQUIREMENTS OF SOUTH COAST AIR QUALITY CONTROL DISTRICT.

2.03 MANUFACTURERS

AND LISTED BY MATERIAL NUMBER AND NAMES ARE STANDARDS FOR KINDS, QUALITY AND FUNCTION, AND ARE TAKEN FROM THE STOCK LIST OF ARCHITECTURAL FINISHES OF THE DUNN EDWARDS CORPORATION, LOS ANGELES.

ARCHITECTS' APPROVAL. 2. EXCEPT FOR SPECIALTY ITEMS, OR OTHERWISE SPECIFIED, ALL MATERIALS

SHALL BE BY ONE MANUFACTURER. PRIMER SHALL BE FROM SAME

3. MISCELLANEOUS BASIC MATERIALS SUCH AS LINSEED OILS, SHELLAC, WHITE LEAD, PUTTY AND SOLVENTS SHALL BE PURE AND OF HIGHEST QUALITY.

2.03 MATERIALS A. SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE FOLLOWING

B. EXTERIOR FINISHES:

1. SURFACE - GALVANIZED METAL PRETREATMENT - GE123 GALVA-ETCH

3RD COAT - W960 PERMAGLOSS

2. SURFACE - WOOD

FIRST COAT: SPARTASHILED, EXTERIOR

SECOND COAT: 100% ACRYLIC SEMI-GLOSS PAINT (SSHL50)

3.00 EXECUTION

A. GENERAL: SURFACES TO RECEIVE PAINT FINISH SHALL BE PREPARED AS

B. METAL SHALL BE FREE OF RUST. DAMAGED SHOP PRIMER SHALL BE RE-TOUCHED. ROUGH EDGES SHALL BE SANDED.

3.02 APPLICATION

A. MISCELLANEOUS FINISHES:

1. FINISHES NOT SCHEDULED ON DRAWINGS:

a. WHERE WALLS ARE PAINTED: (1) PIPES, CONDUITS OR DUCTS: APPLY SAME FINISH AS SPECIFIED FOR WALL OR CEILING ADJACENT TO SURFACES TO BE PAINTED.

PRIME SURFACES AS FOLLOWS BEFORE WALL OR CEILING FINISH

IS APPLIED. 3.03 CLEANING AND PATCHING

A. UPON COMPLETION, REMOVED SPILLAGE, SPATTER SPOTS AND OTHER MISPLACED PAINT MATERIAL. IN MANNER THAT WILL NOT DAMAGE SURFACES. PATCH. REPAIR OR MAKE RESTITUTION FOR WORK OF OTHERS DAMAGED BY PAINTING OPERATIONS, TO SATISFACTION OF ARCHITECT.

A. PROVIDE TO OWNER AN ADDITIONAL 5% OF ALL TYPES AND COLORS OF ALL

END OF SECTION

3.04 ATTIC STOCK

MATERIALS SPECIFIED.

SECTION 10 14 00 SIGNAGE

1.00 GENERAL

1.01 SCOPE A. SIGNAGE AS SHOWN ON THE DRAWINGS AND AS SPECIFIED, INCLUDING BUT NOT LIMITED TO THE FOLLOWING MAJOR ITEMS:

1. DOOR SIGNS AS SCHEDULED AND NOTED.

DISABLED ACCESS SIGNS.

DISABLED ACCESS SYMBOL SIGNS FOR TOILET ROOMS.

EXIT SIGNS.

5. DISABLED ACCESS PARKING SIGNS AND GATE SIGNS.

ROOM OCCUPANCY SIGNS.

TOILET ROOM SIGNS.

8. BUILDING IDENTIFICATION SIGNS

DISABILITIES ACT.

A. WORK SHALL CONFORM TO 2013 CBC 11B AND THE AMERICAN WITH

APPROVED SYSTEMS (MANUFACTURERS): 1. ASI/MODULEX, INC. (213) 645-1400.

2. KROY, (800) 733-5769.

3. MOWHAWK SIGN SYSTEMS, INC. (518) 370-3433. 4. CALIFORNIA CONTRACT, (818) 503-7241

5. OR APPROVED EQUAL

2.00 MATERIALS 2.01 PLAQUE SIGNS

A. NUMBER SIGNS: MOUNT ON A BASE - 1 1/8" INCH HIGH X 5 INCHES LONG. TYPE FACE - MODIFIED HELVETICA. NUMBER SIZE 9/16 INCH HIGH. PROVIDE BRAILLE SYMBOLS. SECURE ADJACENT TO DOOR, WHERE INDICATED. SIMILAR TO: ASI INFINITY;

B. TEXT SIGNS: MOUNT ON A BASE - 1 1/8 INCH HIGH X VARYING LENGTHS. TYPE FACE - MODIFIED HELVETICA. LETTER SIZE - 9/16" INCH HIGH, SUPPER AND LOWER CASE. PROVIDE BRAILLE SYMBOLS. SECURE ADJACENT TO DOOR, WHERE INDICATED. SIMILAR TO: ASI INFINITY; SPE-SA.

2.02 PERMANENT TEXT SIGNS A. DIRECTIONAL AND INFORMATIONAL SIGNS REQUIRED BY TITLE 24 CCR AND THE ADA AS SHOWN ON THE DRAWINGS SHALL HAVE THE TEST SILVER OR VINYL DIE CUT IN SIGNS AS NOTED. SIMILAR TO ASI INFINITY SOG-SA.

2.03 PERMANENT TEXT - EXTERIOR

UPPER AND LOWER CASE MODIFIED HELVETICA, AND OTHER TEXT. MATERIAL: FIBERGLASS BASE, WITH URETHANE FINISH AND SILK SCREENED GRAPHICS, PROTECTED WITH A TRANSPARENT MATTE FINISH. SIMILAR TO ASI GOF

A. SIZE AS REQUIRED TO PROVIDE TEXT STATED USING 1 INCH HIGH LETTERS.

MOUNTING: SCREWS 1/4 INCH DIAMETER, CORROSION AND VANDAL RESISTANT, SELF DRILLING.

2.04 DISABLE ACCESS SIGNS, OCCUPANCY SIGNS

A. TOILET ROOM SYMBOLS

1. MEN'S AND BOYS' SIGN IS A 12" TRIANGLE. PANEL IS PAINTED ACRYLIC WITH SUB-SURFACE TEXT AND PICTOGRAM. 2. WOMEN'S AND GIRLS' ROOM SIGNS IS A 12" CIRCLE. PANEL IS PAINTED

B. FREE-STANDING EXTERIOR ACCESSIBILITY SIGNS, TRAFFIC CONTROL AND

OTHER EXTERIOR SIGNS: TRAFFIC CONTROL SERVICE, INC. (800) 222-8274, ZUMAR

INDUSTRIES (323) 724-8450 OR WESTERN HIGHWAY PRODUCTS, INC. (714) 761-4811, OR

ACRYLIC WITH SUB-SURFACE TEXT AND PICTOGRAM. UNISEX.

EQUAL.

3.00 EXECUTION

3.01 PERMANENT TEXT A. PERMANENT TEXT NOT INDICATED IN CONTRACT DRAWINGS WILL BE FURNISHED AT THE TIME THAT SUBMITTALS ARE RETURNED.

3.02 INSTALLATION A. INSTALL WHERE INDICATED. SIGNS SHALL BE A COMPLETE VANDAL RESISTANT INSTALLATION. FASTENERS SHALL BE CONCEALED, IN DRILLED HOLES, COUNTER SUNK WHERE INDICATED. SIGNS SHALL ALIGN WITH ADJACENT LINES AND EDGES, BE LEVEL, FLAT ON THE MOUNTING SURFACE.

MANUFACTURER. FASTENERS SHALL BE CONCEALED, IN DRILLED HOLES, COUNTER SUNK WHERE INDICATED. SIGNS SHALL ALIGN WITH ADJACENT LINES AND EDGES, BE LEVEL, FLAT ON THE MOUNTING SURFACE. C. POST MOUNTED SIGNS SHALL FOLLOW SAME REQUIREMENTS AS SPECIFIED

B. BUILDING WALL SIGNS: INSTALL AS RECOMMENDED BY THE

SECTION 31 10 00

SITE CLEARING

END OF SECTION

PART 1 - GENERAL 1.1 SUMMARY A. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, SERVICES, TESTING, TRANSPORTATION AND EQUIPMENT NECESSARY FOR THE COMPLETION OF ALL SITE CLEARING WORK AS REQUIRED AND AS INDICATED ON DRAWINGS AND SPECIFIED HEREIN. WORK MATERIALS AND EQUIPMENT NOT INDICATED OR SPECIFIED WHICH IS NECESSARY FOR THE COMPLETE AND PROPER OPERATION OF THE WORK OF THIS SECTION IN ACCORDANCE WITH THE TRUE INTENT AND MEANING OF THE CONTRACT DOCUMENTS SHALL BE PROVIDED AND INCORPORATED AT NO ADDITIONAL COST TO

THE OWNER. B. REMOVAL OF SURFACE DEBRIS; REMOVAL OF PAVING AND CURBS; REMOVAL OF TREES, SHRUBS, AND OTHER PLANT LIFE; TOPSOIL EXCAVATION; AND REPAIR OF DAMAGED VEGETATION AND/OR IRRIGATION SYSTEMS/SYSTEM

COMPONENTS. C. REMOVAL OF CONCRETE AND BITUMINOUS SURFACING.

FOR LINE POSTS OF SAME HEIGHT IN SECTION 32 31 15.

1.2 RELATED SECTIONS A. SECTION 02 41 19: DEMOLITION.

1.3 REGULATORY REQUIREMENTS A. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, LICENSES, OR AGREEMENTS REQUIRED BY ANY LEGALLY CONSTITUTED AGENCY, PAY FOR ALL FEES AND GIVE ALL NECESSARY NOTICES REQUIRED FOR THE CONSTRUCTION OF THE WORK. THE SCHOOL DISTRICT SHALL REIMBURSE THE CONTRACTOR FOR ALL NECESSARY PERMITS OR INSPECTION FEES BY ANY LEGALLY CONSTITUTED AGENCY

APPLICABLE GOVERNMENT CODES AND REGULATIONS ESPECIALLY MEETING ALL SAFETY STANDARDS AND REQUIREMENTS OF CAL/OSHA. C. COMPLY STRICTLY TO ALL LOCAL AIR QUALITY MANAGEMENT DISTRICT'S RULES AND REGULATIONS.

A. OBTAIN APPROVED CLEAN BORROW SOIL MATERIALS OFF-SITE WHEN

B. PERFORM ALL WORK OF THIS SECTION IN STRICT ACCORDANCE WITH

SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE. SEE SPECIFICATION SECTION 31 20 00 FOR REQUIREMENTS. PART 3 - EXECUTION

2.1 SATISFACTORY SOIL MATERIALS:

PART 2 - PRODUCTS

AT A ONE TO ONE BASIS.

3.1 PROTECTION A. PROTECT EXISTING STRUCTURES AND SITE IMPROVEMENTS INDICATED TO REMAIN, FROM DAMAGE BY APPROVED METHODS AND/OR AS AUTHORIZED BY THE DISTRICT REPRESENTATIVE. REMOVAL OF ALL PROTECTIONS SHALL BE WHEN WORK OF THIS SECTION IS COMPLETED OR WHEN SO AUTHORIZED BY THE DISTRICT

REPRESENTATIVE. B. PROTECT EXISTING UTILITIES INDICATED OR MADE KNOWN TO REMAIN TRAVERSING THE JOB-SITE AND SERVING EXISTING ADJACENT FACILITIES.

3.2 EXCESS MATERIALS DISPOSAL A. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS, INCLUDING TRASH AND DEBRIS, AND

LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY. END OF SECTION

SECTION 31 20 00 EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES: 1. PREPARING SUBGRADES FOR WALKS, PAVEMENTS, TURF AND GRASSES, AND

2. DRAINAGE COURSE FOR CONCRETE SLABS-ON-GRADE.

SUBBASE COURSE FOR CONCRETE WALKS.

1.2 DEFINITIONS

A. BACKFILL: SOIL MATERIAL USED TO FILL AN EXCAVATION.

1. INITIAL BACKFILL: BACKFILL PLACED BESIDE AND OVER PIPE IN A TRENCH, INCLUDING HAUNCHES TO SUPPORT SIDES OF PIPE. 2. FINAL BACKFILL: BACKFILL PLACED OVER INITIAL BACKFILL TO FILL A TRENCH. B. BASE COURSE: AGGREGATE LAYER PLACED BETWEEN THE SUBBASE

COURSE AND HOT-MIX ASPHALT PAVING. C. BEDDING COURSE: AGGREGATE LAYER PLACED OVER THE EXCAVATED SUBGRADE IN A TRENCH BEFORE LAYING PIPE. D. BORROW SOIL: SATISFACTORY SOIL IMPORTED FROM OFF-SITE FOR USE AS FILL OR BACKFILL.

E. FILL: SOIL MATERIALS USED TO RAISE EXISTING GRADES.

1.3 PROJECT CONDITIONS

UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE BEGINNING EARTH MOVING OPERATIONS.

A. OBTAIN APPROVED CLEAN BORROW SOIL MATERIALS OFF-SITE WHEN

PART 2 - PRODUCTS

APPROVED SITE. PART 3 - EXECUTION

A. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTH MOVING B. PROTECT AND MAINTAIN EROSION AND SEDIMENTATION CONTROLS DURING EARTH MOVING OPERATIONS.

SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE, ALL BORROW SITES

REQUIRE APPROVAL BY GEOTECHNICAL ENGINEER OF RECORD AND SHALL BE DTSC

REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. UNCLASSIFIED EXCAVATED MATERIALS MAY INCLUDE ROCK, SOIL MATERIALS, AND OBSTRUCTIONS. NO CHANGES IN THE CONTRACT SUM OR THE CONTRACT TIME WILL BE AUTHORIZED FOR ROCK EXCAVATION OR REMOVAL OF

1. IF EXCAVATED MATERIALS INTENDED FOR FILL AND BACKFILL INCLUDE

A. UNCLASSIFIED EXCAVATION: EXCAVATE TO SUBGRADE ELEVATIONS

UNSATISFACTORY SOIL MATERIALS AND ROCK, REPLACE WITH SATISFACTORY SOIL MATERIALS.

3.3 EXCAVATION FOR WALKS AND PAVEMENTS A. EXCAVATE SURFACES UNDER WALKS AND PAVEMENTS TO INDICATED LINES, CROSS SECTIONS, ELEVATIONS, AND SUBGRADES.

A. STOCKPILE BORROW SOIL MATERIALS AND EXCAVATED SATISFACTORY SOIL MATERIALS WITHOUT INTERMIXING. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.

3.5 SOIL MOISTURE CONTROL

3.4 STORAGE OF SOIL MATERIALS

3.2 EXCAVATION, GENERAL

OBSTRUCTIONS.

UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL SOIL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT. 3.6 COMPACTION OF SOIL BACKFILLS AND FILLS

NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. RETAIN ONE OPTION IN PARAGRAPH BELOW BASED ON ASTM LABORATORY-TEST METHOD REQUIRED. REPLACE THE TERM "UNIT WEIGHT" WITH "DENSITY" IF

PLACE BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 6 INCHES IN

LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND

B. COMPACT SOIL MATERIALS TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 ASTM D 1557:

RETAIN APPLICABLE SUBPARAGRAPHS BELOW. PERCENTAGES OF MAXIMUM DRY UNIT

BELOW SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL SOIL

WEIGHT ARE EXAMPLES ONLY; REVISE TO SUIT PROJECT. DELETE SCARIFYING AND RECOMPACTING EXISTING SUBGRADE WHEN PROOF-ROLLING WILL SUFFICE. 1. UNDER WALKWAYS, SCARIFY AND RECOMPACT TOP 6 INCHES (150 MM)

MATERIAL AT 90 PERCENT. 2. FOR UTILITY TRENCHES, COMPACT EACH LAYER OF INITIAL AND FINAL BACKFILL SOIL MATERIAL AT 90 PERCENT.

3.7 GRADING A. GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED. B. SITE ROUGH GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM

BUILDINGS AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS

PLACE SUBBASE COURSE AND BASE COURSE ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.

RETAIN OPTION IN THREE SUBPARAGRAPHS BELOW IF RETAINING "AND BASE COURSE" OPTION IN PARAGRAPHS ABOVE. . COMPACT SUBBASE COURSE AND BASE COURSE AT OPTIMUM MOISTURE CONTENT TO REQUIRED GRADES, LINES, CROSS SECTIONS, AND THICKNESS

TO NOT LESS THAN 90 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING

A. TESTING AGENCY: OWNER WILL ENGAGE A QUALIFIED GEOTECHNICAL

C. ON PREPARED SUBGRADE, PLACE SUBBASE COURSE AND BASE COURSE

TO ASTM D 698 ASTM D 1557. 3.9 FIELD QUALITY CONTROL

WITHIN THE FOLLOWING TOLERANCES:

TURF OR UNPAVED AREAS: PLUS OR MINUS 1 INCH (25 MM)]

3.8 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

3. WALKS: PLUS OR MINUS 1 INCH (25 MM)

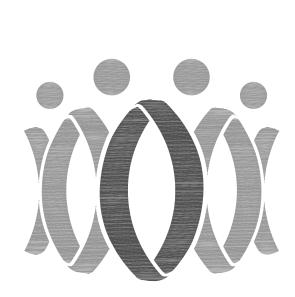
UNDER PAVEMENTS AND WALKS AS FOLLOWS:

3.10 DISPOSAL OF SURPLUS AND WASTE MATERIALS A. REMOVE SURPLUS SATISFACTORY SOIL AND WASTE MATERIALS. INCLUDING UNSATISFACTORY SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY

ENGINEERING TESTING AGENCY TO PERFORM TESTS AND INSPECTIONS.

END OF SECTION

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-120742 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 09/09/2020



FLEWELLING & MOODY architecture planning interiors

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CONSULTANT

DSA A# 03-120742

FILE# 19-117

CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL 40641 PEONZA LANE PALMDALE, CA 93551

II dimensions must be checked at the job by the contractor who accepts full responsibility

therewith have been prepared for a specific site. Any and all responsibility for their use in

RELOCATION OF (1) 24'x40' MODULAR

WESTSIDE UNION SCHOOL DISTRICT

for their accuracy under the contract. These plans & the specifications in connection

whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

SPECIFICATIONS

03-30-2020

G:\Project\2869—0000—WUSD—RanchoVista—Relo\DWG\SPEC—1.dwg; Last Saved By: GWibowo — Mar 30, 2020 — 3:19pm Last Printed By: GWIBOWO — Mar 31, 2020, 8:08am;

SECTION 09 91 00 PAINTING

1. ALL SURFACES SCHEDULED, SPECIFIED OR INDICATED.

STAINLESS STEEL.

PROJECT SIGN, IN DIVISION 0. TEMPORARY FACILITIES.

1.04 PRODUCT HANDLING A. DELIVER MATERIALS TO THE PROJECT SITE IN UNOPENED CONTAINERS BEARING MANUFACTURER'S NAME AND PRODUCT DESCRIPTIONS CORRESPONDING TO DESIGNATION ON MATERIAL LIST.

A. MATERIALS NECESSARY TO COMPLETE THE PAINTING HEREIN SPECIFIED

1. EQUIVALENT MATERIALS FROM THE ARCHITECTURAL PRODUCT LINE OF SINCLAIR/ICI DULUX PAINT COMPANY, SHERWIN WILLIAMS, FRAZEE INDUSTRIES INC. OR VISTA PAINT CORP. WILL BE ACCEPTABLE, SUBJECT TO

PROCEDURES FOR THE SURFACE AND FINISH DESIRED THEREON.

MANUFACTURER AS FINISH PAINT.

1ST COAT - QD43-7 GALVA-ALUM 2ND COAT - W960 PERMAGLOSS

PRIMER ULTRA-GRIP, EXTERIOR MULTI-SURFACE PRIMER LUGSLOO.

3.01 PREPARATION OF SURFACES INDICATED BY PRIMER PAINT PRINTED INSTRUCTIONS.

MISCELLANEOUS FINISH/EQUIPMENT SPECIFICATIONS

CARPETING:

ALL CARPETING SHALL BE FABRICATED BY A SINGLE MANUFACTURER. EXPERT UMP BY SHAW CONTRACT GROUP, PERFORMANCE BROADLOOM, 26 OZ.

RUBBER BASE:

SOLID RUBBER BASES BY THE JOHNSON RUBBER CO., BURKE, FLEXCO CO. OR ROPPE RUBBER CORP. OF THE COLOR SELECTED BY THE ARCHITECT.

SHEET VINYL:

TARKETT, STYLE IQ OPTIMA, 12' WIDTH X 90' LONG ROLLS WITH 6" HIGH COVED BASE.

TACKABLE WALL PANELS:

KOROSEAL/HARBORWEAVE 1/2" THICK NCFR FLAME SPEC BOARD BACKING PANEL MANUFACTURED BY HOMASOTE, OR 1/2" THICK FIBERBOARD MANUFACTURED BY NACO OR BP CELOTEX

CERAMIC WALL TILE:

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4-1/4 IN. X 4-1/4 IN. AND 6 IN. X 6 IN. X 5/16 IN. THICK, WITH CUSHIONED EDGES, STAIN MATTE GLAZED, BY AMERICAN OLEAN, DAL-TILE, HUNTINGTON/PACIFIC OR EQUAL.

SUSPENDED CEILING GRID AND TILES:

GRID: CHICAGO METALLIC 660 SERIES, OR EQUAL BY ARMSTRONG WORLD INDUSTRIES OR DONN CORP. "HEAVY DUTY" CLASSIFICATION COMPLYING WITH

TILES: 24 INCH X 48 INCH X 5/8 INCH THICK, WHITE, CORTEGA MINATONE, 703

LEAVEX "475BCSHGY" HORIZONTAL BABY CHANGING STATION.

SECTION 32 16 00 CONCRETE SITEWORK

PART 1 - GENERAL

1.1 SECTION INCLUDES:

A. CONCRETE WALKS, PAVING, RAMPS, CURBS, WALLS, MOW STRIPS, FENCE FOOTINGS AND CATCH BASINS, AND MISCELLANEOUS CONCRETE SITE WORK AS INDICATED ON THE DRAWINGS.

B. FURNISHING AND INSTALLING FORMWORK.

C. FURNISHING AND INSTALLING REINFORCING STEEL.

D. FURNISHING AND PLACING CONCRETE, INCLUDING JOINTS AND FINISHING.

E. CURING CONCRETE.

1.2 RELATED SECTIONS:

A. DIVISION 31: EARTHWORK

PART 2 - PRODUCTS

2.1 MATERIALS

A. CONFORM TO SECTION 201 - "CONCRETE, MORTAR AND RELATED MATERIALS" OF THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION.

B. FORMS: STEEL, WOOD, OR OTHER SUITABLE MATERIAL OF SIZE AND STRENGTH TO RESIST MOVING DURING CONCRETE PLACEMENT AND TO RETAIN HORIZONTAL AND VERTICAL ALIGNMENT UNTIL REMOVAL. USE STRAIGHT FORMS, FREE OF DISTORTION AND DEFECTS.

1. USE FLEXIBLE SPRING STEEL FORMS OR LAMINATED BOARDS TO FORM RADIUS BENDS AS REQUIRED.

2. COAT FORMS WITH A NON-STAINING FORM RELEASE AGENT THAT WILL NOT DISCOLOR OR DEFACE SURFACE OF CONCRETE.

C. REINFORCING STEEL:

1. REINFORCING BARS: ASTM A615, GRADE 60.

2. WELDED WIRE MESH: ASTM A185.

D. CONCRETE MATERIALS:

1. FINISHED CONCRETE: CONCRETE CLASS PER PWC SPECIFICATIONS SECTION 201-1 12, EXCEPT 6-INCH REINFORCED CONCRETE PAVING SHALL BE 560-C-3500 CONCRETE.

2. COMBINED AGGREGATE: GRADATION PER PWC SPECIFICATIONS, SECTION

3. CEMENT: PORTLAND CEMENT, TYPE II CONFORMING TO ASTM C-150.

4. WATER: CLEAR, CLEAN AND FREE FROM OIL, VEGETABLE MATTER AND OTHER DELETERIOUS SUBSTANCES.

E. CONTROL JOINT MATERIAL:

1. PLASTIC: "QUICKJOINT" T-SHAPED 1/16" PLASTIC STRIP, 1 INCH MINIMUM DEPTH AS DISTRIBUTED BY J.A. CRAWFORD CO. PHONE (562) 698-0901, OR APPROVED EQUAL.

2. PRE-MOLDED EXPANSION JOINT FILLER: ASTM 1751 NON-EXTRUDING BITUMINOUS SATURATED RESILIENT JOINT FILLER.

F. CURING MATERIALS:

1. LIQUID CURING COMPOUND: NON-STAINING, COMPLYING WITH ASTM C309 AT MANUFACTURERS RECOMMENDED RATE OF APPLICATION. DELIVER CURING COMPOUND IN UNOPENED LABELED CONTAINERS.

PART 3 - EXECUTION

3.1 PREPARATION

A. GENERAL: COORDINATE WORK WITH RELATED TRADES. DO NOT LOCATE RELATED WORK IN CONCRETE EXCEPT AS DETAILED. PLACE CONDUITS IN CONCRETE SLABS WITH A MINIMUM COVER OF 2" ABOVE AND BELOW CONDUIT. LOCATE ACCURATELY AND SECURE IN PLACE ALL INSERTS, BOLTS, TIES, DOWELS, MISCELLANEOUS PLATES, ETC., BEFORE POURING. THEY SHALL BE CLEAN AND FREE FROM ANY COATING WHICH WOULD REDUCE THEIR BOND.

B. REINFORCING STEEL: POSITION, SUPPORT AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. LOCATE AND SUPPORT WITH METAL CHAIRS, RUNNERS, BOLSTER, SPACERS AND HANGERS, AS REQUIRED. SET WIRE TIE SO ENDS ARE DIRECTED INTO CONCRETE, NOT TOWARD EXPOSED CONCRETE SURFACES.

3.2 CONCRETE MIX

A. COMPLY WITH REQUIREMENTS OF PWC SPECIFICATIONS, SECTION 201-1.3 PROPORTIONING AND SECTION 201-1.4 MIXING AND AS HEREIN SPECIFIED. CONCRETE STRENGTH SHALL BE 2500 PSI AT 28 DAYS UNLESS SPECIFIED BY ARCHITECT TO BE OF A GREATER STRENGTH FOR THE APPLICATION-SPECIFIC PURPOSE.

3.3 PLACING CONCRETE

A. GENERAL: PLACE CONCRETE IN ACCORDANCE WITH PWC SPECIFICATIONS SECTION 303-5.3.

3.4 FINISHING

A. MEDIUM BROOM FINISH: BROOM FINISH BY DRAWING A FINE-HAIR BROOM ACROSS CONCRETE SURFACE, PERPENDICULAR TO LINE OF TRAFFIC. REPEAT OPERATION IF REQUIRED TO PROVIDE A FINE LINE TEXTURE ACCEPTABLE TO

3.5 CURLNG

ARCHITECT.

A. LIQUID CURING COMPOUND FOR NATURAL CONCRETE: LOCATIONS AS APPROVED BY ARCHITECT. APPLY A UNIFORM COATING WITHIN 2 HOURS OF FINAL TROWELING.

END OF SECTION

SECTION 32 31 15 CHAIN LINK FENCING AND GATES

PART 1 - GENERAL

1.1 DESCRIPTION

A. PRINCIPAL WORK ITEMS ARE:

1. CHAIN LINK FENCE. CONCRETE POST FOUNDATIONS. ALL HARDWARE, EXCEPT PADLOCKS.

1.2 QUALITY ASSURANCE

A. REQUIREMENTS OF REGULATORY AGENCIES RELATIVE TO GATES AND HARDWARE IN THE PATH OF TRAVEL:

1. CODES: CONFORM TO 2016 TITLE 24 CBC SECTION 1007.3.11 AND CALIFORNIA FIRE CODE (CFC) SECTION 1208.

B. QUALITY STANDARDS: ALL WORK SHALL COMPLY WITH CHAIN LINK FENCE MANUFACTURERS INSTITUTE (CLFMI) STANDARDS, ASTM F567, AND ALL REQUIREMENTS IN THESE SPECIFICATIONS: THE MOST STRINGENT REQUIREMENTS SHALL APPLY WHERE THERE ARE CONFLICTS.

PART 2 - PRODUCTS

2.1 GENERAL

A. ALL FENCE COMPONENTS TO BE GALVANICALLY COMPATIBLE.

2.2 MATERIALS; FABRIC

A. GENERAL: DRAWN STEEL WIRE, HOT-DIPPED ZINC COATED AFTER WEAVING, ASTM A-392 CLASS 1, 1.2 OZ/SQ. FT. OF WIRE SURFACE, PER ASTM A-90

STRIPPING TEST; WITHSTAND 5 ONE-MINUTE IMMERSIONS PER PREECE TEST PER ASTM A-392 & A-90.

B. FENCE & GATE FABRIC:

1. ONE-PIECE FABRIC FULL-HEIGHT FOR FENCE THRU 12'-0"; EDGES KNUCKLED SELVAGE. TOP EDGES OVER 6'-0" ABOVE ADJACENT FINISH SURFACE.

2. MESH SIZE: 2" TYPICAL.

WIRE DIA.: #9 GA. TYPICAL.

4. FABRIC SHALL BE FREE FROM BARBS, ICICLES, OR OTHER PROJECTIONS RESULTING FROM THE GALVANIZING PROCESS, WHICH MIGHT BE HAZARDOUS. FENCE FABRIC HAVING SUCH DEFECTS WILL BE REJECTED AND CONTRACTOR SHALL REPLACE IT WITH SUITABLE FABRIC AT NO COST TO DISTRICT EVEN IF IT HAS BEEN INSTALLED.

2.3 MATERIALS; FRAMEWORK

A. PIPE: ASTM F-1083, GROUP IA, SCHED. 40, STANDARD WELDED OR SEAMLESS STEEL PIPE, COMMERCIAL HOT-DIPPED ZINC COATED, 1.8 OZ/SQ. FT. MIN. EVENLY DEPOSITED; REASONABLY STRAIGHT, BURRS REMOVED, FREE OF DEFECTS AND ALL ROUGHNESS.

B. SIZES: FOR FENCING 8' HIGH OR LESS;

ITEM	O.D INCHES	WGT. LBS/L.F.						
1. LINE POSTS:	2.375	3.65						
2. CORNER, TERMINAL & PULL POSTS:	2.875	5.80						
PEDESTRIAN GATE POSTS:								
3.1. FOR GATE LEAF 0' THRU 6'	2.875	5.80						
3.2. LEFT 6'-1" THRU 13'	3.500	7.58						
4. GATE POSTS: FOR GATE LEAD WIDTH	S AS LISTE	D:						
4.1. 0' THRU 6':	3.500	7.58						
4.2. 6'-1" THRU 13':	4.500	10.80						
4.3. 13'-1" THRU 18':	6.625	18.99						
5. TOP RAILS, BOTTOM RAILS, BRACE RAILS, &								
BOTTOM RAILS:	1.660	2.27						
6. GATES: FOR GATE LEAF WIDTHS AS L	ISTED:							
6.1. FRAME THRU 12':	1.900	2.72						
6.2. FRAME OVER 12':	2.375	3.65						
6.3. BRACING:	1.660	2.27						
7. FOR 8' TO 12' HIGH FENCING:								
7.1. LINE POST:	2.875	5.80						
7.2. CORNER & TERMINAL POSTS:	3.500	3.58						
7.3. GATE POSTS (GATE LEAF < 6')	4.00	9.12						
7.4. TOP RAILS, BOTTOM RAILS,								
BRACE RAILS & TRANSOM RAIL:	1.900	2.72						

2.4 MATERIALS; ACCESSORIES

A. WIRE: ALL GALVANIZED.

1. TENSION: #9 GA. STEEL, COLD DRAWN, MARCELLED; ASTM A-82.

2. TIES: SOFT ANNEALED STEEL; FS QQ-W-461; FOR FASTENING FABRIC TO POSTS, TOP RAILS, BOTTOM RAILS AND BRACE RAILS: a. #9 GA. TO POSTS.

b. #14 GA. TO TOP & BOTTOM RAILS, AND TENSION WIRE.

B. GALVANIZING; ALL ACCESSORIES, EXCEPT WIRE: ASTM A-153.

C. FITTINGS:

1. TENSION BARS: 3/16" X 3/4", MILD STEEL.

2. STEEL BANDS: 1/8" X 1" TYPICAL. 1/8" X 3/4" AT GATES: MILD STEEL. 3. POST EYE CAPS: CAST MALLEABLE IRON OR PRESSED STEEL; SNUG FIT

TO EXCLUDE MOISTURE FROM POSTS; HOLE TO ACCOMMODATE TOP RAIL.

4. TRUSS RODS: 3/8" DIA. STEEL; ADJUSTABLE LENGTH.

5. TURNBUCKLES FOR TENSION WIRE: EYE/EYE TYPE, DROP FORGED STEEL, 5/16" MIN. SCREWS WITH 4-1/2" MIN. TAKE-UP.

6. BOLTS: 3/8" DIA. MIN.; CADMIUM PLATED.

7. EXPANSION COUPLINGS FOR RAILS: STEEL, 6" LONG; DESIGNED TO FIT TIGHTLY INSIDE RAIL, FITTED WITH RAISED CENTER.

8. HOG RINGS: SIZES AND GAGES AS REQUIRED; #9 GA. MINIMUM GALVANIZED STEEL.

9. RAIL ENDS FOR TOP RAILS AND BRACE RAILS: MALLEABLE IRON (ASTM A47, GRADE 32510) WITH HOLES TO RECEIVE 3/8" BOLTS FOR SECURING TO RAIL END BANDS.

10. MISC.: ALL OTHER REQUIRED FITTINGS.

11. 1 1/4" TO 1 1/2" BOTTOM RAIL, FULLY WELDED IN PLACE BOTTOM RAIL ONLY.

2.5 MATERIALS; GATE HARDWARE

A. GENERAL:

1. MFR.'S STANDARD GALVANIZED HEAVY DUTY HARDWARE, UNLESS NOTED OTHERWISE ON DRAWINGS.

2. GALVANIZING FOR ALL PARTS: ASTM A-153; GALVANIZE AFTER

B. HINGES: TYPICALLY, MALLEABLE IRON, DOUBLE CLAMPING, NON-LIFT-OFF, OFFSET TYPE FOR 180 DEG. SWING. INSTALL AND ADJUST HINGES; BURR OR CENTER PUNCH THREADS OF GATE HINGE BOLTS TO PREVENT REMOVAL OF

C. LATCHES: TYPICALLY, MALLEABLE IRON, FORKED OR PLUNGER-BAR TYPE, PERMIT OPERATION FROM EITHER SIDE OF GATE, GRAVITY TYPE AUTOMATICALLY ENGAGING GATE FRAME; WITH PADLOCK EYES FOR LOCKING GATES IN BOTH THE OPEN AND CLOSED POSITIONS; MOUNTING HEIGHT AT 30" TO 44" ABOVE FINISHED FLOOR.

D. KEEPER: MALLEABLE IRON; AUTOMATICALLY ENGAGE GATE WHEN SWUNG OPEN 180 DEG., AND HOLD UNTIL MANUALLY RELEASED.

E. PAIRS OF GATES:

1. STOPS: FLUSH STEEL PLATE, WITH ANCHORS.

2. LATCH: CENTER DROP ROD OR PLUNGER BAR; WITH INTEGRAL PADLOCK

2.6 MATERIALS; MISC.

A. PORTLAND CEMENT CONCRETE: 1: 2-L/2: 3-L/2 MIX (2500 PSI MIN.) DELIVERED BY READY-MIX TRUCK. CONCRETE BAG MIXES OR CONCRETE MIXED ON-SITE ARE NOT ACCEPTABLE. 2.7 FABRICATION; GATES

A. FRAME: WELD FRAMES WITH INTEGRAL RADIUS OR MITERED AND FULLY WELDED CORNERS; HORIZONTAL BRACING RAILS FOR GATES EXCEEDING 6' HIGH: VERTICAL BRACING RAILS AT 6' O.C. MAX. FOR GATES EXCEEDING 9' WIDE; DIAGONAL CROSS-BRACING TRUSS RODS TO INSURE GATES STAY SQUARE AND OPERATE PROPERLY. GRIND ALL WELDS FLUSH AND SMOOTH. GALVANIZE AFTER FABRICATION.

B. FABRIC: STRETCH TAUT; TENSION BARS AND BANDS A 15" O.C. MAX. AT VERTICAL EDGES. TENSION BARS SHALL EXTEND FULL HEIGHT OF GATES. WIRE TIE FABRIC AT 12" O.C. MAX. TOP, BOTTOM, AND BRACING RAILS.

PART 3 - EXECUTION

3.1 PREPARATION

A. EXISTING CONDITIONS: VERIFY LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES AND WATER LINES PRIOR TO EXCAVATING FOR FOOTINGS.

B. LAYOUT: MEASURE AND LAY OUT COMPLETE FENCE LINE, GATE(S), AND MODIFICATIONS TO EXISTING FENCE.

1. GENERAL: LOCATE LINE POSTS AT EQUAL-DISTANCE SPACING IN A RUN, BUT DO NOT EXCEED 10-FEET ON CENTER, UNLESS NOTED OTHERWISE.

C. POST SPACING:

3.2 INSTALLATION; FOOTINGS

A. SIZES; FOR FENCING 8' HIGH OR LESS: DIAMETER (INCHES) CORNER POSTS: 3. GATE POSTS: FOR GATE LEAF WIDTHS AS LISTED. a. LEAF 0' THRU 8'

b. LEAF 8'-1" THRU 13': B. POSTS; FOR 8' HIGH OR GREATER FENCING: LINE POSTS: CORNER POSTS: 3. GATE POSTS: FOR GATE LEAF WIDTHS AS LISTED. a. LEAF 0' THRU 8' b. LEAF 8'-1" THRU 13':

C. HOLES: DRILL HOLES IN FIRM, UNDISTURBED, OR COMPACTED SOIL

3.3 ERECTION; FRAMEWORK

1. TYPICAL INSTALLATION; POSTS SET INTO CONCRETE FOOTINGS:

a. GENERAL: SET POSTS INTO CONCRETE FOOTINGS PLUMB, CENTERED, AND ALIGNED; 3" CONCRETE COVER BETWEEN POST BOTTOM AND

b. CONCRETE: PLACE IN CONTINUOUS POUR IN HOLE; TAMP TO CONSOLIDATE; CROWN CONCRETE TO DRAIN WATER AWAY FROM

c. REBAR: WHERE INDICATED, INSTALL REBAR CAGES.

d. SET POSTS AND FOOTINGS PRIOR TO INSTALLATION OF ADJACENT PAVING. LOCATE TOP OF FOOTING A MINIMUM OF 3 INCHES (4" AT CONCRETE) BELOW INDICATED FINISH ELEVATION OF TOP OF ADJACENT PAVING OR MOW STRIP, TO ALLOW PAVING OR MOW STRIP TO COVER FOOTING AND FINISH TIGHT TO POST.

2. CORNER/TERMINAL/PULL POSTS: INSTALL AT ENDS OF RUNS, HORIZONTAL DIRECTION CHANGES OF 15 DEG. OR MORE, VERTICAL GRADE CHANGES OF 5 DEG. OR MORE, ENDS OF CURVED FENCE SECTION; PULL POST EACH 500' RUN OF FENCE.

3. GATE POSTS: INSTALL EACH SIDE OF GATES.

3.4 ERECTION; FENCE FABRIC

A. FABRIC: INSTALL IN ONE CONTINUOUS PIECE WHEREVER POSSIBLE; STRETCH 1. ADJOINING EXISTING FENCING: MATCH EXISTING.

2. AT REPLACEMENT OF FENCE FABRIC: MATCH EXISTING, UNLESS NOTED OTHERWISE.

B. FASTENINGS:

1. AT TERMINAL/CORNER/PULL/GATES POSTS, THREAD TENSION BARS THRU MESH; SECURE TO POSTS WITH BANDS AT 15" O.C. MAX.

2. WIRE-TIE FABRIC TO LINE POSTS AT 16" O.C.; TO TOP RAIL, BOTTOM RAILS,

BRACE RAILS, AND INTERMEDIATE RAILS AT 18" O.C. 3. HOG-RING TO BOTTOM TENSION WIRE AT 18" O.C., WHERE BOTTOM RAILS

DO NOT OCCUR. 4. HOOKED TIES WITH LINKS ARE NOT PERMITTED.

3.5 ERECTION; GATES

A. INSTALL GATES PLUMB AND LEVEL TO A TOLERANCE OF 1/4 IN. IN 10 FT. B. INSTALL GROUND-SET ITEMS IN CONCRETE.

C. ADJUST HARDWARE TO PROVIDE SMOOTH OPERATION. LUBRICATE WHERE REQUIRED.

D. KNUCKLE ENDS OF FABRIC TO ELIMINATE HAZARDS. ALLOW CLEARANCE ON

GATES OF 1-1/2" AT BOTTOM. 3.6 EXISTING FENCING; REMOVAL, REUSE, SALVAGE, & MODIFICATIONS

A. REMOVAL WORK:

1. REMOVE EXISTING FENCING AS INDICATED, INCLUDING CONCRETE POST

FOOTINGS AND MOW STRIPS. 2. POST HOLES: FILL WITH EARTH, COMPACT TO SAME DENSITY AS SURROUNDING EARTH. AT PAVING AREAS, COMPACT FILL TO 95% MAX.

DRY DENSITY, AND FLUSH WITH ADJOINING SURFACES. 3. DISPOSAL: DISPOSE OF ALL REMOVED MATERIALS WHICH ARE NOT INDICATED TO BE REUSED OR SALVAGED, OFF-SITE AT CONTRACTOR'S

B. REUSE OF EXISTING FENCING; WHERE INDICATED AND APPROVED BY

1. REMOVE EXISTING FENCE FABRIC AS INDICATED. LEAVE POSTS AND FOOTINGS IN PLACE. 2. FULLY CLEAN EXISTING POSTS OF ALL RUST, PROPERLY PREP, AND APPLY GALVANIZING PAINT PER MFR.'S SPECIFICATIONS. FINISH SURFACE TO BE

CLEAN AND SMOOTH AND WITH CONSISTENT GALVANIZED COATING

EQUAL TO G-90 HOT-DIPPED GALVANIZING.

3. REPLACE ANY DAMAGED POSTS AS DETERMINED BY THE ARCHITECT. 4. PROVIDE NEW POSTS AND FRAMING MEMBERS AS INDICATED ON

5. INSTALL NEW FENCE FABRIC AND HARDWARE TO SAME REQUIREMENTS

AS SPECIFIED FOR ALL-NEW WORK. 6. DO NOT REUSE DEFECTIVE MATERIALS OR PARTS.

8. CONFORM TO SAME STANDARDS AS FOR ALL-NEW WORK.

7. SUPPLY ANY MISSING AND/OR ADDITIONAL PARTS NECESSARY FOR A COMPLETE INSTALLATION.

9. DISPOSE OF ALL REMOVED MATERIALS WHICH ARE NOT INDICATED TO BE REUSED, OFF-SITE AT CONTRACTOR'S EXPENSE.

3.7 ADJUSTMENT & CLEANING

A. ADJUSTMENT: ADJUST BRACE RAILS AND TENSION RODS FOR RIGID

INSTALLATION. TIGHTEN HARDWARE, FASTENERS, AND ACCESSORIES. B. REPAIR OF DAMAGED WORK: WHERE OPERATIONS DAMAGE WORK TO REMAIN, REPAIR, REPLACE OR RESTORE WORK AS DIRECTED BY ARCHITECT AND/OR DISTRICT USING QUALIFIED WORKMEN OF RESPECTIVE TRADES. CLOSELY COORDINATE WORK WITH IRRIGATION, PAVING, CONCRETE, LANDSCAPING, ELECTRICAL AND UTILITIES, AND ALL OTHER RELATED OR ADJACENT WORK.

C. CLEANING: REMOVE EXCESS AND WASTE MATERIALS FROM PROJECT SITE.

END OF SECTION

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-120742 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 09/09/2020



FLEWELLING & MOODY architecture planning interiors

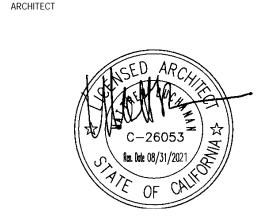
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An Employee Owned Corporation



CONSULTANT

DSA A# 03-120742

| FILE# 19-117

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

RELOCATION OF (1) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL 40641 PEONZA LANE

PALMDALE, CA 93551

WESTSIDE UNION SCHOOL DISTRICT

SPECIFICATIONS

03-30-2020

GENERAL NOTES

- SCOPE OF WORK: PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND FACILITIES FOR A COMPLETE SATISFACTORY AND OPERABLE ELECTRICAL INSTALLATION AS SHOWN AND SPECIFIED.
- ALL WORK, MATERIALS, FIXTURES, EQUIPMENT, APPARATUS, DEVICES, ITEMS, OPERATIONS AND INSTALLATION OF METHODS PERFORMED UNDER THIS DIVISION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ALL LOCALLY CONSTITUTED ELECTRICAL MANUFACTURERS ASSOCIATION, NATIONAL ELECTRICAL CODE, UNDERWRITERS LABORATORIES, STATE OF CALIFORNIA, DIV. OF INDUSTRIAL SAFETY, ELECTRICAL SAFETY ORDERS, APPLICABLE COUNTY AND CITY ORDINANCES CODES AND REGULATIONS OF THE STATE FIRE MARSHALL, APPLICABLE REGULATION OF THE POWER COMPANY.
- ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BEAR THE LABEL OF THE UNDERWRITER'S LABORATORIES, SHALL BE ON THEIR LIST OF ELECTRICAL FITTINGS AND SHALL BE USED FOR THE PURPOSES FOR WHICH THEY ARE APPROVED, UNLESS THE MATERIAL AND EQUIPMENT ARE OF THE TYPE WHICH THE UNDERWRITER'S LABORATORIES DO NOT LIST OR LABEL.
- CONTRACTOR SHALL VISIT THE SITE, DETERMINE ALL THE WORK TO BE DONE AND ALL CONDITIONS AFFECTING THE WORK AND THE COSTS THEREOF. ALL COSTS OF WHATEVER NATURE ARISING OUT OF THIS WORK SHALL BE INCLUDED IN THE BID.
 - SERVICE EQUIPMENT SHALL BEAR THE U.L. LABEL AND SHALL CONFORM TO THE POWER COMPANY'S REQUIREMENTS AND BE AS MANUFACTURED BY SQUARE - D OR EQUAL. EACH DISCONNECTING DEVICE SHALL BEAR AN ENGRAVED DESIGNATION OF THE EQUIPMENT CONTROLLED.
- SUBMIT 5 COPIES OF SHOP DRAWINGS AND MATERIAL LISTS TO OWNER FOR APPROVAL BEFORE PURCHASE.
- VERIFY AVAILABLE SHORT CIRCUIT WITH POWER COMPANY AND PROVIDE CIRCUIT BREAKERS AND SWITCHBOARD BUSSES FOR THAT DUTY.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHERS AND SHALL INSTRUCT THE OWNER ON THE USE AND MAINTENANCE OF THE ELECTRICAL EQUIPMENT INSTALLED.
- DISCONNECTING MEANS AND OVERLOAD PROTECTION SHALL BE INSTALLED FOR ALL MOTORS TO COMPLY WITH N.E.C. AND LOCAL CODES.
- 10. VERIFY EXACT LOCATIONS OF OUTLETS AND EQUIPMENT IN FIELD.
- 11. ALL ELECTRICAL EQUIPMENT EXPOSED TO WEATHER SHALL BE WEATHERPROOF.
- FURNISH, INSTALL AND CONNECT A/C SYSTEM CONTROL COMPONENTS AS REQUIRED BY MECHANICAL SECTION.
- THE ELECTRICAL CONTRACTOR SHALL EXAMINE ALL CONTRACT DOCUMENTS IN ORDER TO LOCATE OUTLETS AND EQUIPMENT IN COORDINATION WITH CONSTRUCTION SUCH AS BEAMS, FURRING, CABINETS, DOOR SWINGS, DUCTS PIPES, ETC.
- WIRING SYSTEM SHALL BE INSTALLED IN CONDUIT OR DUCT. DUCT UNDER GROUND SHALL BE RIGID SCHEDULE 40 PVC CONDUIT, IN CONCRETE SLABS OR WHERE EXPOSED SHALL BE GALVANIZED RIGID STEEL. CONDUITS IN STUD WALL SHALL BE FLEXIBLE. USE FLEXIBLE CONDUITS FOR FINAL EQUIPMENT CONNNECTIONS.
- ALL CONDUITS SHALL BE CLEANED OF WATER DEBRIS AND OTHER FOREIGN MATERIALS BEFORE PULLING OF WIRE.
- CONDUITS WHICH ARE INSTALLED AT THIS TIME AND LEFT EMPTY FOR FUTURE USE SHALL HAVE A NYLON PULL ROPE LEFT IN PLACE FOR PULLING WIRES.
- PANEL BOARDS SHALL HAVE HINGED LOCKABLE DOORS, ENGRAVED I.D. PLATES AND TYPEWRITTEN CIRCUIT INDEX CARDS. FINISH SHALL BE FACTORY STANDARD GRAY IN EQUIPMENT ROOMS.
- ALL FLUORESCENT FIXTURE BALLAST SHALL BE CMB-ETL CERTIFIED AS CLASS "P" AND SHALL HAVE U.L. APPROVAL. THE BALLAST SHALL BE THE LOWEST HEAT PRODUCING, ENERGY CONSERVATION TYPE AVAILABLE.
- CONDUCTORS IN FLUORESCENT FIXTURES SHALL BE TYPE THHN OR AVA.
- 20. CONDUCTORS #10 AND SMALLER SHALL BE SOLID TYPE THHN, #8 AND LARGER SHALL BE STRANDED TYPE THHN OR XHHW. ALL CONDUCTORS SHALL BE COPPER.
- CONDUCTORS ON ROOF OR IN ROOF STRUCTURE SHALL BE 90 DEGREE CENTIGRADE RATED.
- 22. CONTRACTOR, AT HIS OPTION, MAY COMBINE CONDUIT HOME RUNS WHILE PROPERLY DERATING CURRENT CARRYING CAPACITY OF CONDUCTORS ACCORDING TO THE NUMBER OF WIRES USED IN ONE CONDUIT.
- CONTRACTOR SHALL PROVIDE A ONE YEAR WRITTEN GUARANTEE FOR MATERIALS AND LABOR.
- PROVIDE GROUND CONNECTIONS OF SYSTEMS AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. USE SEPARATE BONDING WIRE IN FLEXIBLE CONDUITS.
- THE CONTRACTOR SHALL PERFORM HIS WORK IN AN ACCEPTABLE MANNER MAINTAINING MAINTAINING GOOD HOUSEKEEPING DURING CONSTRUCTION AND LEAVING THE JOB SITE CLEARED OF ALL REFUSE TO MEET THE OWNER'S APPROVAL. ALL ELECTRICAL EQUIPMENT BOTH INSIDE AND OUTSIDE, SHALL BE LEFT CLEAN AND CLEAR OF STAIN, GREASE SPATTER, FINGER MARKS OR OTHER SOIL, FINISHED SURFACES SUCH AS PANEL BOARDS. CABINETS AND THE LIKE SHALL HAVE PAINT SCARS RETOUCHED AND POLISHED.
- EXISTING SOURCE OF POWER HAS BEEN INVESTIGATED AND IS ADEQUATE FOR ADDITIONAL

FIRE ALARM WIRING SCHEDULE

ALL WIRING SHALL BE INSTALLED IN METALLIC CONDUIT MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS OTHERWISE NOTED.

S = (1) 2C #18 THH CABLE - SIGNALING CIRCUIT

P = 2 #14 THHN ANNUNCIATOR POWER A = 2 #14 THHN AUDIBLE CIRCUIT

V = 2 #12 THHN VISUAL CIRCUIT D = 2C #18 TW-SH CABLE AND 2 #14 THHN DETECTOR CIRCUIT

R = 2 #14 THHN DOOR RELEASE CIRCUIT.

SEQUENCE OF OPERATIONS

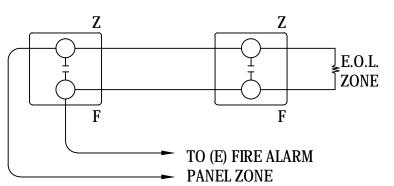
(PER CBC/CFC 907.5.2.2 AND 907.5.2.3 REQUIREMENTS)

ALARM

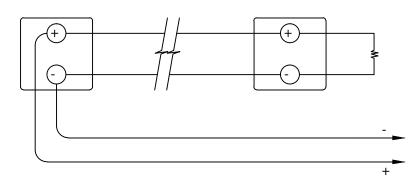
- WHEN AN INITIATING DEVICE IS ACTIVATED, THE FIRE ALARM CONTROL PANEL DOES THE FOLLOWING:
- a. SHOWS THE NAME OF THE THE ACTIVATED ZONE ON THE PANEL DISPLAY WINDOW. b. SENDS ALARM SIGNAL TO ALL FIRE SIGNALLING SPEAKERS.
- c. ACTIVATES ALL STROBES AND SPEAKERS.
- d. LOGS EVENT TO MEMORY.
- THE ALARM WILL CONTINUE UNTIL THE PANEL SILENCE SWITCH IS ACTIVATED. THE PANEL CAN BE RESET ONLY AFTER AN ACTIVATED PULL STATION IS RESTORED.

TROUBLE

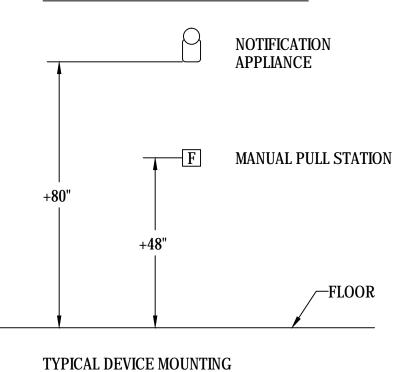
THE PANEL WILL SOUND A TROUBLE TONE, SHOW THE TYPE OF TROUBLE AND LOCATION IN THE PANEL DISPLAY WINDOW. THE TONE CAN BE SILENCED BY ACTIVATING THE ACKNOWLEDGE SWITCH. TROUBLE WILL BE DISPLAYED UNTIL CORRECTED. TROUBLE CONDITIONS ARE LOGGED IN THE SYSTEM MEMORY.



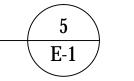
MANUAL PULL STATION



STROBE LIGHT / HORN STROBE / HORN



FIRE ALARM DETAILS



SYMBOL

	FIRE	ALARM EQUIP	MENT LIST	
SYMBOL	MFG.	MODEL	DESCRIPTION	C.S.F.M. #
FA	NOTIFIER	NFS2-640(E)	CONTROL PANEL	7165-0028:243
\otimes	NOTIFIER	FSP 851	SMOKE DETECTOR	7272-0028:206
\otimes	NOTIFIER	FST 851	HEAT DETECTOR	7270-0028:196
⊳ s	SYSTEM SENSOR	SPSR	SPEAKER STROBE-SELECTABLE 15, 15/75, 30, 75, 110	7125-1653:201
EXT	SYSTEM SENSOR	SPRK	EXTERIOR SPEAKER W.P.	7320-1653:201
F	NOTIFIER	NBG-12LX	PULL STATION	7150-0028:199

	BATTERY	1	1		
EQUIPMENT MODEL	QUANTITY	SUPERVISORY CURRENT A.			
_ ,	4	UNIT	TOTAL	UNIT	TOTAL
FA	1	0.100	0.100	0.100	0.100
\otimes	8(E) + 2	0.00065	0.0065	0.00065	0.0065
\otimes	8(E) + 2	0.00065	0.0065	0.00065	0.0065
$\triangleright \overline{S}$	4(E) + 1			0.170	0.850
⊳s _{ext}	1(E)			0.242	0.242
STANDBY 2.712 AH ALARM 0.301 AH	SU	B TOTAL 0.113 x 24	A HRS	SUB TOTAL	1.205 A x .25 HRS
3.01 AH 1	REQUIRED	2.712	AH		0.301 AH
7 .AH BA'	TTERY PACK PR	OVIDED		0.25 HRS	= 15 MIN.

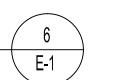
WORST CASE VOLTAGE DROP CALCULATION

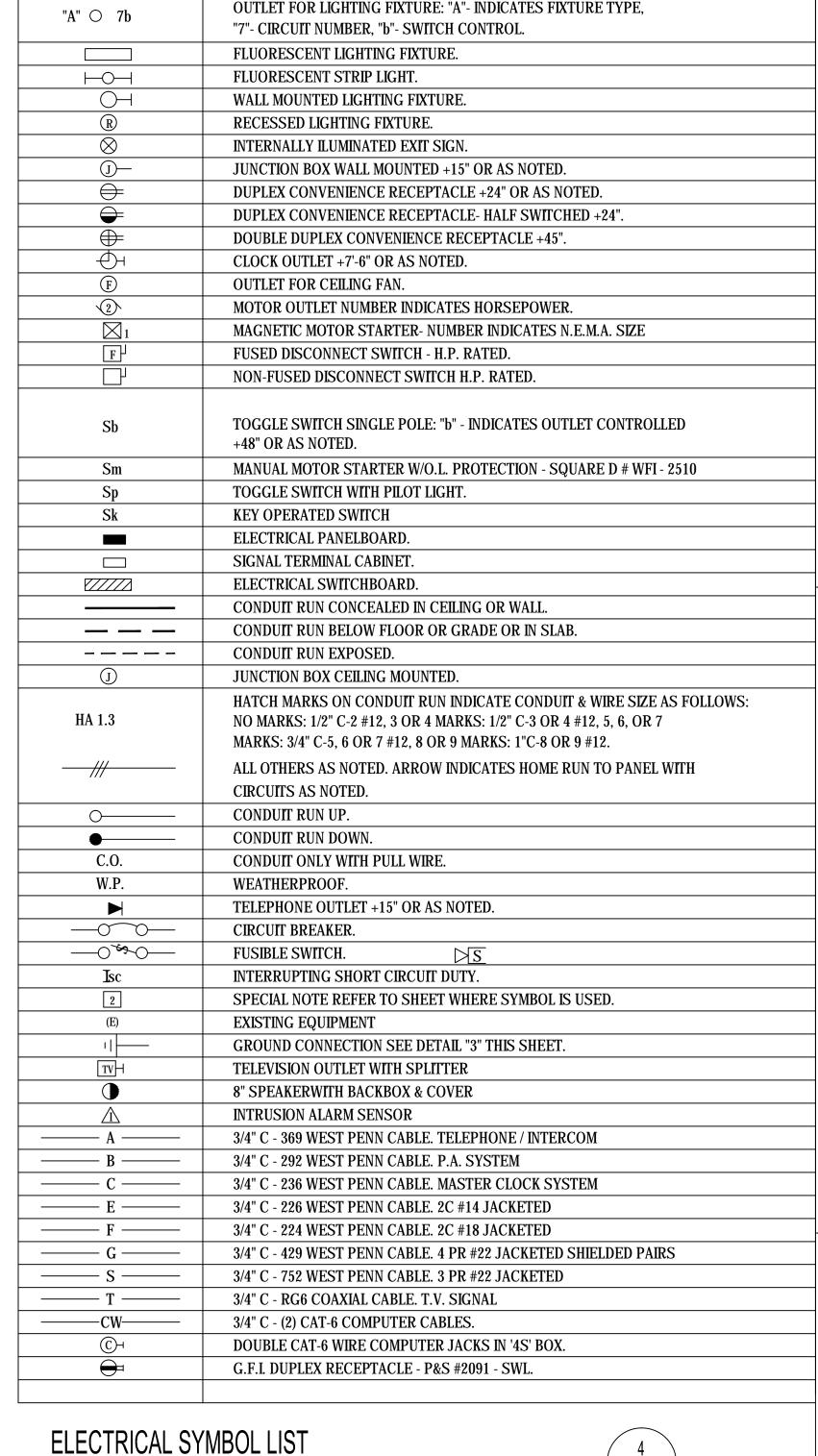
- F.A. SIGNAL CIRCUIT #12 AWG
- = TOTAL CURRENT IN ALARM CONDITION = 1.205 = LENGTH OF CIRCUIT FROM SUPPLY TO LAST DEVICE = 450'
- 21.6 = RESISTIVITY OF Cu CONDUCTOR PER CIRCULAR MILL C.M. = CROSS SECTIONAL AREA OF CONDUCTOR #12 = 6530 CIRC. MILL.
- I x L x 21.6 ---- = VOLTS DROP C.M.

1.205 x 450 x 21.6 ----- = 1.79 VOLTS DROP

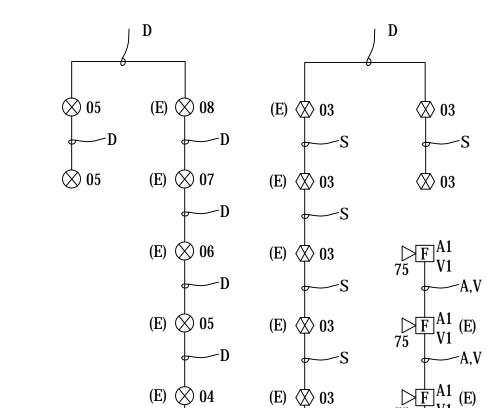
7.47% VOLTAGE DROP

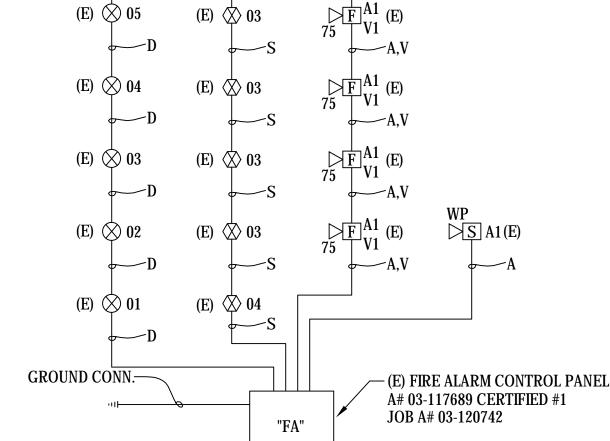
FIRE ALARM CALCULATIONS





DESCRIPTION

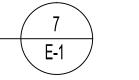


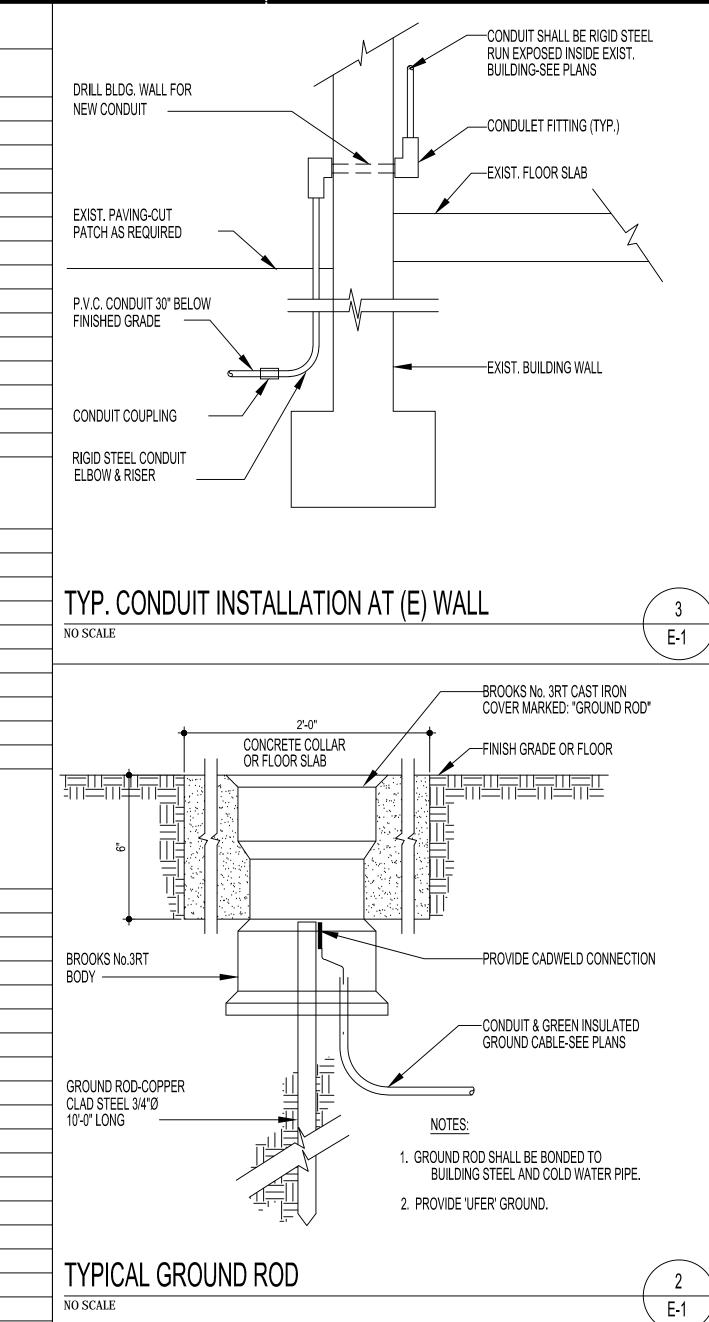


(2) - 2C #22 AWG -CRP-10 PHONE LINE CONNECTIONS 120V-20 AMP POWER CONNECTION

EVACUATION FIRE ALARM SYSTEM IS FULLY AUTOMATIC

FIRE ALARM RISER DIAGRAM

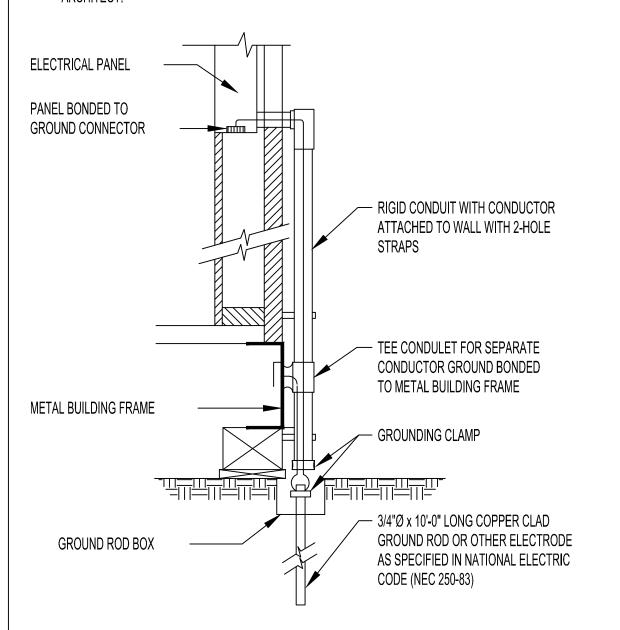






FOR FLEXIBLY MOUNTED EQUIPMENT USE 2x THE ABOVE VALUES.

SIMULTANEOUS VERTICAL FORCE - USE 1/3x HORIZONTAL FORCE. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ELECTRICAL ENGINEER AND THE FIELD REPRESENTATIVE OF THE OFFICE OF THE STATE



- SIZE OF CONDUCTORS SHALL COMPLY WITH NEC TABLE 250-95.
- 2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME (NEC 250-81) IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. INTO THE SOIL IF AVAILABLE (NEC 250-81 AND 250-83).
- 3. ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING).
- 4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN, SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS. (NEC 250-84).
- 5. SITE INSPECTOR IS TO WITNESS AND VERIFY GROUNDING TEST.

BUILDING GROUNDING

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AGENCY

architecture planning interiors

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An Employee Owned Corporation



CONSULTANT



DSA A# 03-120742 FILE# 19-117

Drawr	ı by	PJK		
Check	ed by	РЈК		
Revisi	ons			
No.	Date		Description	
-	-		-	

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the site. Any and all responsibility for their use in whole or in part on any other

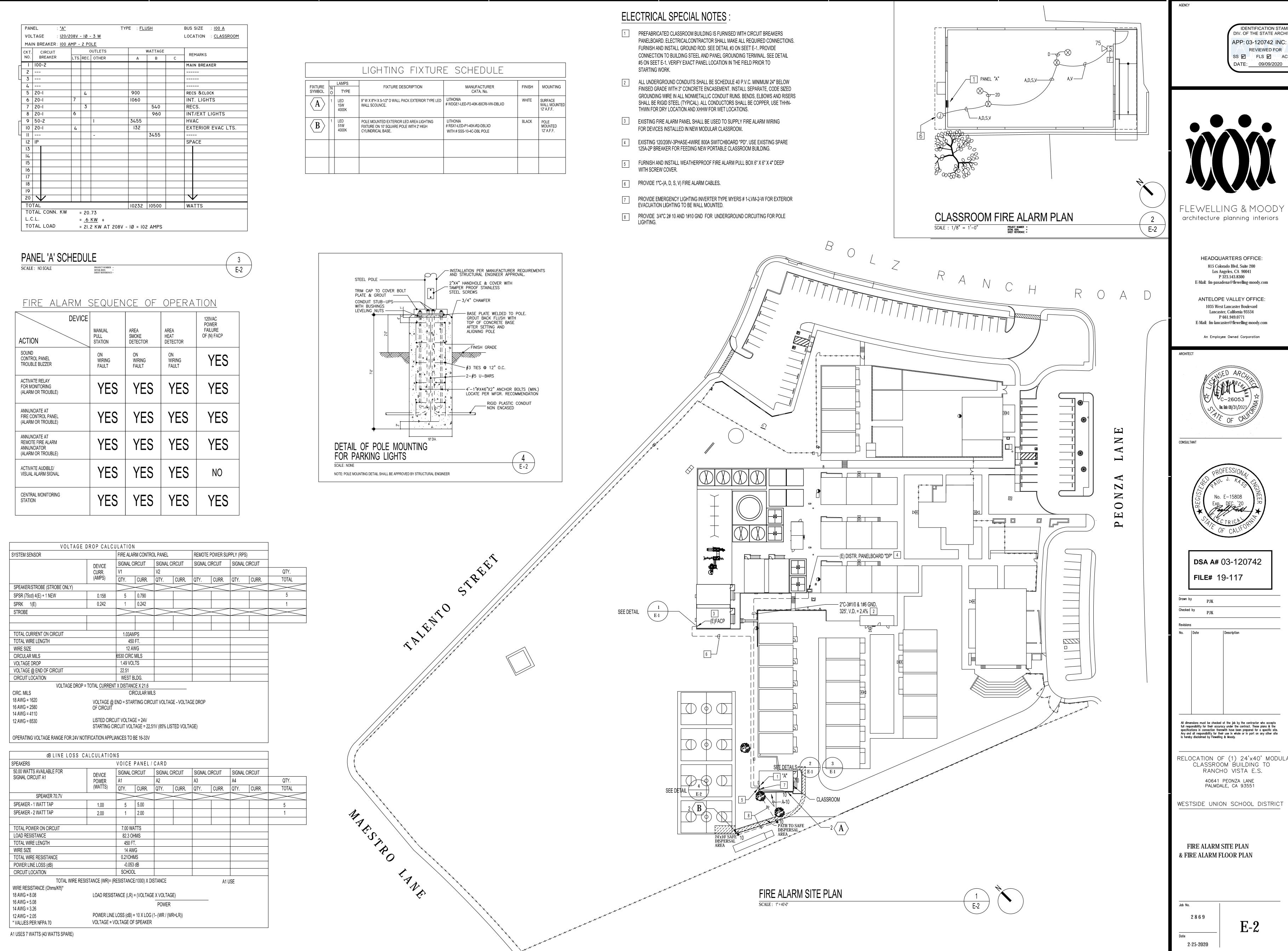
RELOCATION OF (1) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA E.S. 40641 PEONZA LANE

WESTSIDE UNION SCHOOL DISTRICT

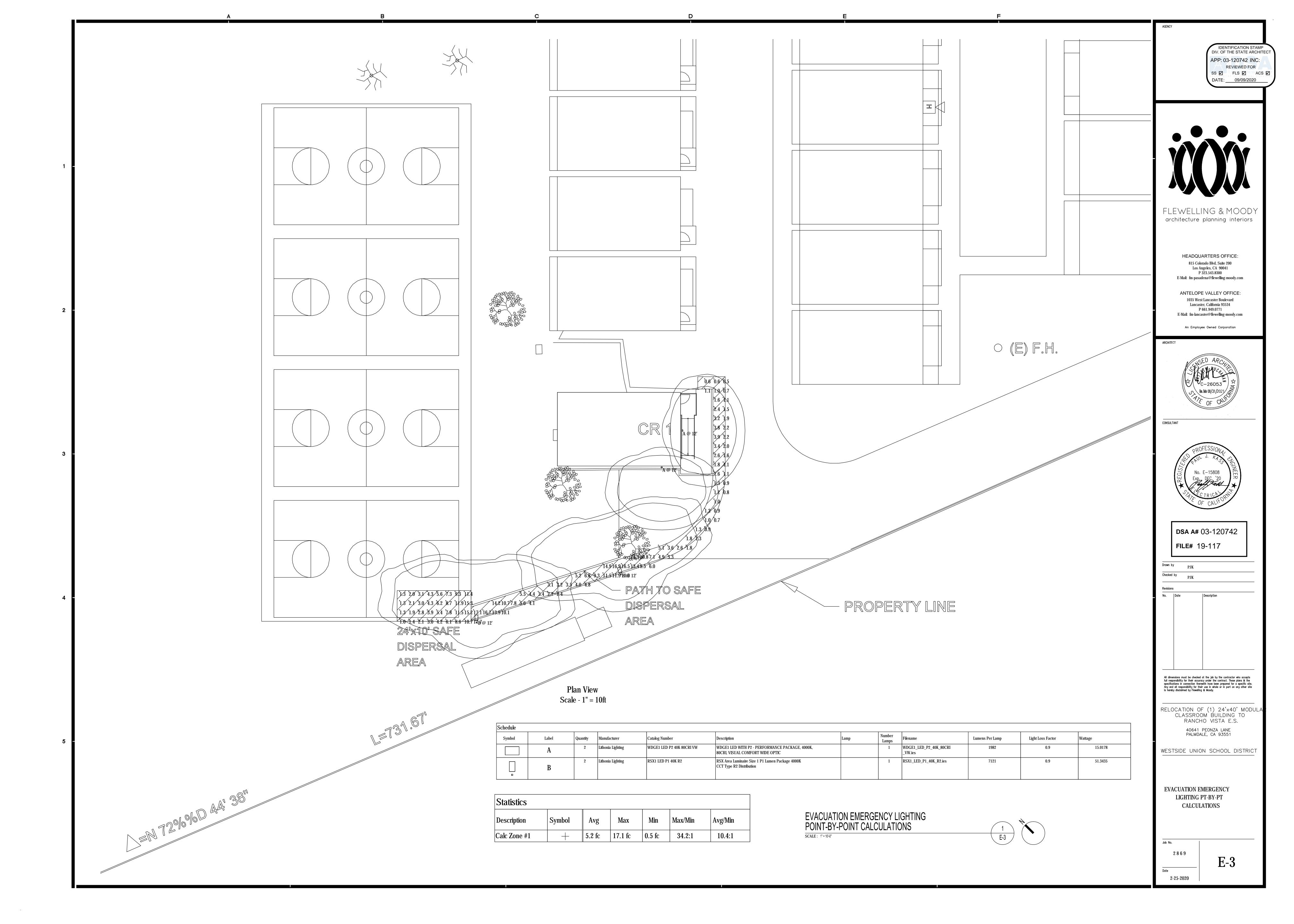
PALMDALE, CA 93551

NOTES, SYMBOLS, DETAILS DIAGRAMS & CALCULATIONS

2-25-2020



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DRAWING INDEX

ARCHITECTURAL

0.0 INDEX / COVER SHEET A1.0 FLOOR PLAN A1.0A FLOOR PLAN (W/RESTROOM & CASEWORK) A2.0 ROOF PLAN

A3.0 EXTERIOR ELEVATIONS A4.0 INTERIOR ELEVATIONS A4.1A INTERIOR ELEVATIONS

A5.0 FINISH SCHEDULE A6.0 ARCHITECTURAL DETAILS

A6.1 ARCHITECTURAL DETAILS

A7.0 REFLECTED CEILING PLAN A7.1 CEILING DETAILS

FOUNDATION

F2.0 WOOD FOUNDATION F2.1 WOOD FOUNDATION DETAILS F2.2 WOOD FOUNDATION DETAILS NOTES

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STRUCTURAL

S1.0 FLOOR FRAMING PLAN

S1.1 FLOOR FRAMING PLAN (CENTER)

S2.1 ROOF FRAMING PLAN (CENTER)

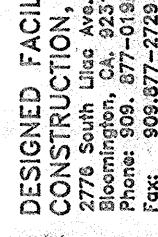
S3.1A STRUCTURAL DETAILS

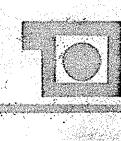
S5.0 WALL FRAMING

S5.1 WALL FRAMING DETAILS S5.2 WALL FRAMING DETAILS

ELECTRICAL

E1.0 ELECTRICAL PLAN

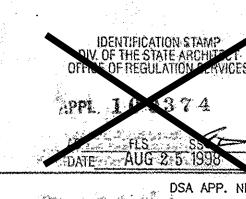






DSA A# 03-120742 FILE# 19-117

O DESIGN FACILITIES 1996



LICEANT EXPINES NO J-000

A. PIERCE · CC

9/13/96

2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.

(OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

APPLICABLE CODES

on the product of the control of the

TITLE 24, C.C.R, PART 2, VOL 1 1995 C.B.C (1994 UBC W/CALIF. AMENDMENTS) TITLE 24, C.C. PART 2, VOL 2 1995 C.B.C (1994 UBC W/CALIF. AMENDMENTS)

TITLE 24, C.C.R, PART 3, 1995 C.E.C. (1993 NEC W/CALIF. AMENDMENTS) TITLE, 24, C.C.R, PART 4, 1995 C.M.C. (1994 UMC W/CALIF. AMENDMENTS)

TITLE, 24, C.C.R, PART 5, 1995 C.P.C. (1994 UPC W/CALIF. AMENDMENTS) TITLE, 19, C.C.R, PUBLIC SAFETY, DIV. 1 STATE FIRE MARSHAL REGULATIONS

S2.0 ROOF FRAMING PLAN

S3.0 STRUCTURAL DETAILS S3.1 STRUCTURAL DETAILS

S4.0 STRUCTURAL DETAILS

BUILDING DATA: OCCUPANCY: E1, E2, & E3 - ALLOW BLDG, AREA # 9100 SQ. FT > BLDG. AREA = 960 SQ. FT.

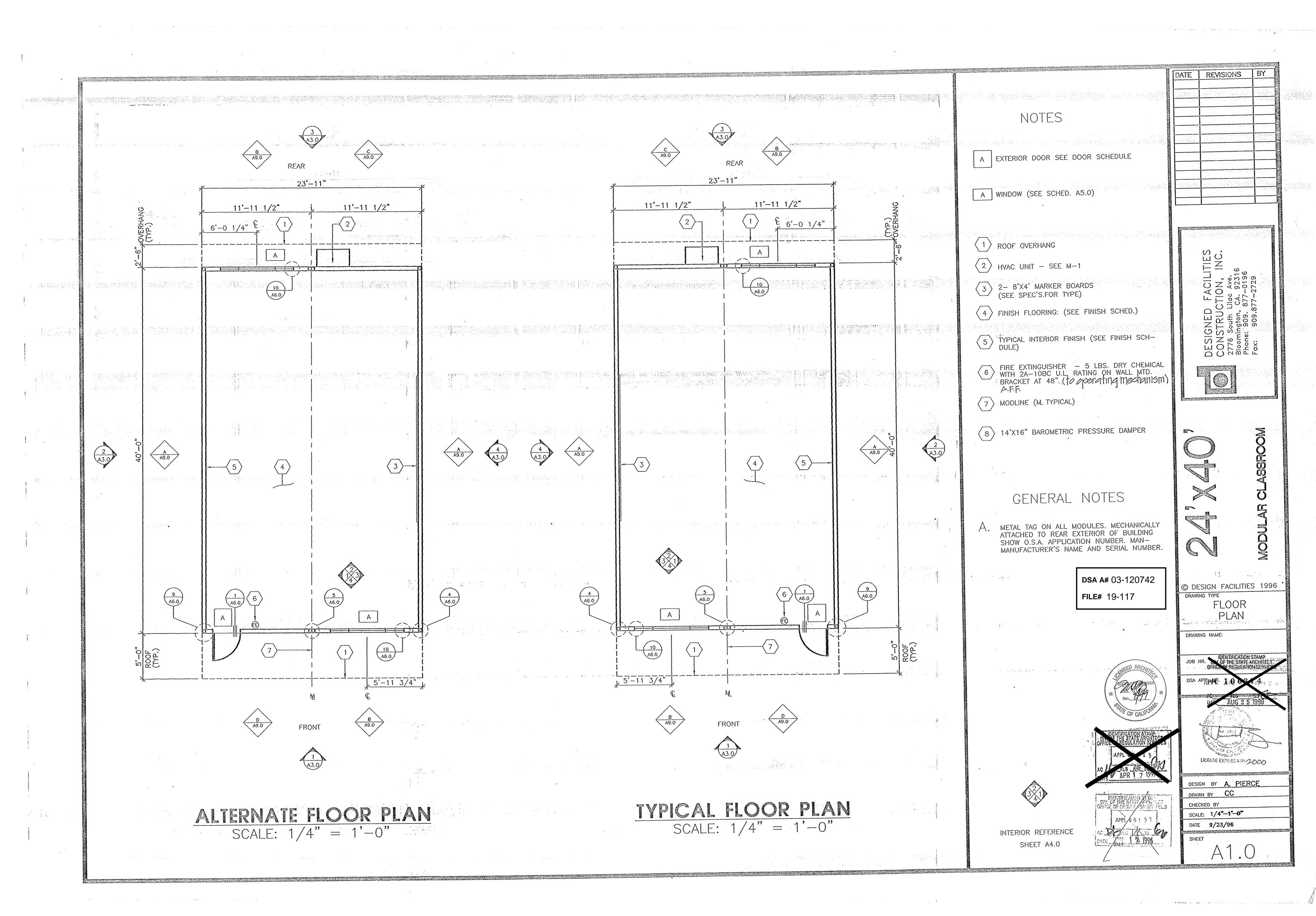
TYPE OF CONSTRUCTION VN FLOOR LOAD 50 PSF

ROOF LOAD 20 PSF (REDUCIBLE PER AREA) WIND LOAD 70 MPH EXPOSURE "C"

BUILDING AREA 960 SQ. FT. STRUCTURAL DESIGN RIGID FRAME (ORDINARY STEEL MOMENT RESISTING FRAME)

MECHINAL

M1.0 MECHANICAL PLAN



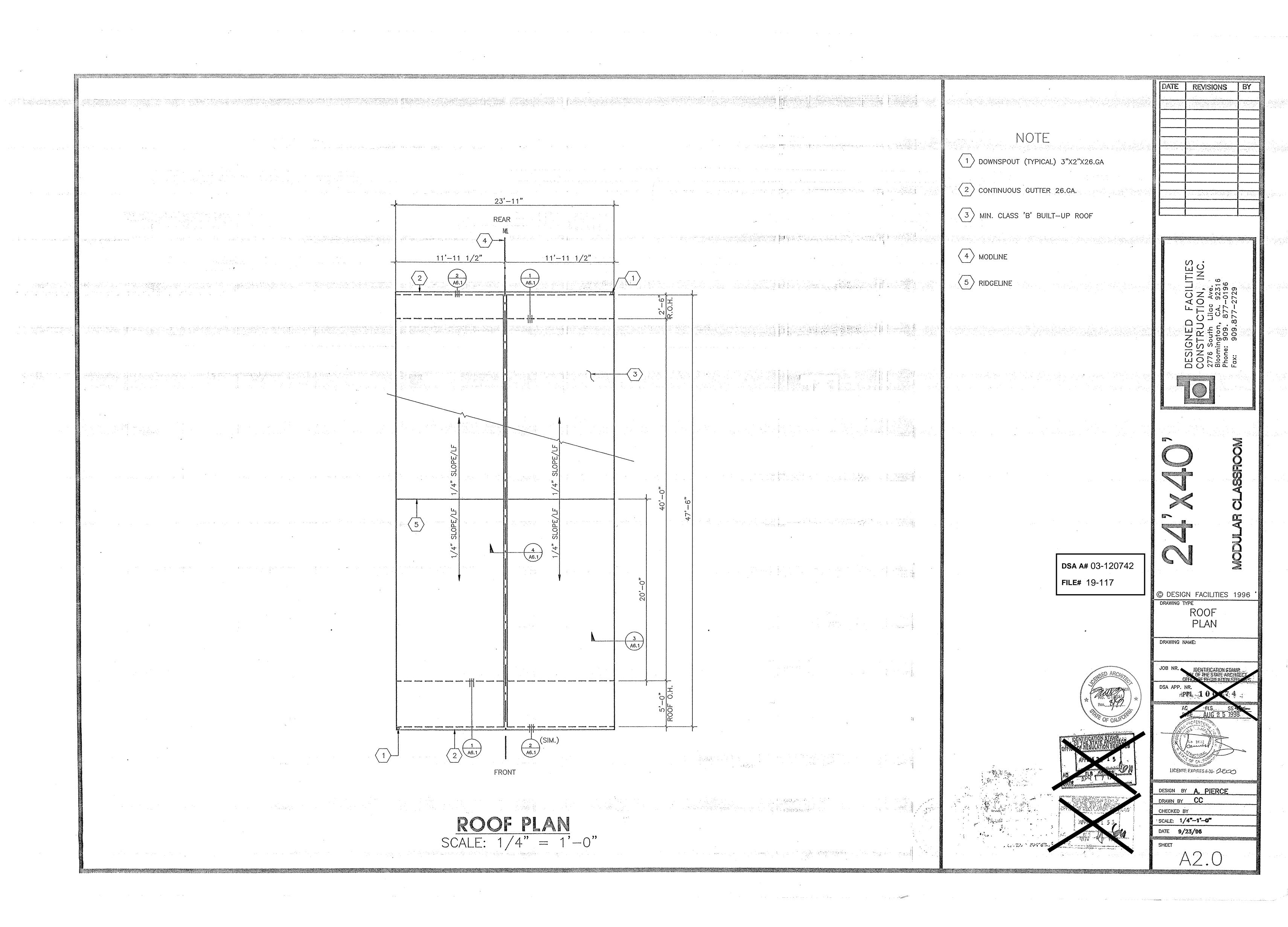
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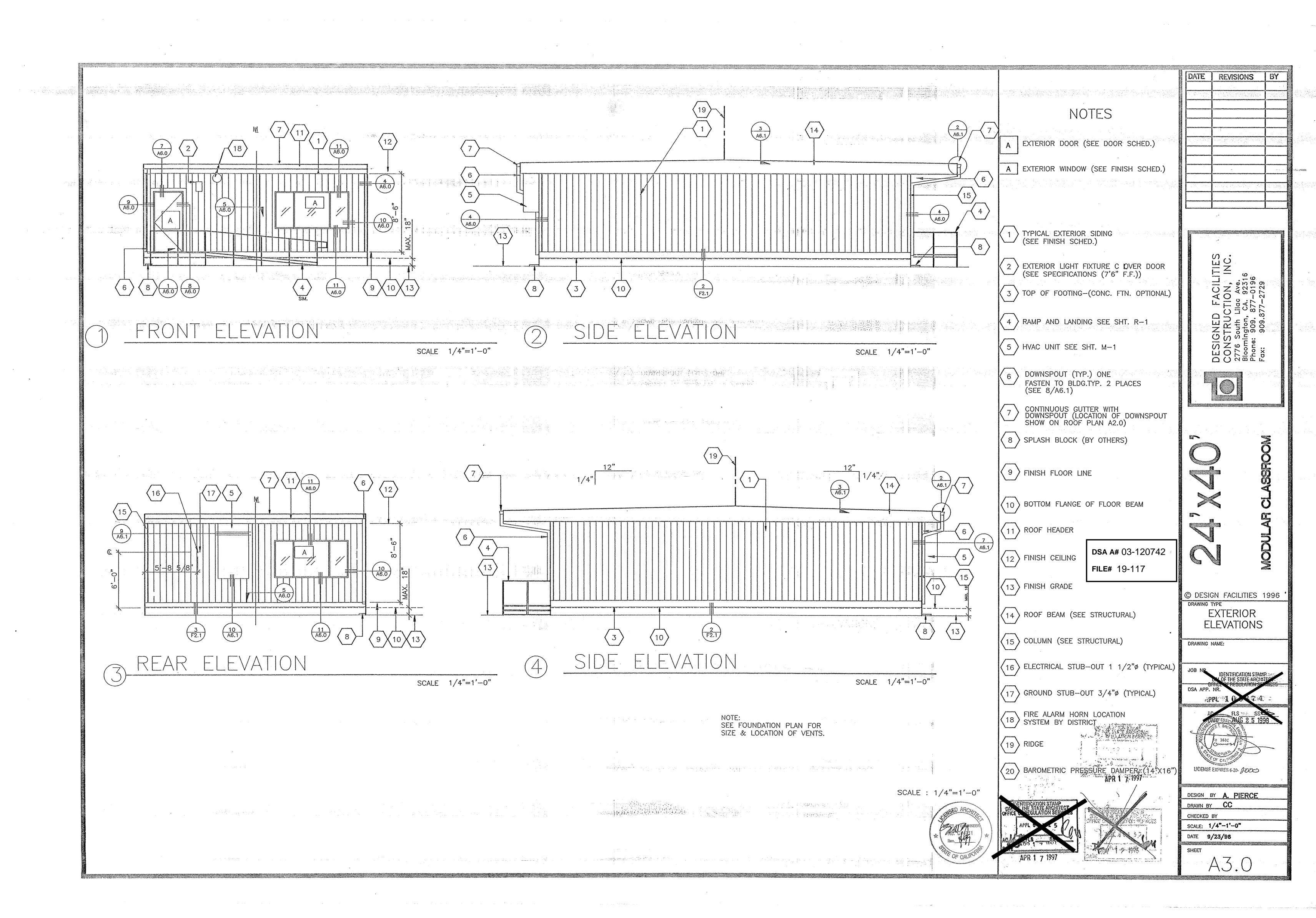
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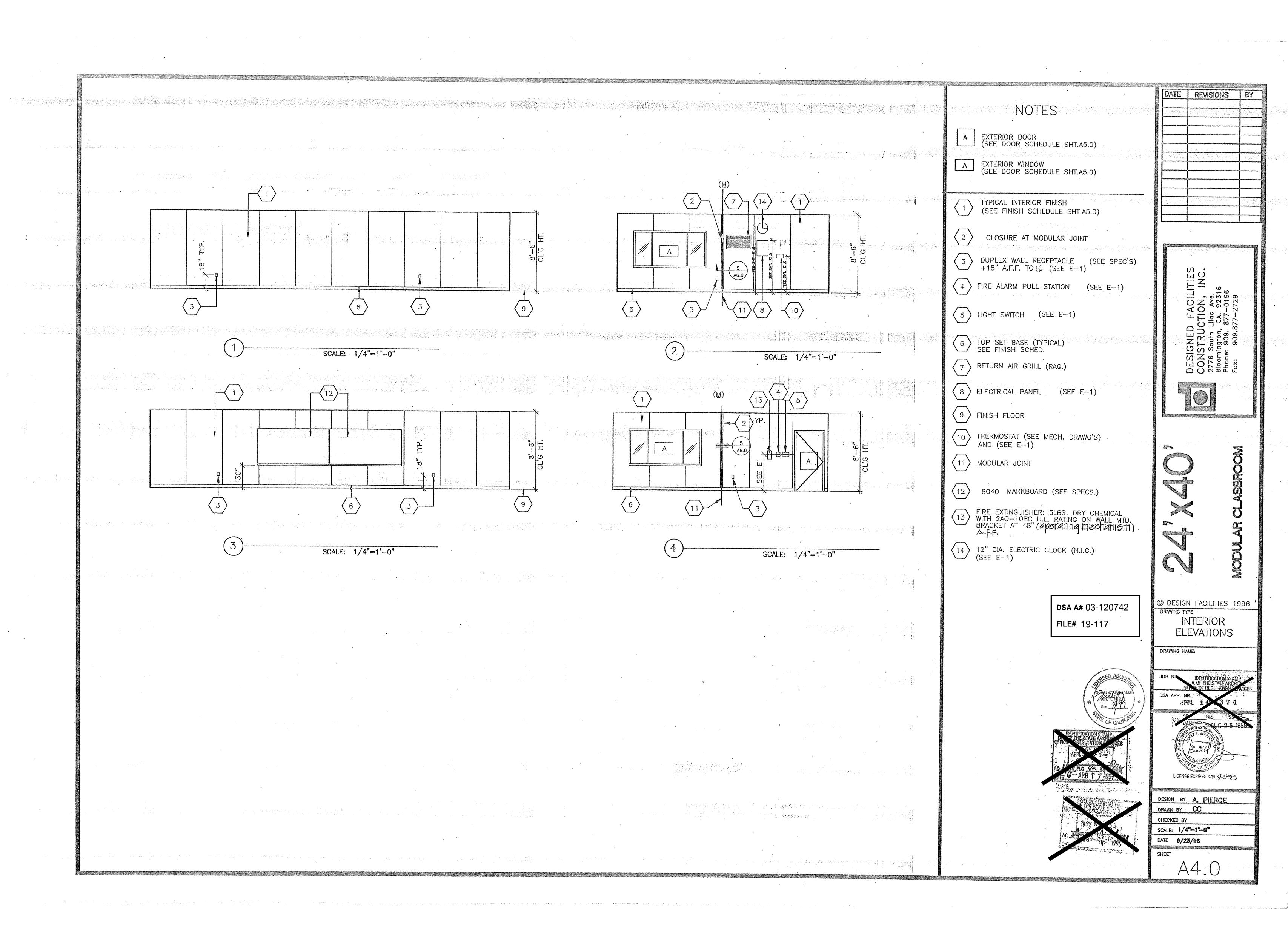
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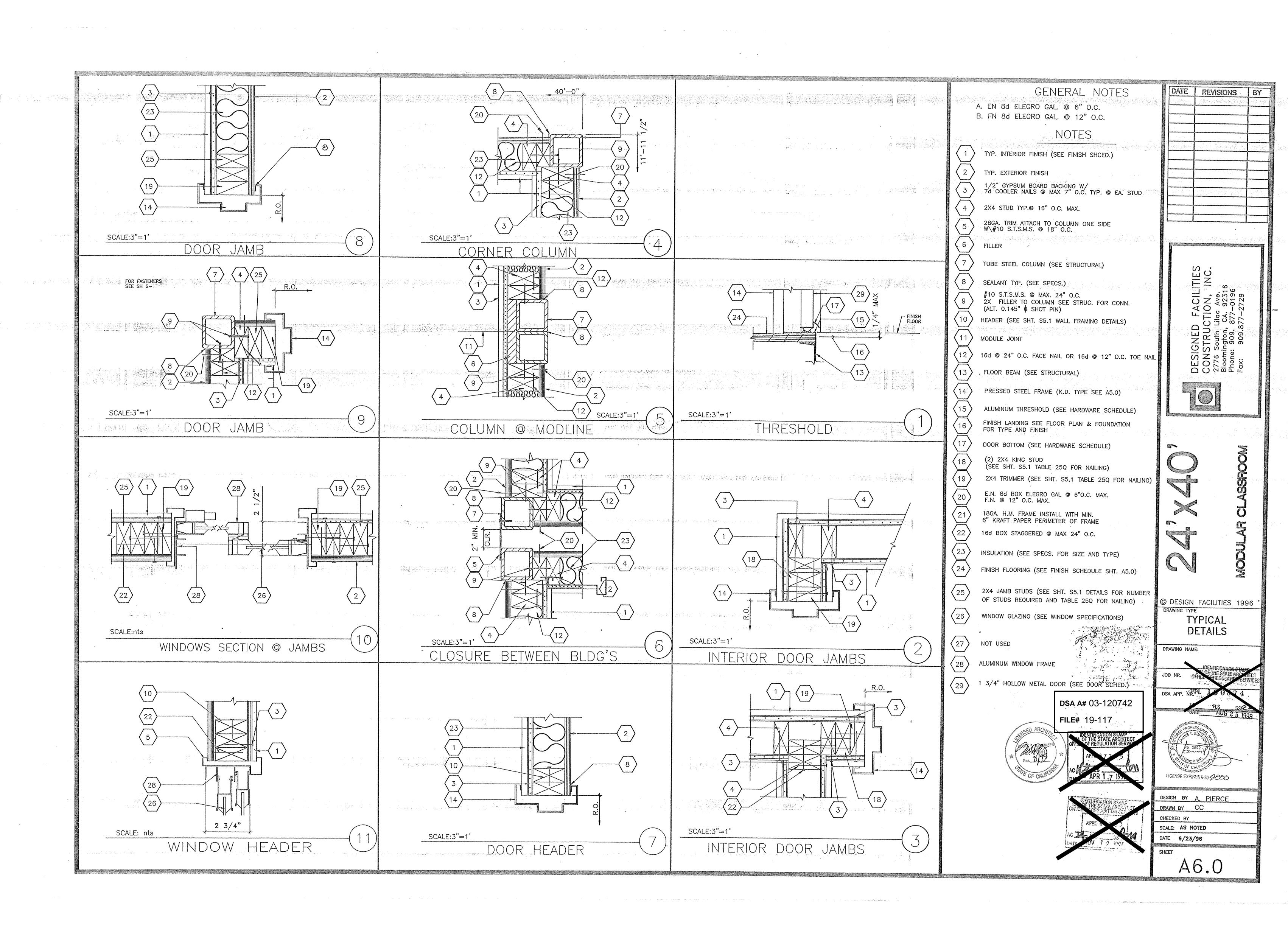
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DATE: 09/09/2020



	DOOR SCHEDULE	© DOOR TYPES	ROOM FINISH SC	THEDULE (XXX) RM. NAME	DATE REVISIONS BY
	NG NG IION IION IION IION IION IION IION	NOTES: 1. DOOR HANDLES FOR LOCKSETS TO BE CENTERED @ 38" A.F.F. & DEADBOLTS @ 44" A.F.F. 2. HARDWARE TO BE OR OPENABLE FROM THE INSIDE WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT. LEVERS TO RETURN TO WITHIN 1/2" OF DOOR. 3. ALL DOORS SHALL BE 1-3/4" THICK, U.N.O. 4. DOUBLE LETTERS IN SCHEDULE, INDICATES A PAIR OF DOORS. 5. SAFETY GLASS, CLEAR. 6. WIRE GLASS 7. UNDERCUT DOOR	FINISHES ROOM NAME ST SOUTH RESTROOM C E G G G G MOOSTER MOOST	A - CARPET PER STATE OF CAL COMPLYING WITH GROUP 1, B, CLASS 2, DENSITY 4600, DOWN WITH 4" TOPSET BAS B - SHEET VINYL FLOORINGW/6' BASE ARMSTRONG CLASSIC C - VCT - ARMSTRONG STANDAR	IFORNIA SPEC. TYPE A OR TYPE D, DIRECT GLUE SE. "INTEGRAL SELFCOVED CORLON
	DOOR TYPES	8. FIXED LOUVER 9. FUSIBLE LINK LOUVER 10. VISION PANEL 11. CLOSURE SHALL BE SET FOR MAX. OPENING		① - 4" BURKE TOPSET BASE ② - 6" BURKE TOPSET BASE ⑤ - 1/2" VINYL TACKBOARD CLAGYP. BOARD BACKING ③ - 1/2" W.R. GYP. BOARD TAP WITH PAINTED FINISH ④ - 5/8" W.R. GYP. BOARD TAP WITH PAINTED FINISH ① - 1/2" GYP. BOARD TAPE/TEX WITH PAINTED FINISH	PE TEXTURE PE TEXTURE XTURE PAINTED
	3'-0" 	AL — ALUMINUM SST — STAINLESS STEEL STL — STEEL WWF — WINDOW WALL FRAME SC — SOLID CORE WOOD HC — HOLLOW CORE WOOD SCL — SOLID CORE WOOD W/ LAMINATED PLASTIC FACES.		 U − 5/8" GYP. BOARD TAPE/TEX WITH PAINTED FINISH W − 1/2" MARLITE\FRP OVER 1, U − ACCOUSTICAL LAY IN GRID OF PANELS (SEE SPECIFICATIONS WINDOW TYPE	XTURE PAINTED 72" W.R. GYP BOARD 72" W.R. GYP BOARD
		8'-0"	QTY. WIDTH HEIGHT TYPE 2 8'-0" 4'-0" -	FINISH GLASS TYPE WINDOW TYPES TYPE 1 MIN. 3/16" TEMMPERED SOLAR XOX GRAY	DENTIFICATION STAMP
	HARDWARE SCHEDULE HARDWARE PACKAGE #1 LOCKSET - D70 SCHLAGE PD RHODES LEVER BUTTS - 1-1/2 PR. HAGER 1279 BB 4-1/2 X 4-1/2 NRP 26D OR EQUAL CLOSER - NORTON 1604 OR EQUAL THRESHOLD - PEMKO 271A OR EQUAL DOOR BOTTOM - PEMKO 216AV OR EQUAL WEATHERSTRIP - PEMKO 299AV OR EQUAL	ACCESS SIGNAGE		1/8" — 1/8"	DSA A# 03-120742 FILE# 19-117
	HARDWARE PACKAGE #2 (INTERIOR) LOCKSET - D10 (PASSAGE) WITH RHODES LEVER BUTTS - 1-1/2 PR. HAGER 1279 4-1/2 X 4-1/2 26D OR EQUAL	12" SYMBOL MOUNTED @ +60" ON REST ROOM DOORS	MEN'S OR WOMEN'S REST ROOM		CLEAR ACRYLIC PLASTIC, (TYPE.) OPAQUE WHITE ACRYLIC PLASTIC BACKING, (TYPE.) PAINT BACKGROUND ON INTERIOR FACE OF CLEAR PLASTIC, (TYPE.) ODESIGNED FACILITIES 1998 DRAWING TYPE FINISH SCHEDULE
			PROVIDE ONE SIGN WHERE INDICATED ON PLANS LOCATE SIGN MAX. 12" AWAY FROM DOOR STRIKE SIDE. SIGN MOUNTED @ +60" ON WALL AT LATCH SIDE OF DOOR.	MEN/BOYS	BACKGROUND COLOR SHALL CONTRAST WITH DOOR COLOR. SUBSURFACE IMAGE CENTERED ON SIGN . DRAWING NAME: JOB NIN IDENTIFICATION STAMP D. OF THE STATE ARCHITE OFFICE TO REGULATION STAMP OFFICE TO
	NOTES: SUB-FLOOR PREP: PREPARTION FOR SUB FLOOR TO ACCEPT FINISH FLOORING IS BY FLOORING CONTRACTOR. PLYWOOD SUB FLOOR IS 2.4.1 PLYWOOD. OUTER PLY IS PLUGGED AND TOUCH SANDED, ANY DEFORMITIES DUE TO STANDARD CONSTRUCTION PRACTICES SHALL	MEN-	ROOM NAME TEXT 1" HIGH HIGH LETTERS COLOR WHITE BRAILLE LETTERS CONTRACTED GRADE 2 BRAILLE DOTS 1/10" O.C. 2/10" BETWEEN CELLS	WOMEN/GIRLS NA T	ACKGROUND COLOR SHALL CONTRAST WITH DOOR COLOR. NOTE: ATTACH SIGNS USING (3) THREE FLATHEAD WOOD SCREWS, COUNTERSUNK AND ADHESIVE. SIGNS SHALL BE LICENSE EXPIRES 6-30- DESIGN BY A. PIERCE DRAWN BY CHECKED BY
s an in a sain Miniah	BE FILLED AND SANDED BY FLOORING CONTRACTOR. THE JOINT AT THE MODULE JOINING SHALL NOT BE LARGER THAN 1/8" AND SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR.	NOTE: PROVIDE ONE SIGN WHERE INDICATED ON PLANS LOCATE SIGN MAX. 12" AWAY FROM DOOR STRIKE SIDE. NOTE: PROVIDE ONE SIGN WHERE INDICATED ON PLANS LOCATE SIGN MAX. 12" AWAY FROM DOOR STRIKE SIDE.		M F Drawing nar	CENTERED ON THE DOOR AND WOUNTED 60" ABOVE FIN. FLOOR. (TYPE.) The state of the st

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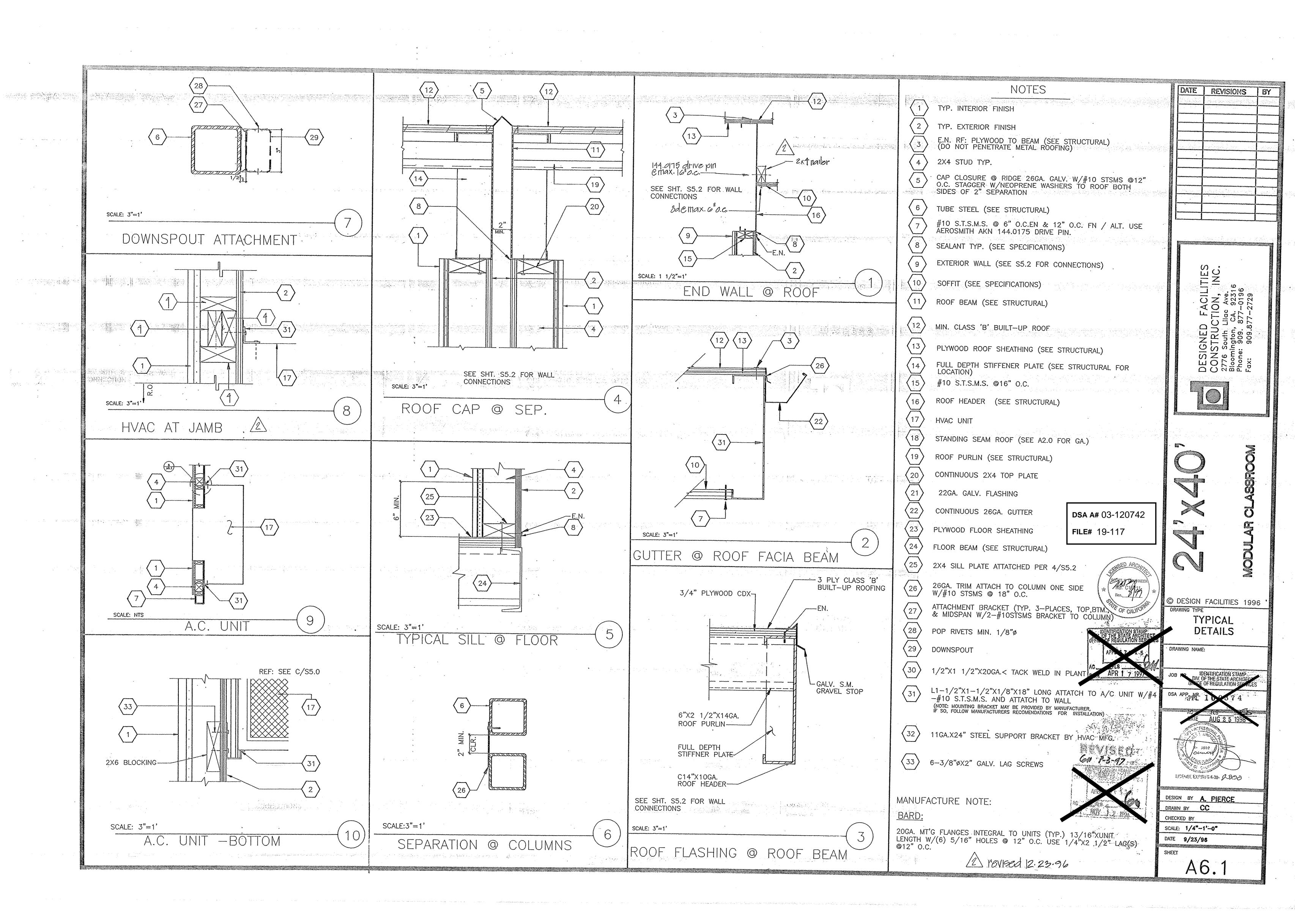


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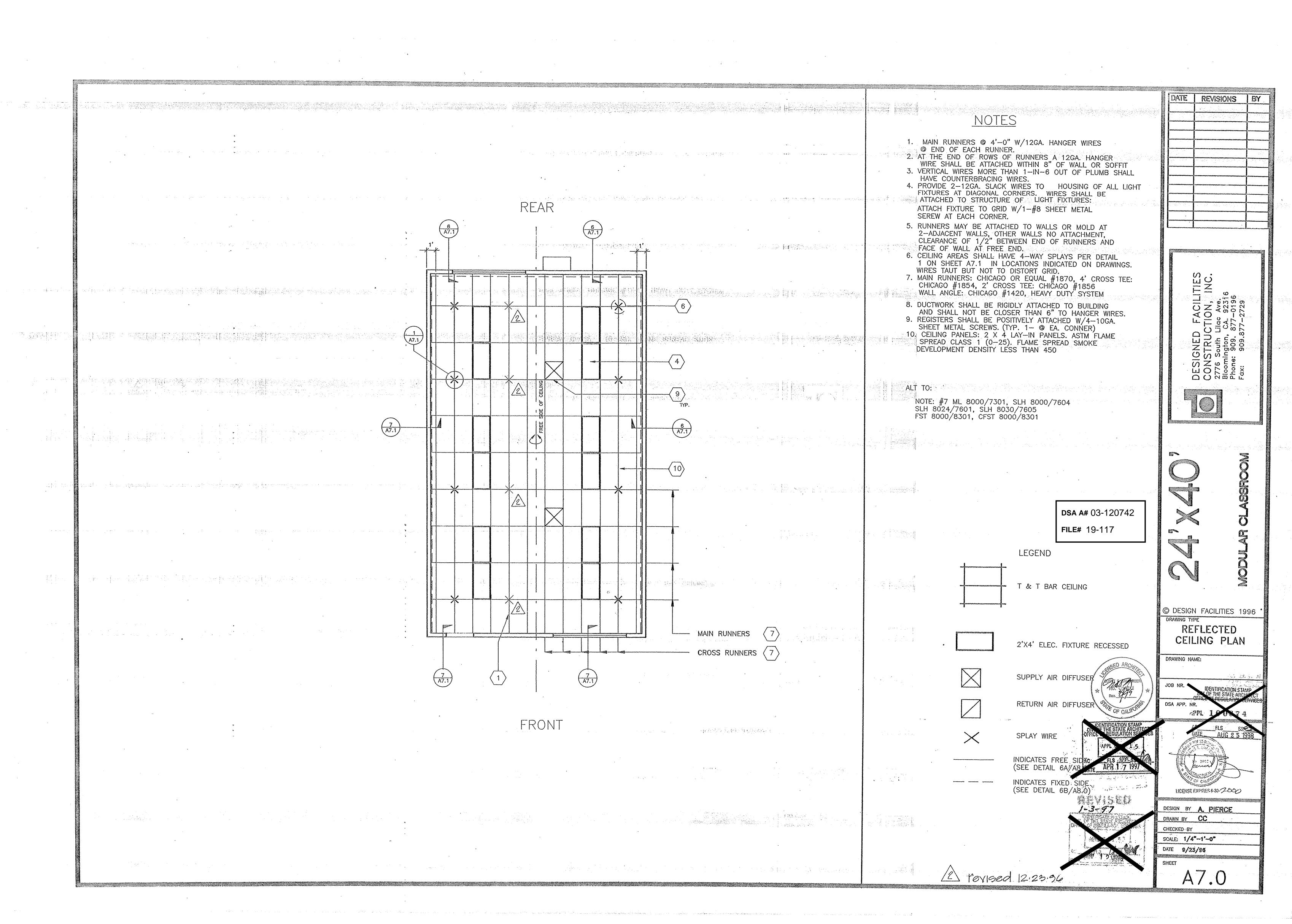
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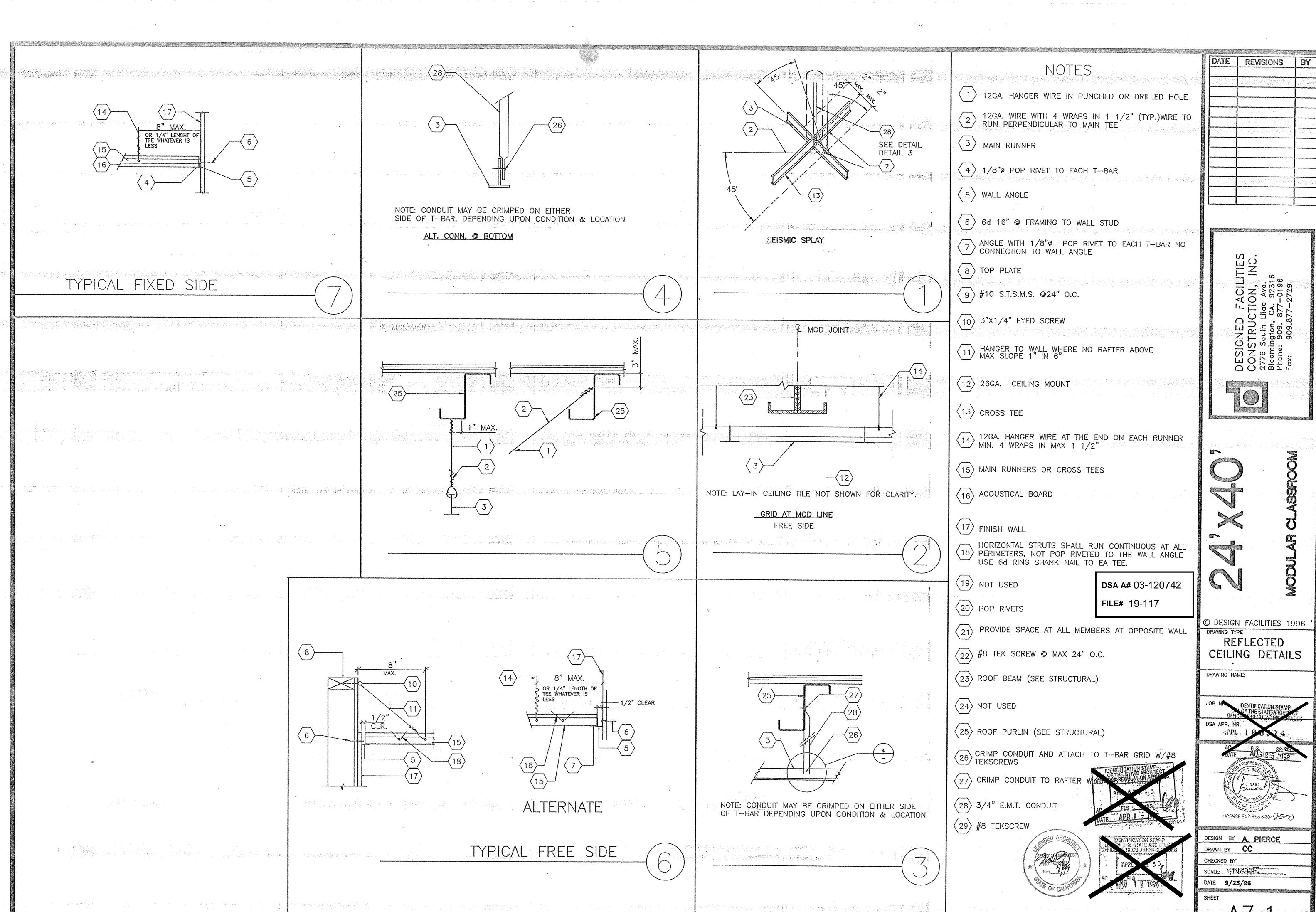
REVIEWED FOR
SS FLS ACS DATE: 09/09/2020



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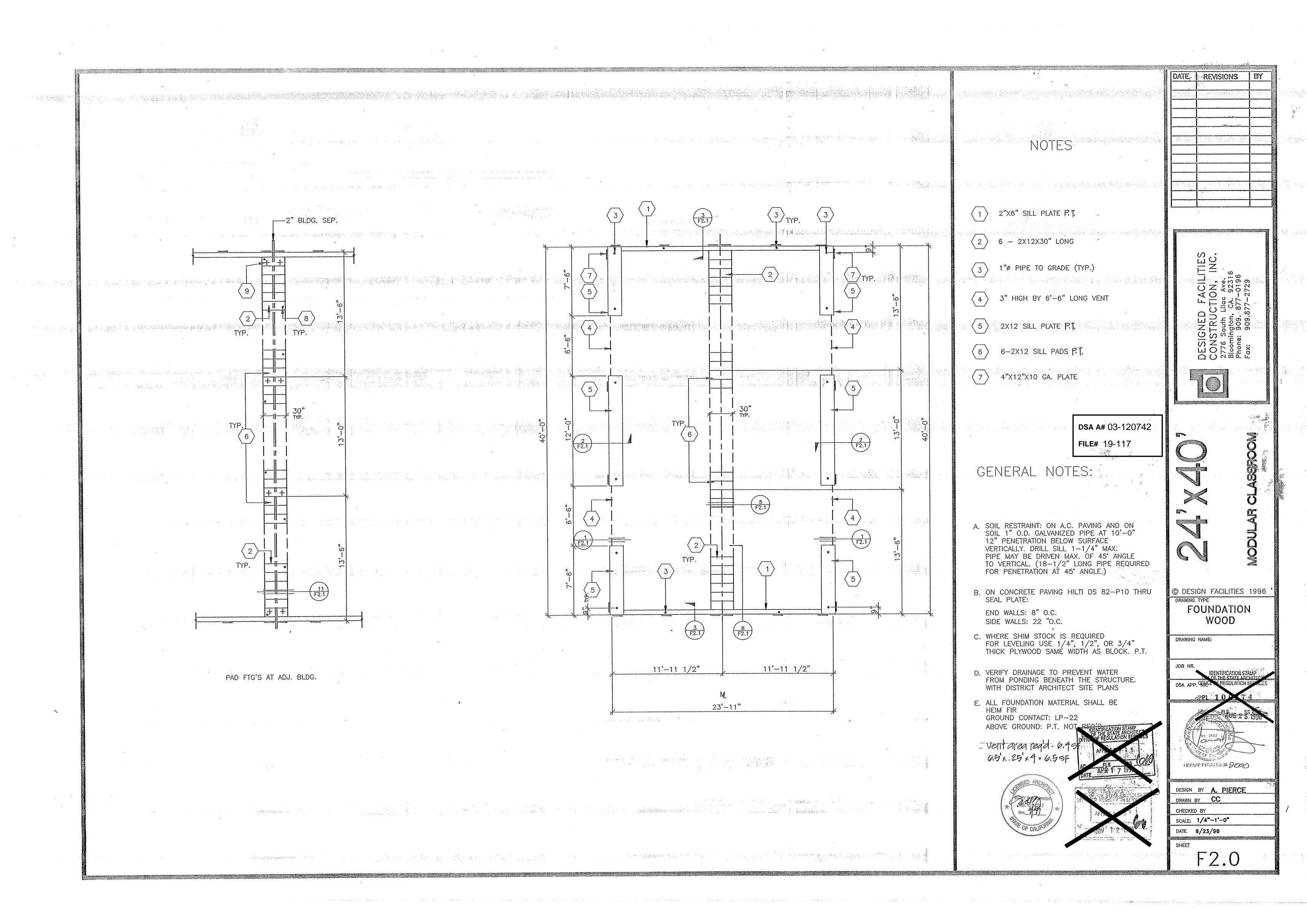
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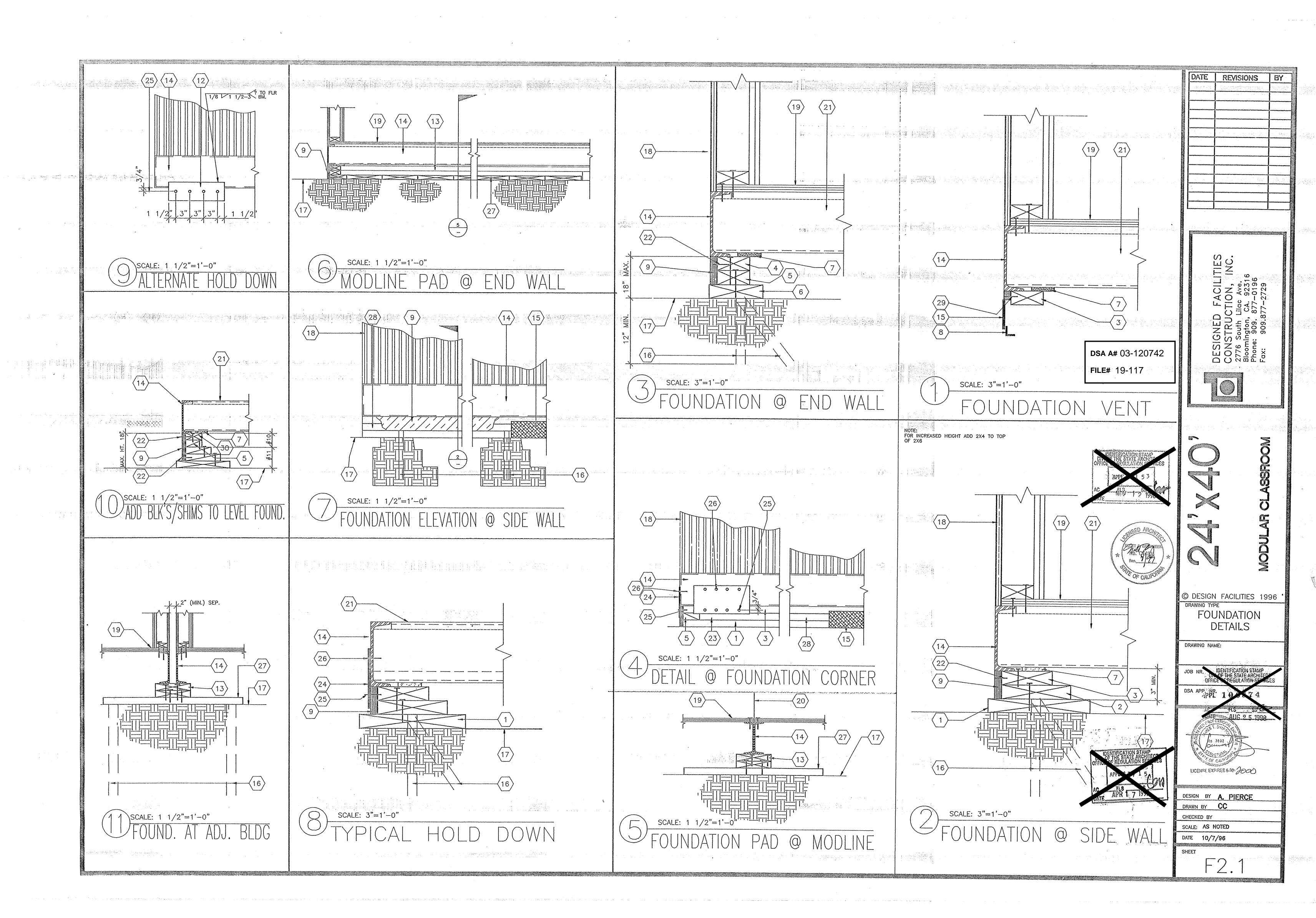
APP: 03-120742 INC:

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DATE: 09/09/2020





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APP: 03-120742 INC:

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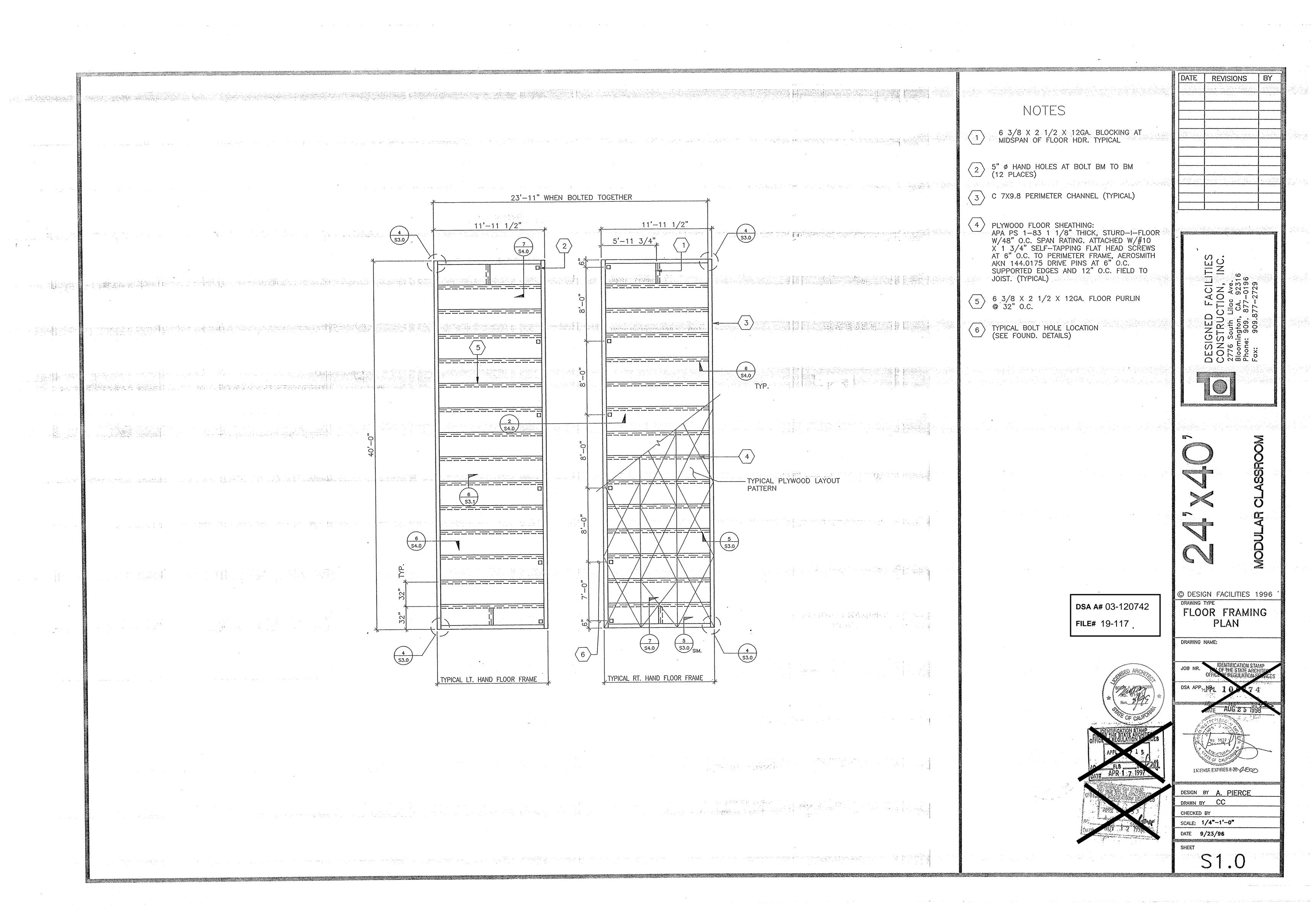
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			NOTES FOR I	72.1	DATE REVI
			NOTES		
			1 2X12 SILL PLATE SE PLAN FOR LENGHT	E FOUND.	
			TO SILL PLATE	d @MAX 5"O.C. W/16d @MAX 12" O.C.	
			4 2X4 TOP PLATE CONT 5 2X4 BLOCKING W/16c 0.C. TO SILL PLATE	Sad te Kali ili ika Same makara.	
	· · · · · · · · · · · · · · · · · · ·		6 2X6 CONT.SILL PLATE		ES
			8 STIFFNER ANGLE		FACILITI
			9 MIN. 3/8" PLYWOOD S @ MIN. 4" O.C. @ EN SIDEWALLS E.N. & TYI ADD BLK'ING OR SHIM HT. SEE DETAIL #2		SIGNED
			MIN. FOUNDATION HEIO 11 10GA. PLATE 4"X12"		
			2X8 BLK'NG FACE OR 12" O.C. ADD BLKS. (14) FLOOR FRAME BEAM S	EE. STRUCTURAL	
			VENT MIN. 3"X6'-6" 1 6.5 SQ.FT. 16 SILL RESTRAINT 1"Ø P FOR LOCATION		
alesto lelle på kan i til til en flak e samler tyrer for å before ettikkat fra til en kan kan kan kan kan kan Til ett lelle på til kan ett til en			18 EXTERIOR FINISH		
			20 MOD-LINE 21 FLOOR-JOIST	DSA A# 03-120742 FILE# 19-117	
			EN SEE NOTE #9	W/4 —#10 SMS TO FLR. O FOUND. TOP PLATE	
			24 6"X12"X10 GA. PLATE 25 1/4"ø X3" LG. LAG S		© DESIGN FA
			$ \begin{array}{c} 27 \\ 27 \end{array} $ 2X12X2'-6" SILL PLATED TO THE PLATE OF THE PLATE O	E SEE FOUND. PLAN	DRAWING NAME:
		and the second s	2X8 BLK'NG W/16d © 3 PER BLOCK (MAY VARY ACCORDING 29 10d GALV. BOX HAIL	MAX. 6" O.C.	JOB NR IDE
			30 INSERT REQ'D 2X4 BL SHIM W/16d @ 12" C	C. FACE NAIL	AC AC STATE OF THE
			CHICED ARCAUTED	OFFICAL REGULATION SOURCES APPL 7 1 5 PLANT APR 7 19	LICENSE EXPIRES
			OF CAULTON		DESIGN BY A. DRAWN BY CO

The solution of the solution o

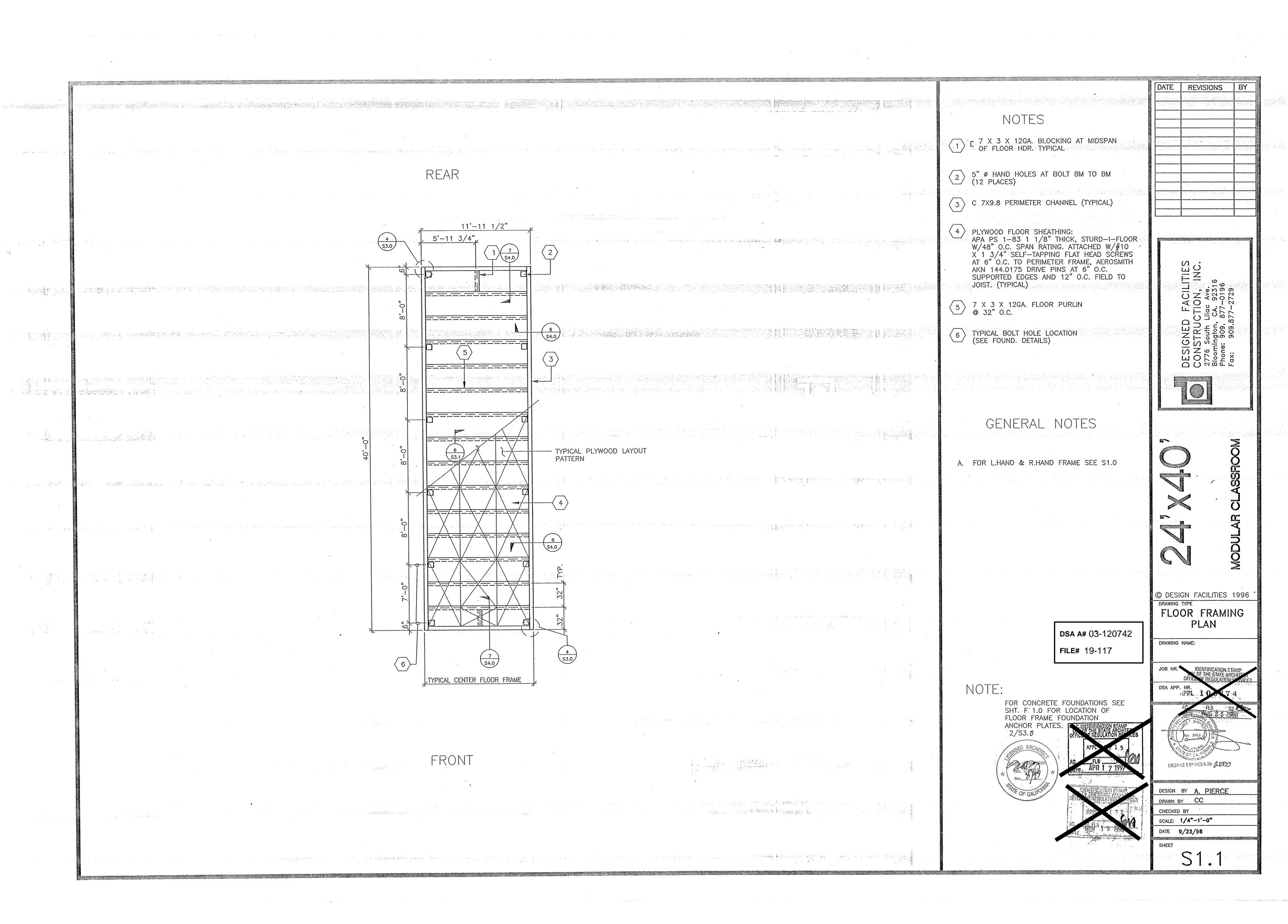
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REVIEWED FOR SS FLS ACS DATE: 09/09/2020



IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-120742 INC:

REVIEWED FOR
SS FLS ACS DATE: 09/09/2020

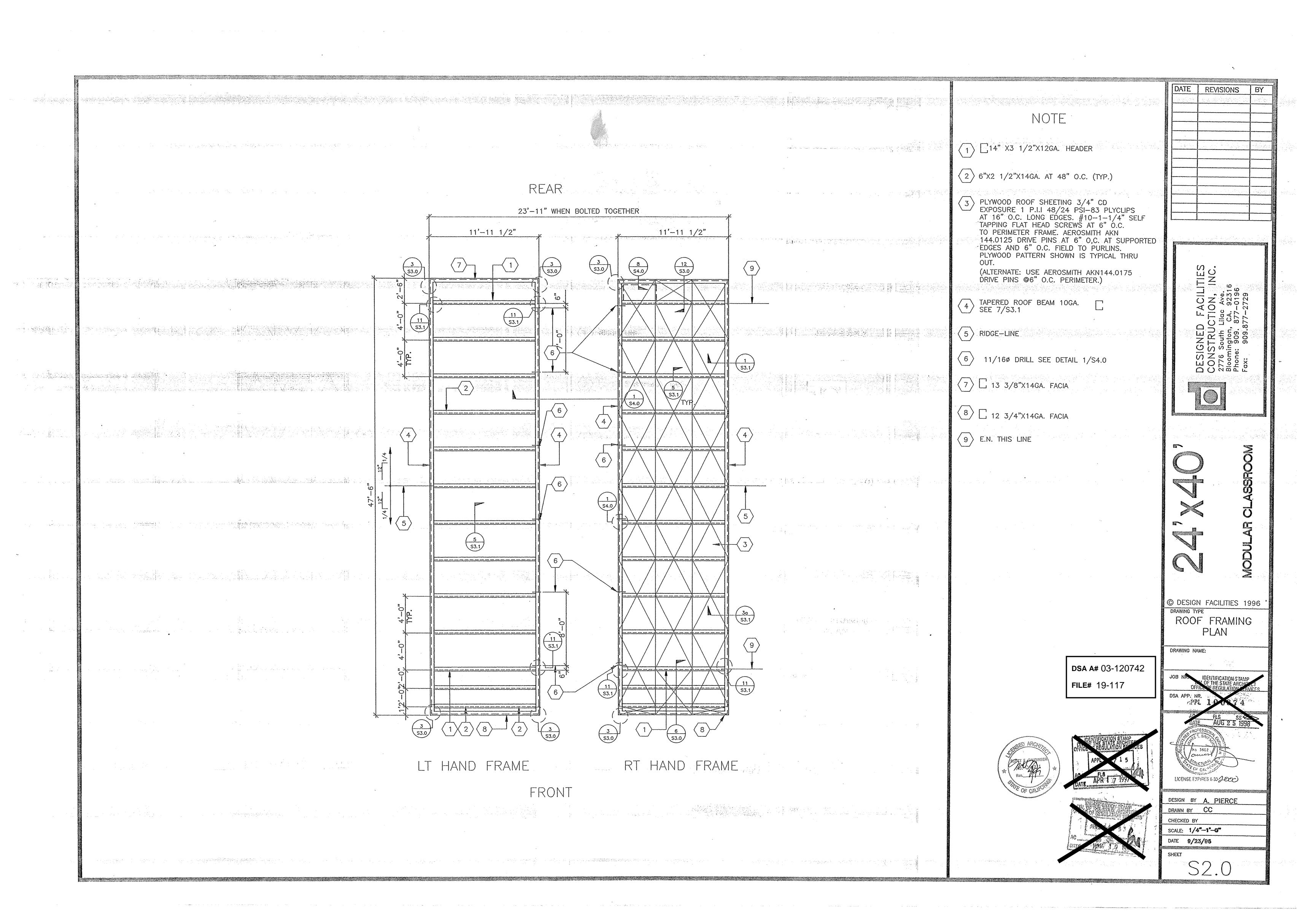


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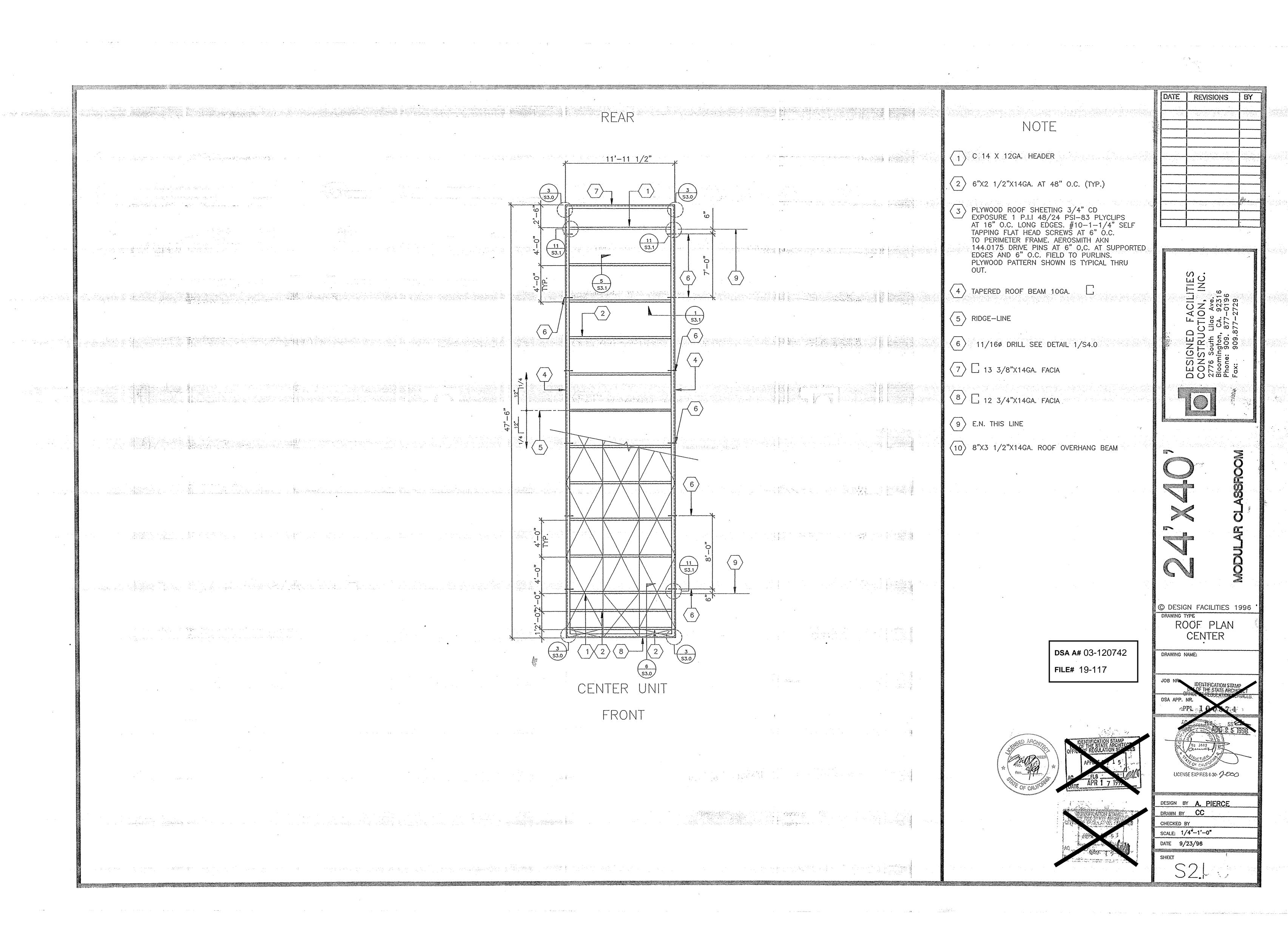
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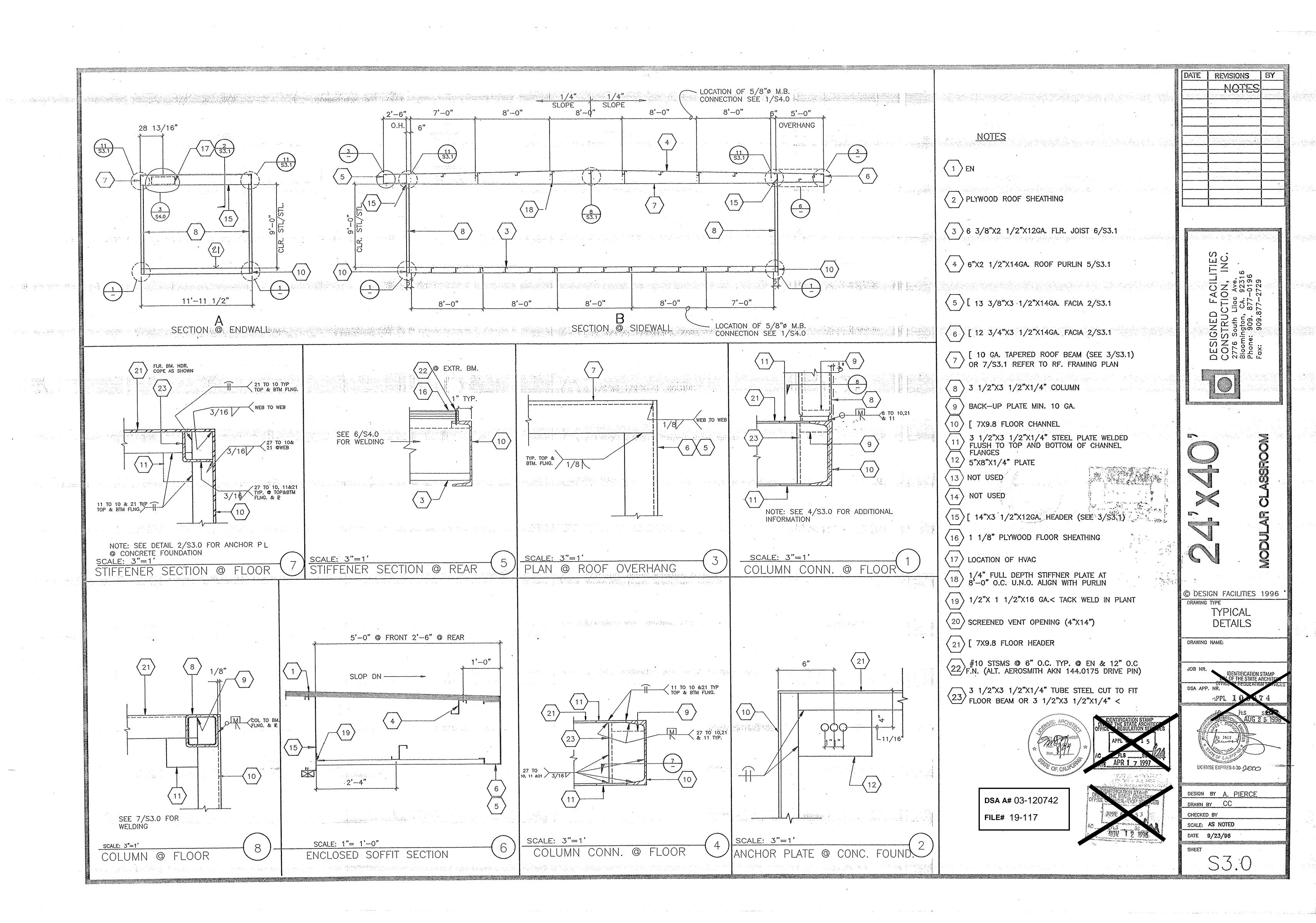
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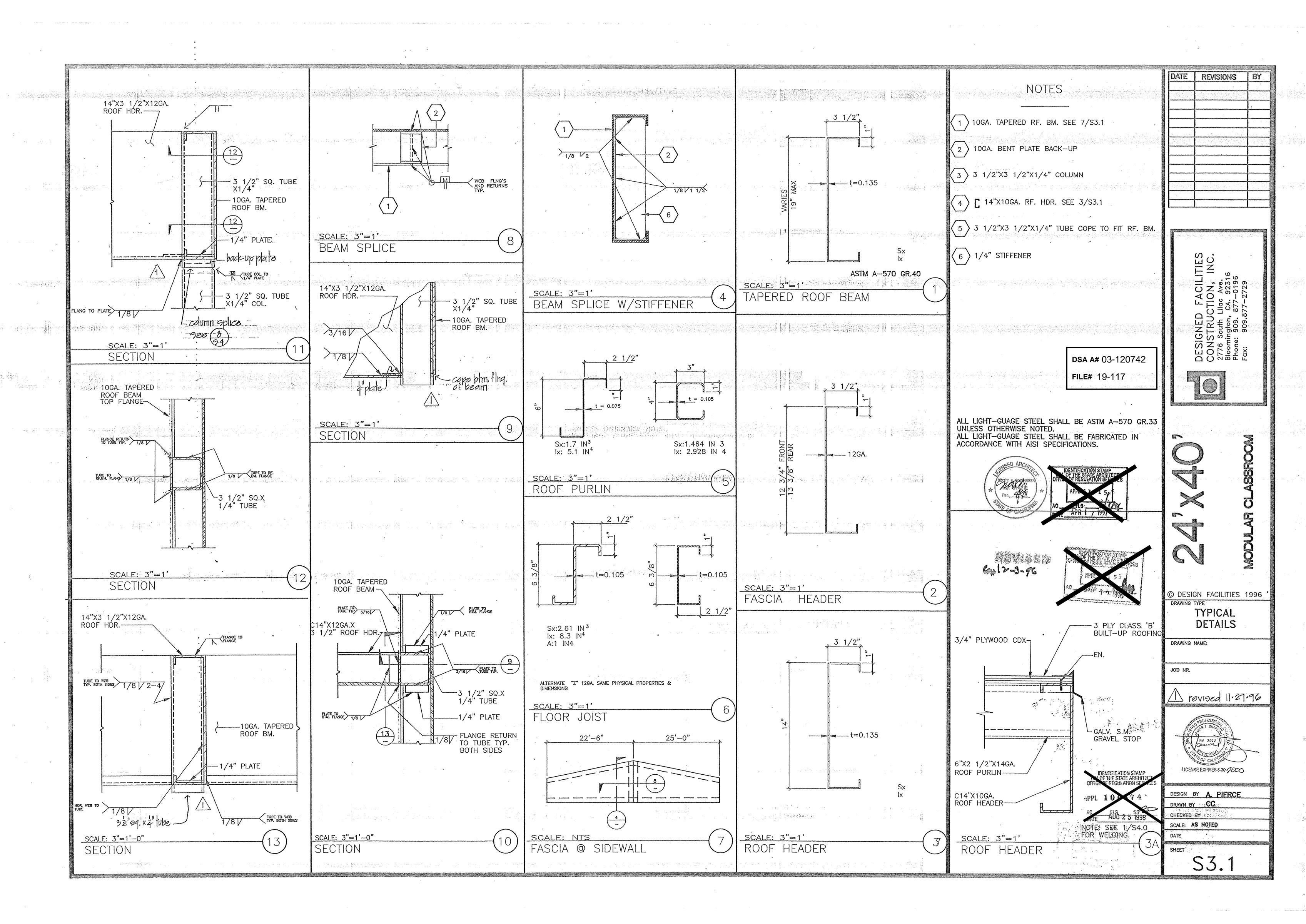
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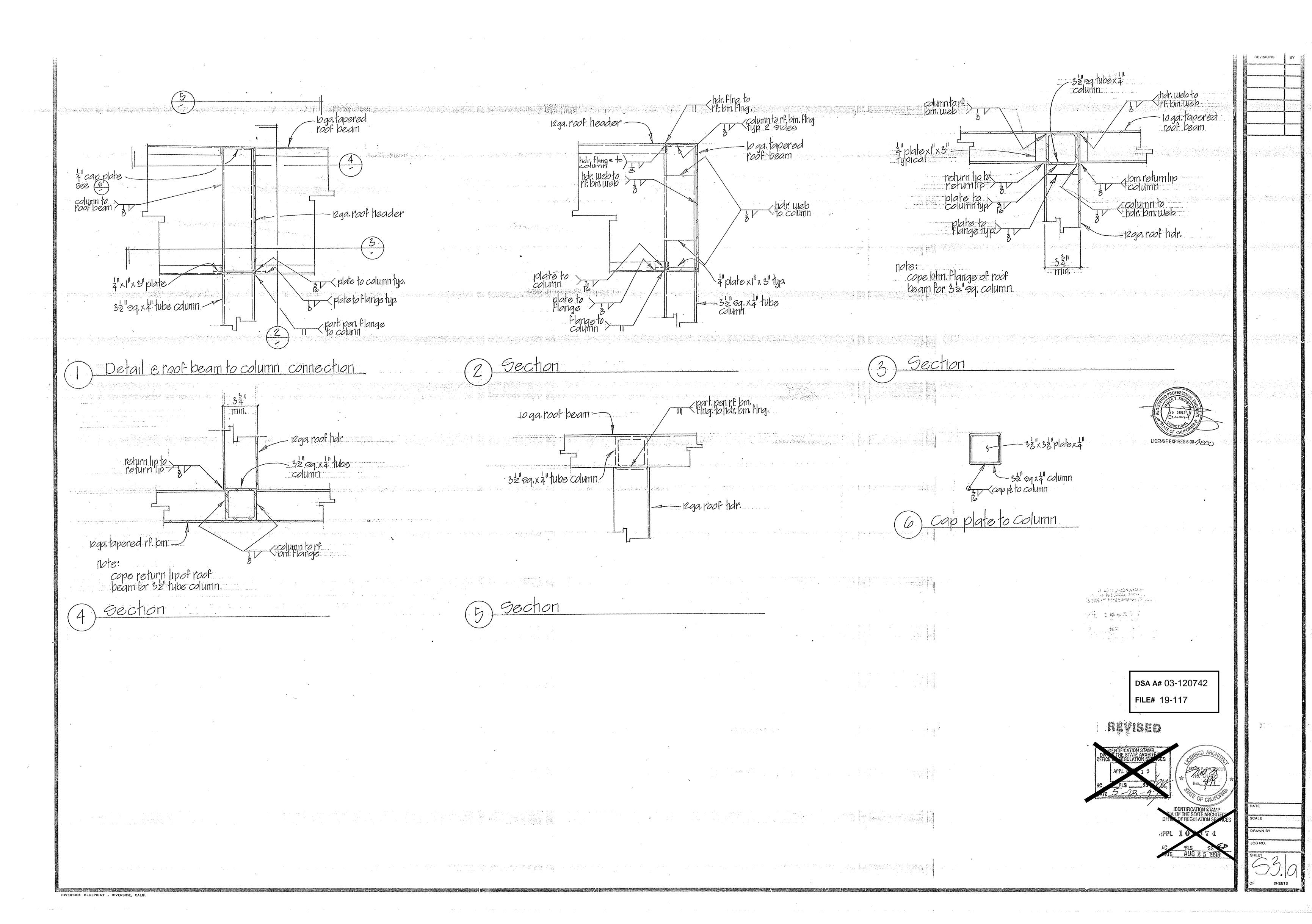
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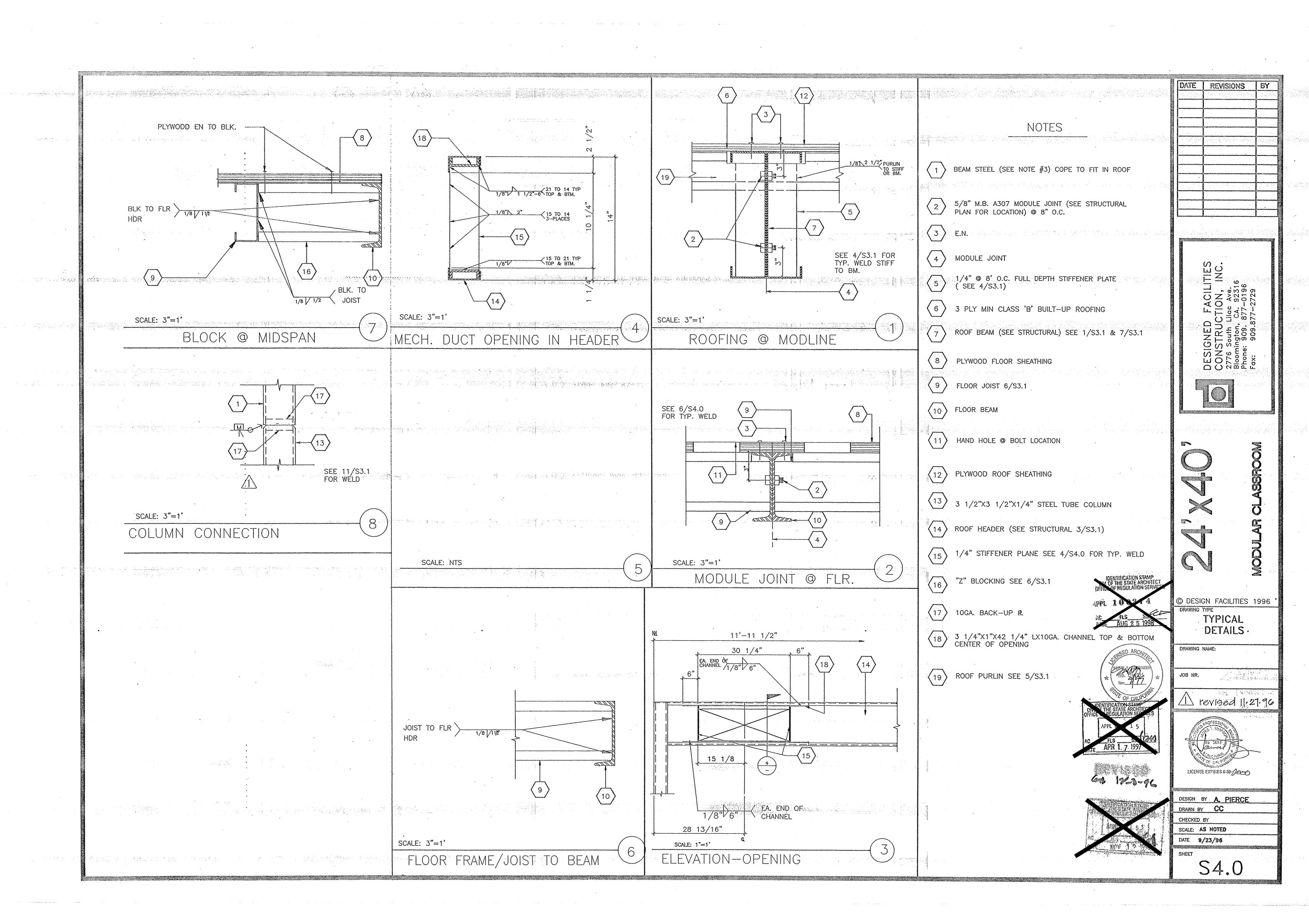
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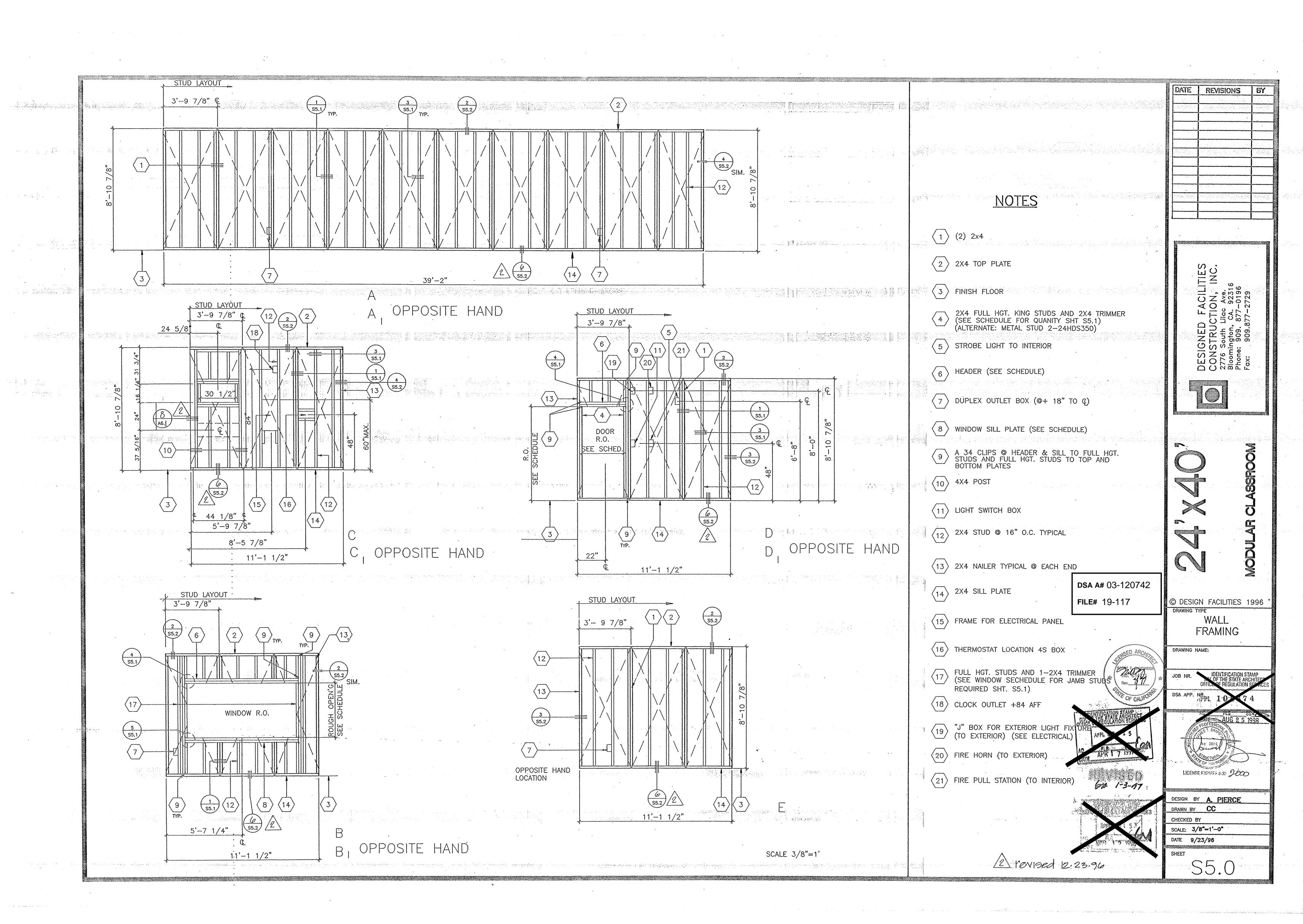


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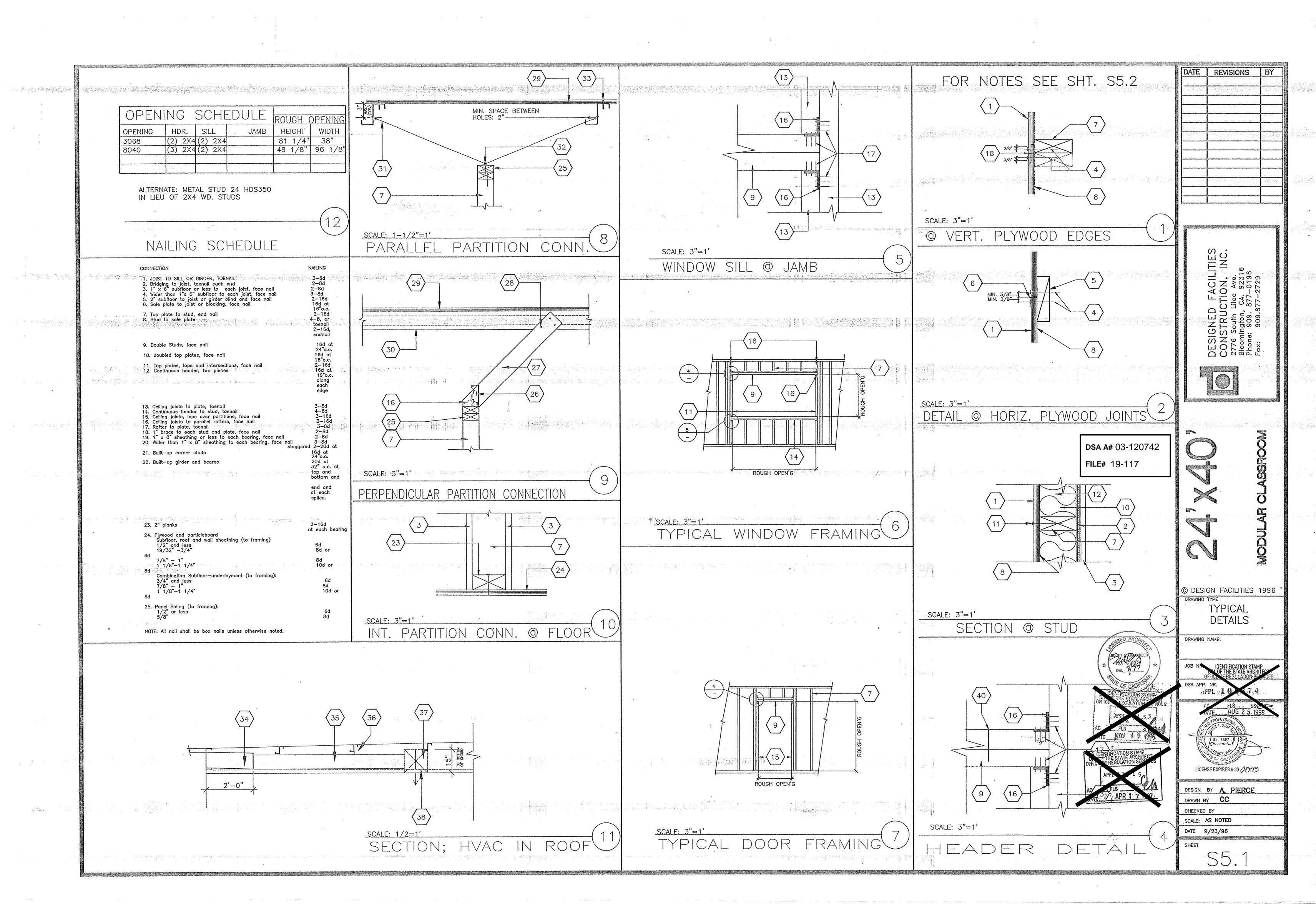


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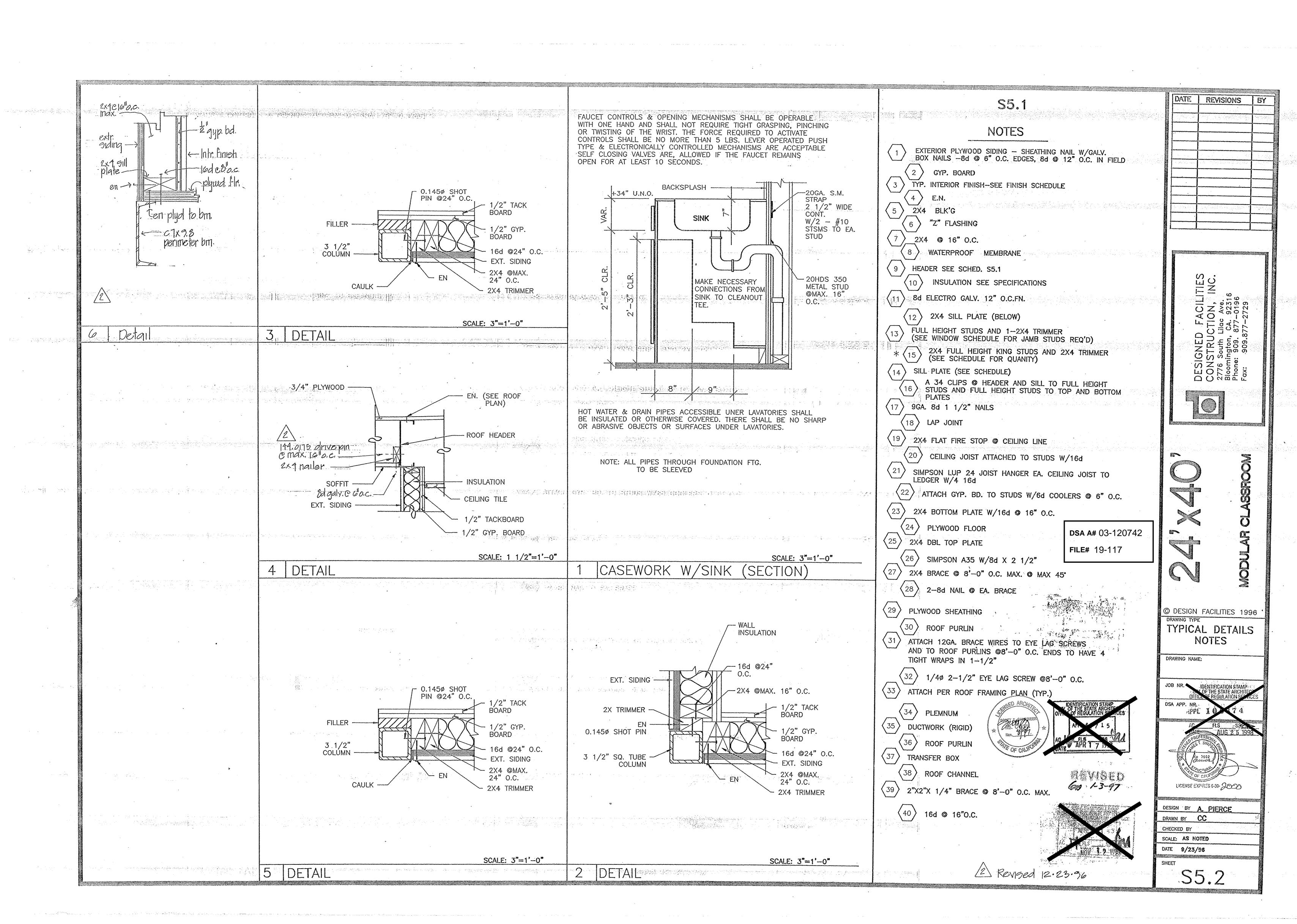
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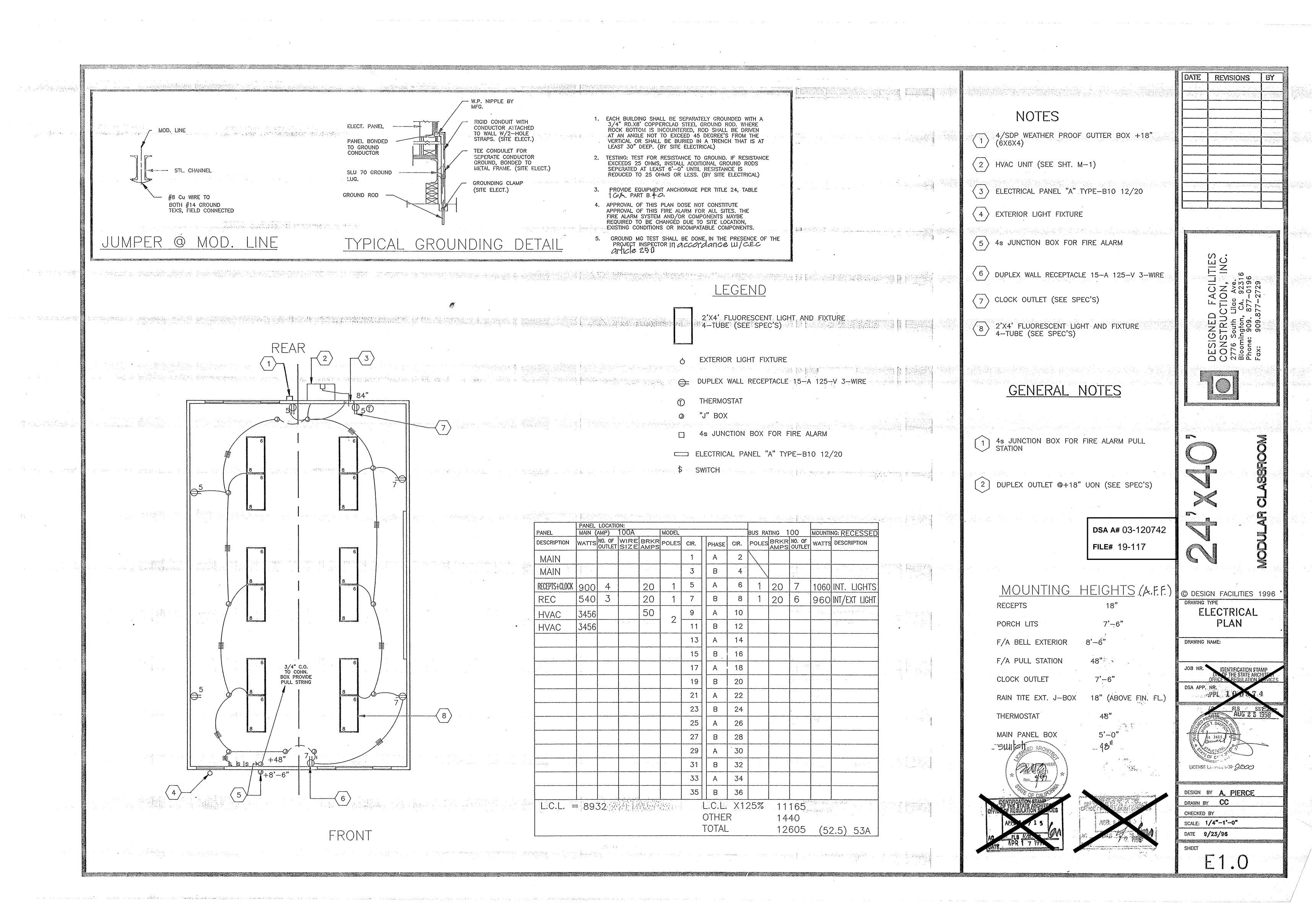
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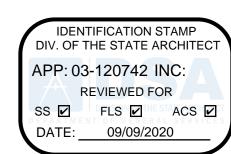
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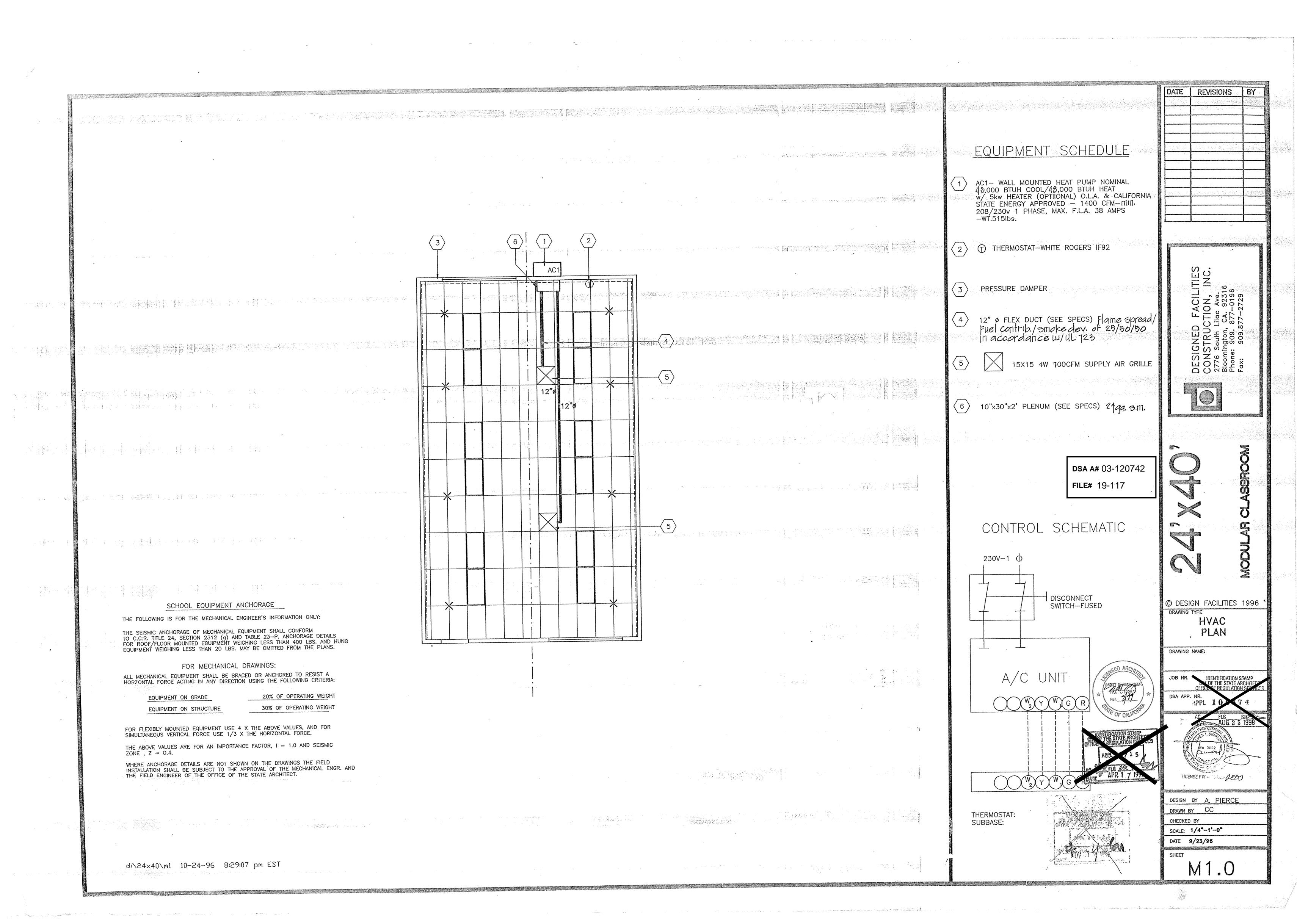
DATE: 09/09/2020



IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-120742 INC:
REVIEWED FOR
SS FLS ACS DATE: 09/09/2020







DSA List of Required St Special Inspection			Date Submitted: Revised:
		District	
PORTAIN. This form is only a summary list of structural tests and some pections required for the project. Generally, the structural tests and speed on this forware those that will be performed by the Geotechnical Entertory of Record, or Special Inspector. The actual complete test and it gram must be performed as detailed on the DSA approved documents bottom of this form lentifies work NOT subject to DSA requirements for projection or structural taking. The project inspector is responsible for projections.	ecial inspections ngineer of Record, inspection . The appendix at for special oviding inspection	tests requir clicke headi cleare	RUCTIONS: Click a plus sign (+) before any category or subcategory to reveal applicant and special inspections. A shaded box indicates a test or special inspection the may be red, depending on the scope of the construction and other issues. A shaded box can be red indicating your selection of that test. Note: A minus (-) on a category of subcategory ing indicates that it can be collapsed. However, any selections you may have made will be red. Click on the "COMPILE" button to show only the tests and inspections finally selected more information on use of this form, see DSA-103.INSTR.
Ill facets of construction, including but not limited to, special inspections in such as structural wood aming, high-load wood diaphragms, cold-forning, anchorage of non-structural components, etc., per Title 24, Part 2 TE: This form is also available by projects submitted for review under the 2013 CBC.	ormed steel 2, Chapter 17A.		
Note: References are to the 2	2016 edition of the C	alifornia Bi	uilding Code (CBC) unless otherwise noted.
REGISTED TEST OR SPECIAL INSPECTION	TREE	- pickit	CODE REFERENCE AND NOTES
SOILS			
CONCRETE MASONRY			4 Sections 26.12 & 26.13 SCE 5-13 Table 3.1.3 & TMS 2-13/ACI 530.1-13/ASCE 6-13 Table 5
MASONRY STEEL, ALUMINUM			3-10, AISC 360-10, AISC 3-10, AISC 358-10, AISI S100-07/S2-10
17. STRUCTURAL STEEL, COLD-FORM ED Material Verification:			
a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements, • Material sizes, types and grades comply with requirements.	Periodic	#	2203A.1 (220 A.7), Table 1705A.2.1 Item 3a-3c; AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performs off-site.
b. Test unidentified materials Inspection:	Test	LOR	220° (1 (2203.1°).
e. Verify and document steel fabrication per DSA approved construction documents.	Perio c	SI	ot applicable to cold-formed steel light-frame construction, except for trusses (1705A.2.4). 1705A.2.5, Table 1705A.2.1 Items 4 & 5; DSA IR 17-3, AWS D1.1 and AWS D1.8 for structural
19. WELDING: Verification of Materials, Equipment, Welders, etc:		X	steel, AWS D1.2 for Aluminum, AWS D1.3 for cold-formed steel, AWS D1.4 for reinforcing steel. (See Appendix for exemptions.)
a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS. b. Verify weld filler material manufacturer's certificate of	Periodic	S _I	DSA IR 17-3.
compliance.	Perdic	SI `	SA IR 17-3.
c. Verify WPS, welder qualifications and equipment.	eriodic	SI	DS - R 17-3.
19.1 SHOP WELDING: a. Inspect groove weids, multi-pass fillet welds, single pass fillet	Continuous	SI	Table 1703 2.1 Item 5a1-4. Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
welds > 5/16", plug and slot welds b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck w/s	Periodic	SI	1705A.2.2, Ta: 1705A.2.1 Item 5a.5 & 5a.6. Per AISC 360-10 (and AISC 341-10 as applicable).
c. Inspect welding of stairs and railing systems.	Powering	SI	1705A.2.1. Fel. AIS. 60-10 (and AISC 341-10 as applicable). AWS D1.1 & D1.3. DSA IR 17-3.
d. Verification of reinforcing steel weldability other than 3TM A706 e. Inspect welding of emitorcing steel.	Periodic Continuous	SI SI	1705A.3.1; verify carbox, quivalent reported on mill certificates. AWS D1.4. DSA IR 17-3. 1705A.3.1, Table 1705A.3. em 2, and Table 1705A.2.1 Item 5b; 1803A.8. AWS D1.4. DSA IR 17-3.
WOOD		·	
OTHER			
required verified report(s):			
KEY to Columns			
1 Type -		Ł	formed By - cates that the special inspection is to be performed by a residered geotechnical engineer or his or her
Continuous - Indicate mat a continuous special inspection is required		authorized	d representative
Periodic – Indicates that a periodic special inspection is required		Laborator	dicates that the test or inspection is to be performed by a testing coratory accepted in the DSA by Evaluation and Acceptance (LEA) Program. See section 4-335, 2-3 CCR Title 24, Part 1.
Test – Indicates that a test is required		SI - Indic	ates that the special inspection is to be performed by a special inspects
COMPILE	Pjelja		
ne of Architect or Engineer in general responsible charge			IDENTIFICATION STAMP DIV OF THE STATE ARCHITECT APP. #
ne of Structural Engineer (When structural design has been delegated)			AC N/A F/LS N/A SS
			DATE

"CONSTRUCTION OF" AND "STOCKPILE OF" EXAMPLE DSA 103 FORM (DSA 103 FORM NOT REQUIRED FOR RELOCATION OF CERTIFIED

OF FUTURE PROJECT-SPECIFIC FORM DSA-103'S. A FORM DSA-103

THE EXAMPLE FORM DSA-103 SHOWN ON THIS SHEET IS FOR

ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION

IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS

BEING INCORPORATED INTO AND THE EXAMPLE FORM DSA-103

IS TO BE CROSSED OUT ON THIS DRAWING.

RAMP & LANDING).

TMP SERVICES

2929 KANSAS AVE.
RIVERSIDE, CA 92507
(951) 213-3900
FAX (951) 213-3997

PC 04-116740
ACCESSIBLE RAMPS/
LANDINGS/STAIRS

STATE OF CALIFORNIA - 2015 IBC/2016 CBC

PROPRIETARY DESIGN: THIS DRAWING AND THE MATERIAL CONTAINED THEREIN ARE THE PROPERTY OF IMP SERVICES, INC. AND SHALL NOT BE REPRODUCED, COPIED OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY AND SHALL NOT BE USED IN WHOLE OR IN PART TO ASSIST IN THE MAKING OF OR THE PURPOSE OF FURNISHING ANY INFORMATION FOR THE MAKING OF DRAWINGS, PRINTS, APPARATUS OR PARTS THEREOF WITHOUT THE FULL KNOWLEDGE AND CONSENT OF TMP SERVICES, INC. ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATED WITH TMP SERVICES, INC. SHALL BE THE PROPERTY OF TMP SERVICES, INC.

STRUCTURAL ENGINEERS, INC.

4091 RIVERSIDE DRIVE, SUITE 114
CHINO, CALIFORNIA 91710

MEMBER
STRUCTURAL ENGINEERS
ASSOCIATION OF CALIFORNIA

AMERICAN CONCRETE
INSTITUTE

(909) 613-0234 Fax(909) 613-0238 NOTES:

LOADS:

- RAMP LIVE LOAD = 100 PSF
 NO SNOW LOADING
- 3. NO FLOOD LOADING
- 4. WIND:
 WIND SPEED = 130 MPH
 RISK CATEGORY = II
 EXPOSURE = C
- $K_{ZT} = 1.0$ WIND DESIGN PER ASCE 7-10 CHAPTER 29
- 5. SEISMIC: RISK CATEGORY = II
- $I_e = 1.25$ $S_S = 3.73$ $S_1 = 1.30$
- SITE CLASS = D S $_{DS}$ = 2.487
- $C_S = 0.932$ (ASCE 7-10 EQUATION 15.4-5) R = 3.25 (ASCE 7-10 TABLE 15.4-1)
- 6. ALLOWABLE SOIL BEARING = 1000 PSF
- 7. THIS PC CANNOT BE USED IN WILDLAND URBAN INTERFACE (WUI) AREAS.

CODES: (TITLE 24 CODES)

- 2016 CALIFORNIA ADMINISTRATIVE CODE (CAC)....(PART 1, TITLE 24, CCR)
 2016 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2 (PART 2,
 TITLE 24, CCR) (2015 EDITION INTERNATIONAL BUILDING CODE WITH
 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA FIRE CODE (CFC), (PART 9, TITLE 24, CCR) (2015 EDITION INTERNATIONAL FIRE CODE WITH 2013 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA GREEN CODE (CFC), (PART 9, TITLE 24, CCR)
- 2016 CALIFORNIA REFERENCED CODE, (PART 12, TITLE 24, CCR)
 NFPA 13 2016
 NFPA 72 2016
- 2016 CODE SECTIONS FOR APPLICABLE STANDARDS 2016 CBC, CHAPTER 35

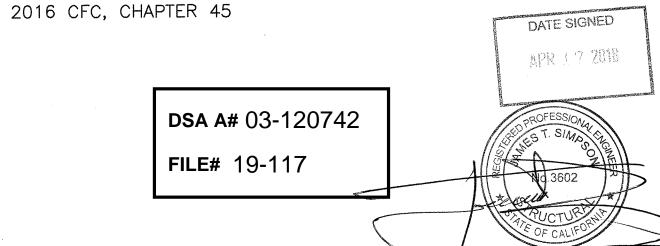


TABLE OF CONTENTS Sheet No. Dated Description Revised 05 DEC. 2017 COVER SHEET 05 DEC. 2017 ACCESSIBLE RAMP ELEVATIONS & DETAILS 05 DEC. 2017 ACCESSIBLE RAMP DETAILS & NOTES 05 DEC. 2017 DETAILS & NOTES 05 DEC. 2017 ACCESSIBLE RAMP SWITCH BACK DETAILS 05 DEC. 2017 STAIRS - OPTIONAL ACCESSIBLE RAMP OPTIONAL ALUMINUM DECK 05 DEC. 2017 ACCESSIBLE RAMP ELEVATIONS & PLAN VIEWS 05 DEC. 2017

1A COVER SHEET 05 DEC. 2017 2A ACCESSIBLE RAMP ELEVATIONS & DETAILS 05 DEC. 2017 3A ACCESSIBLE RAMP DETAILS & NOTES 05 DEC. 2017	A	LTERNATE RAMPS/LANDINGS	S/STAIRS	
2A ACCESSIBLE RAMP ELEVATIONS & DETAILS 05 DEC. 2017 3A ACCESSIBLE RAMP DETAILS & NOTES 05 DEC. 2017	Sheet No	Description	Dated	Revised
3A ACCE SIBLE RAMP DETAILS & NOTES 05 DEC. 2.17	1A	COVER SHEET	05 DEC. 2017	
JA ACCE. BLE RAMP DETAILS & NOTES	2A	ACCESSIBLE RAMP ELEVATIONS & DETAILS	05 DEC. 2017	
	3A	ACCL SIBLE RAMP DETAILS & NOTES	05 DEC. 2 17	
4A DETAILS & NOTES OF JEC. 2017	4A	DETAILS & NOTES	05 JEC. 2017	
5A ACCESSIBLE RAMP SWITCH BACK DETAIL 05 DEC. 2017	5A	ACCESSIBLE RAMP SWITCH BACK DETAIL	05 DEC. 2017	
6A STAIRS - OPTIONAL 05 DEC. 2017	6A	STAIRS - OPTIONAL	05 DEC. 2017	
7A ACCESSIBLE RAMP OPPONAL ALUMINAL DECK 05 DEC. 2017	7A	ACCESSIBLE RAMP OPTIMAL ALUMINAL DECK	05 DEC. 2017	
8A ACCESSIBLE RALL ELEVATIONS & PLAN VIEWS 25 DEC. 2017	8A	ACCESSIBLE RATA ELEVATIONS & PLAN VIEWS	95 DEC. 2017	

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APP: 03-120742 INC:

REVIEWED FOR
SS FLS ACS D

DATE: 09/09/2020

REVISIONS

CHECK (PC) DOCUMENT
: 2016 CBC
PARATE PROJECT
ICATION FOR CONSTRUCTION
EQUIRED

DENTIFICATION STAMP

THE STATE ARCHITE

04 11 574 0

ACS 32 51 55 V

DATE AY 16 2015

S: S. Cyce feon of r

5. P. ROON

ERVICES NSAS AVE. CA 92507 1) 213-3900

TMP SERVI 2929 KANSAS RIVERSIDE, CA 9 PHONE: (951) 213-

> TE OF CALIFORNIA 04-116740-2016 CBC

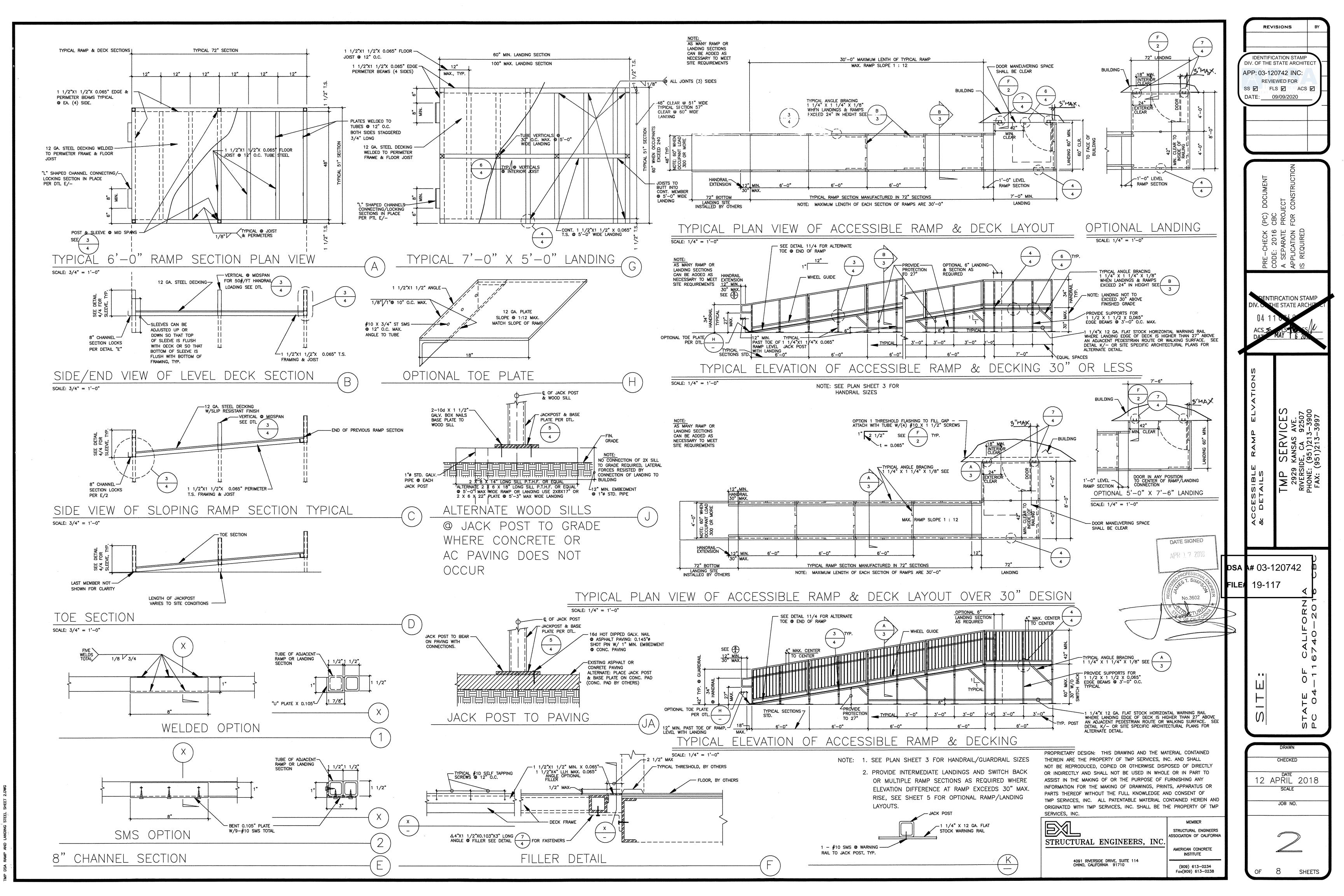
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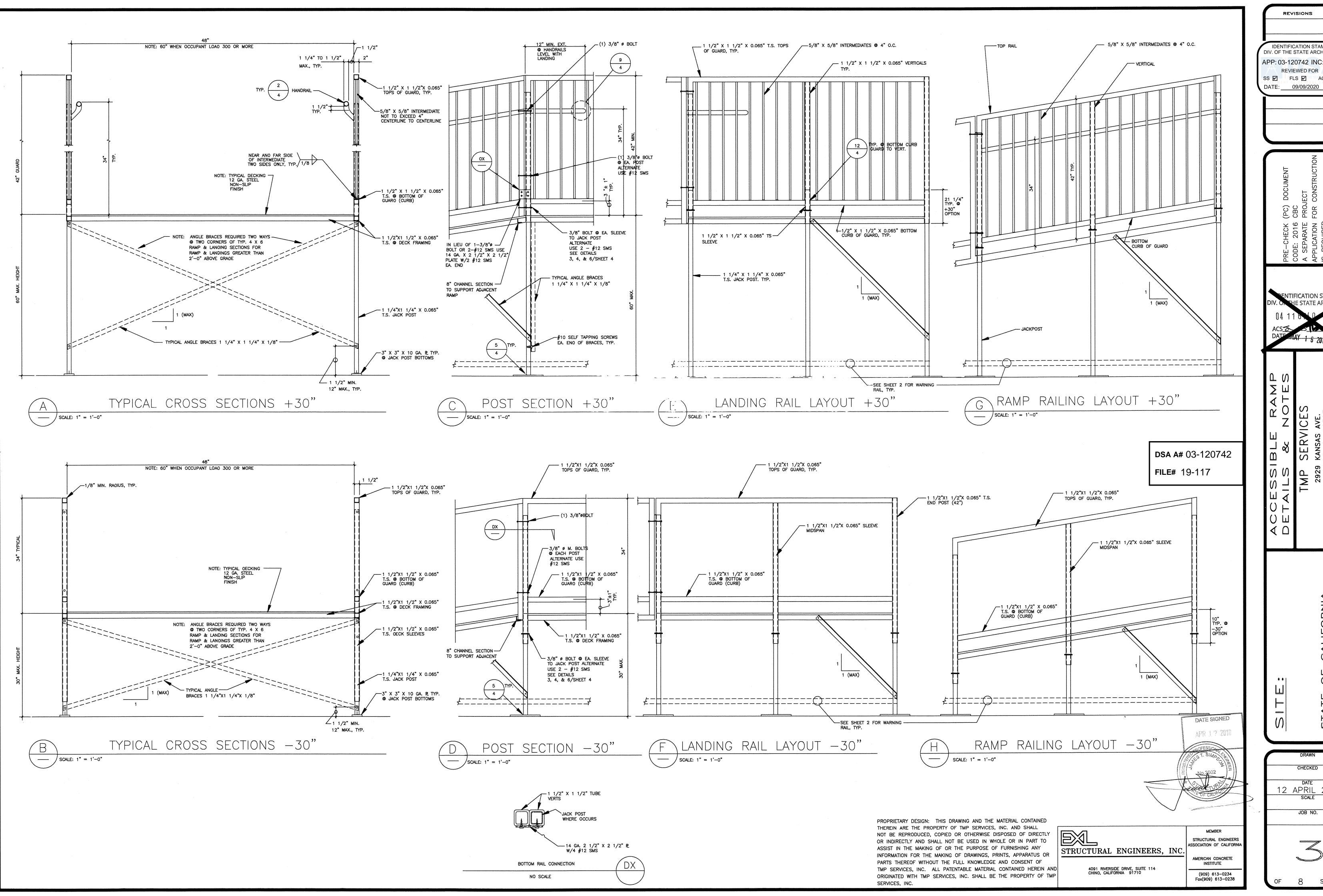
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12 APRIL 2018

SCALE

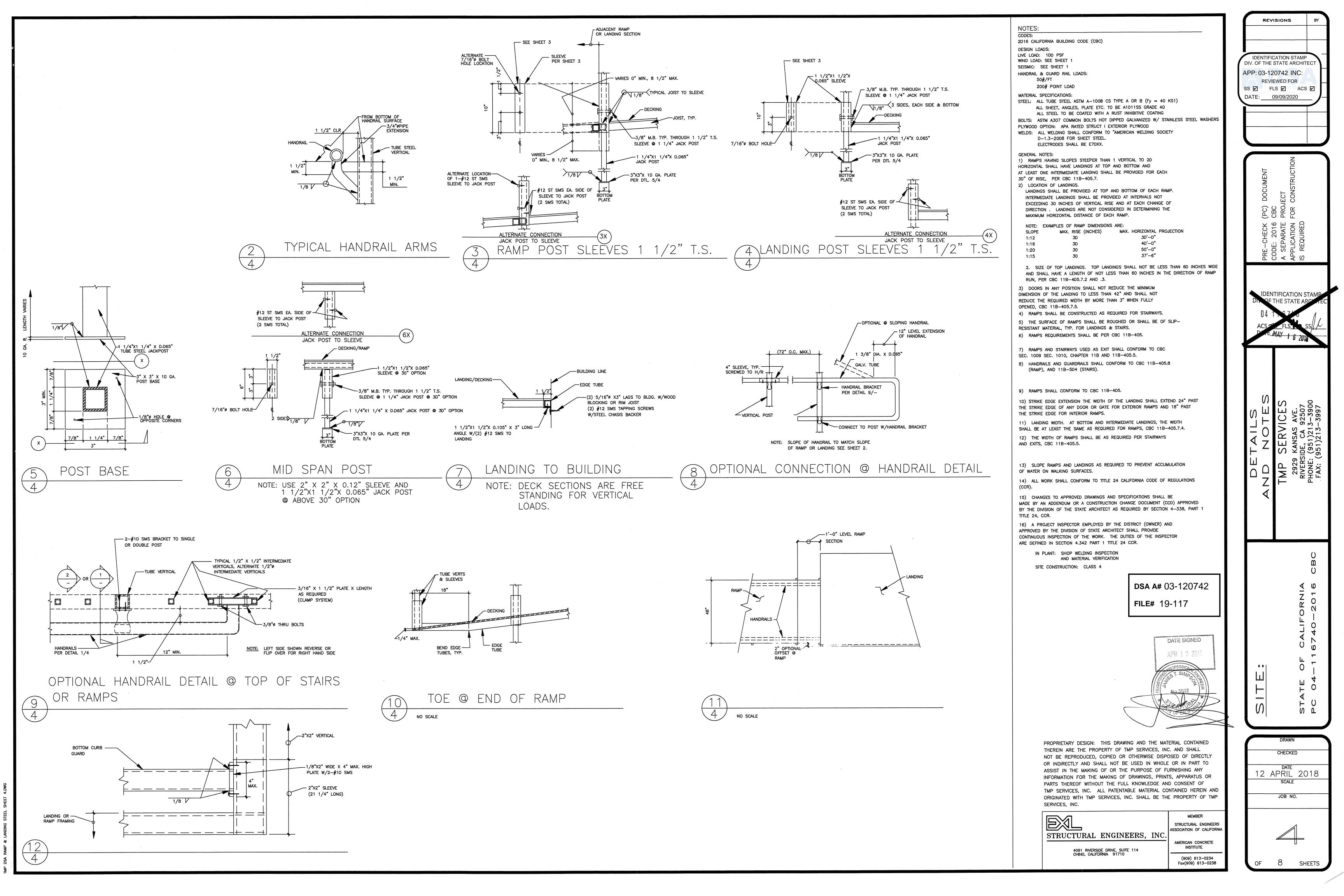
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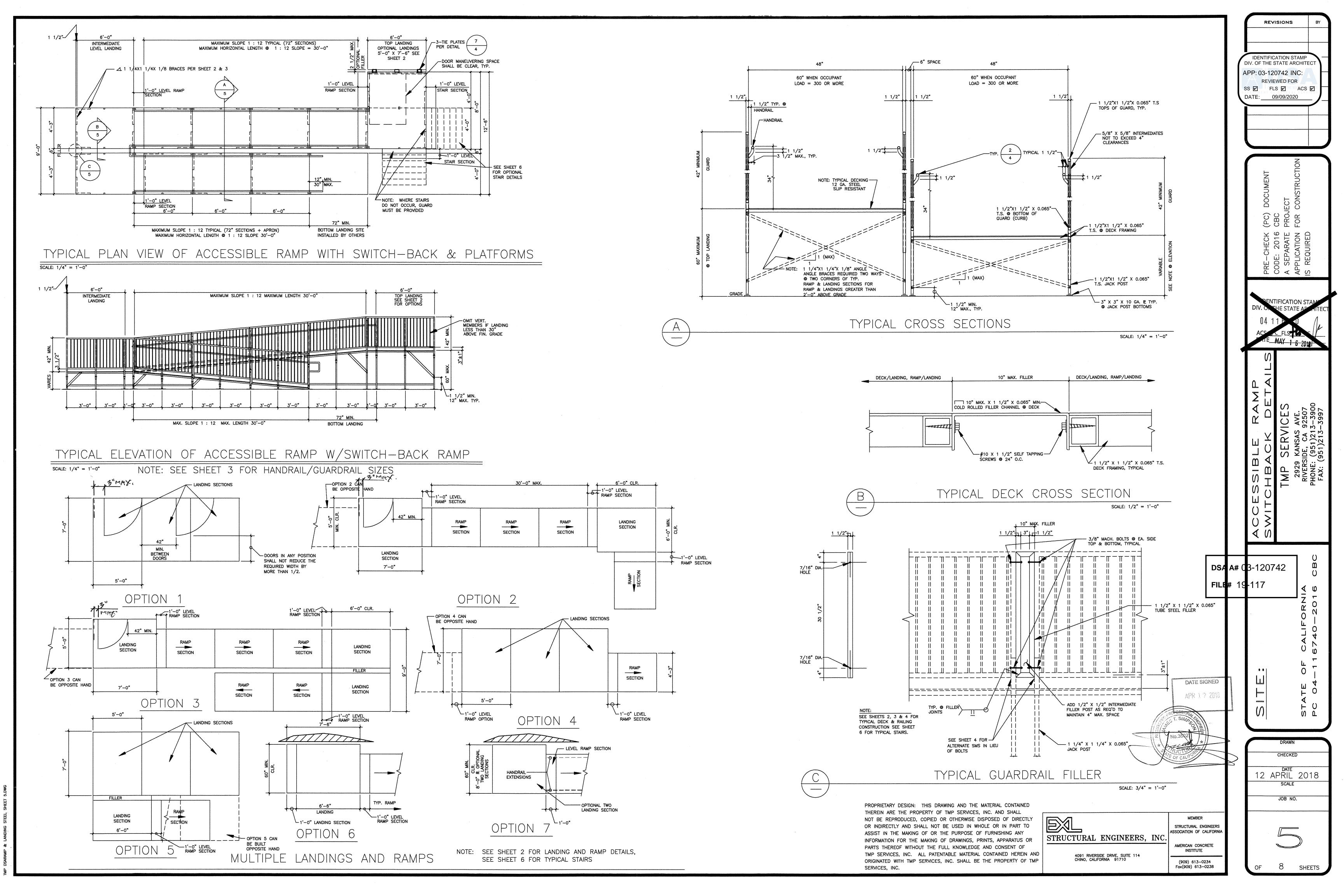


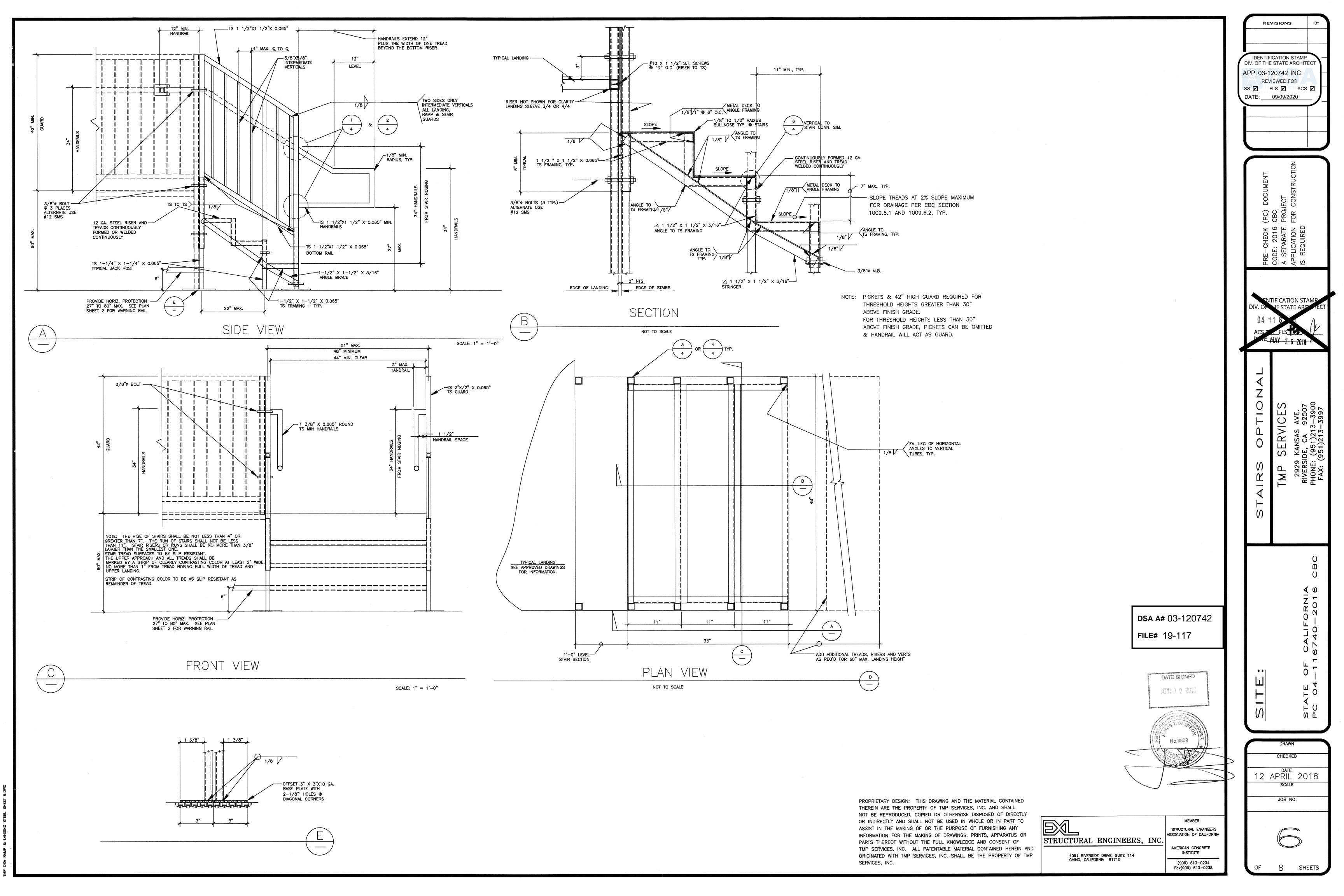


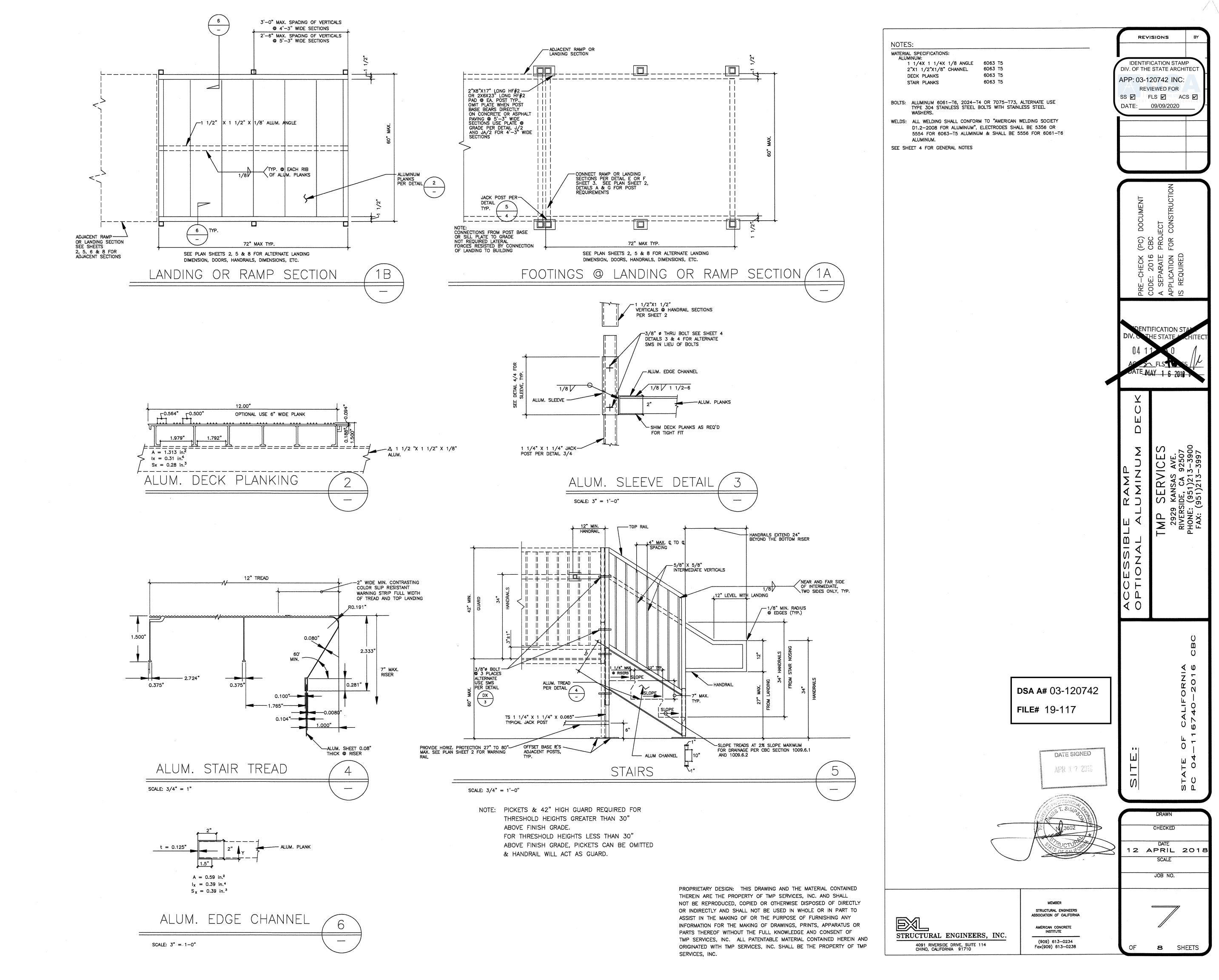
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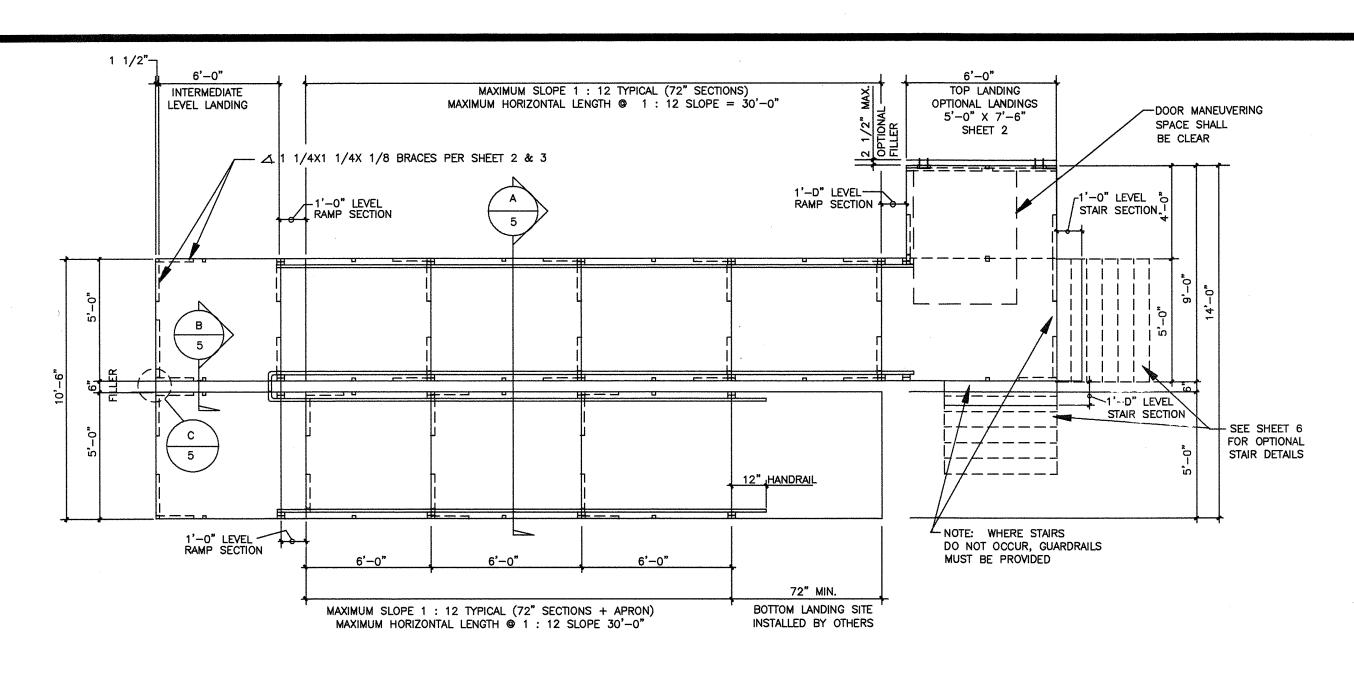
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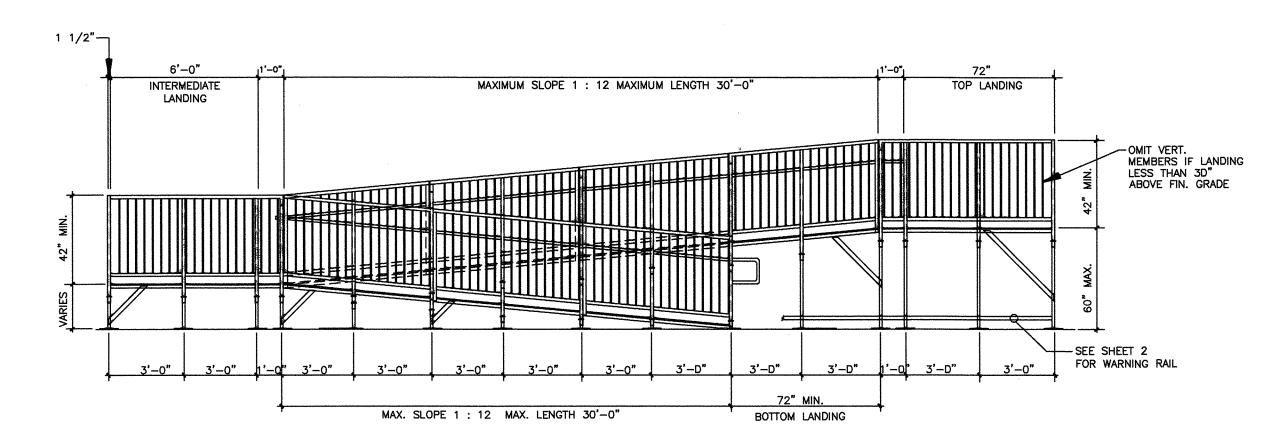






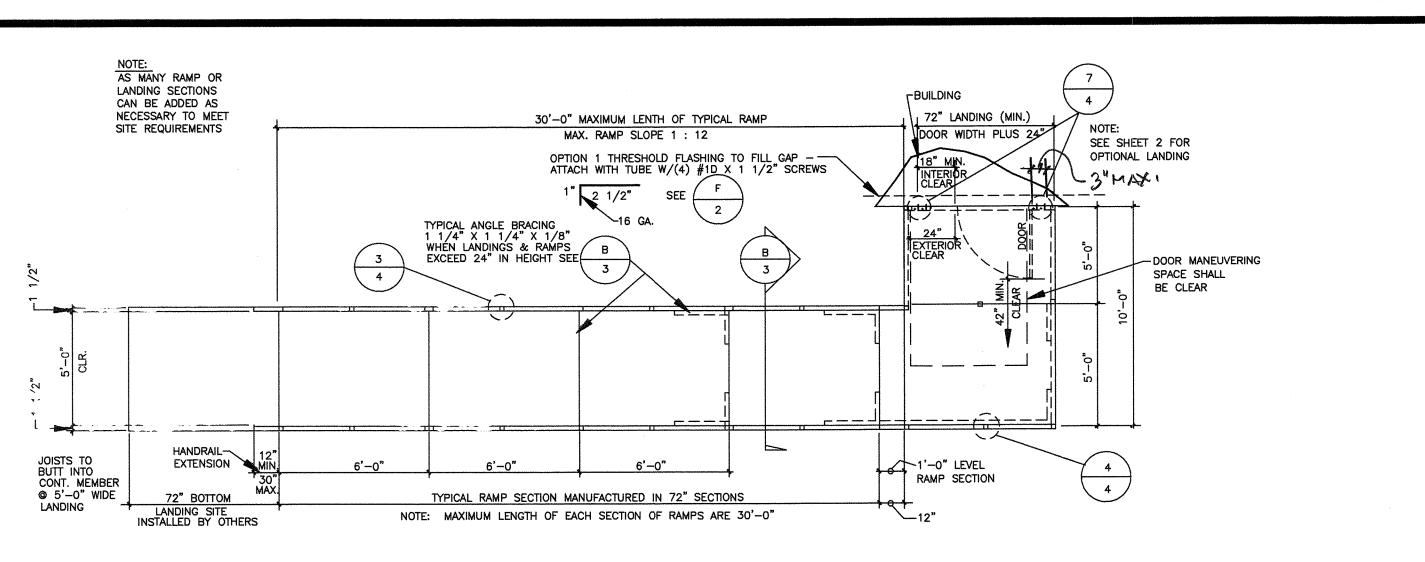


TYPICAL PLAN VIEW OF ACCESSIBLE RAMP WITH SWITCH-BACK & PLATFORMS SCALE: 1/4" = 1'-D"

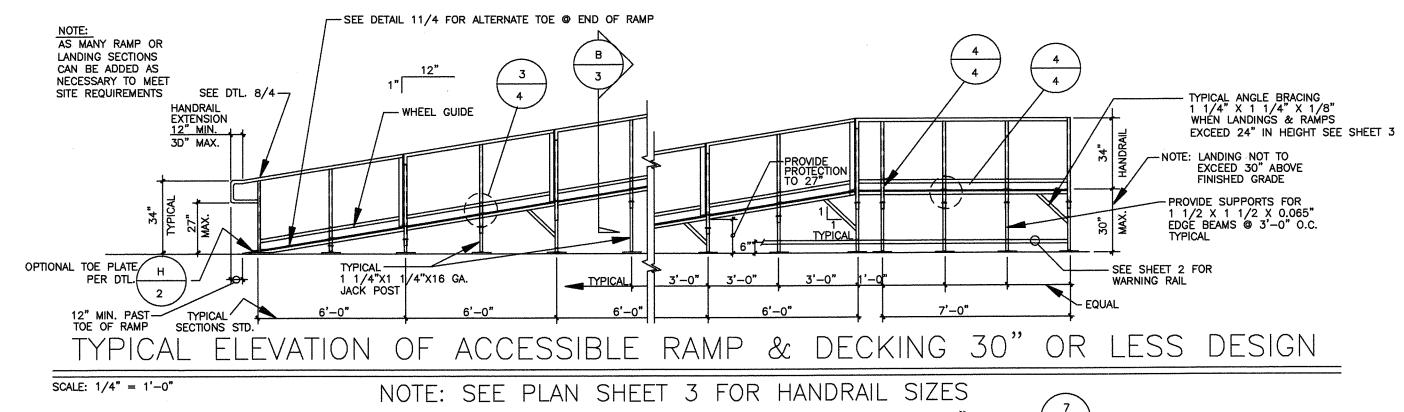


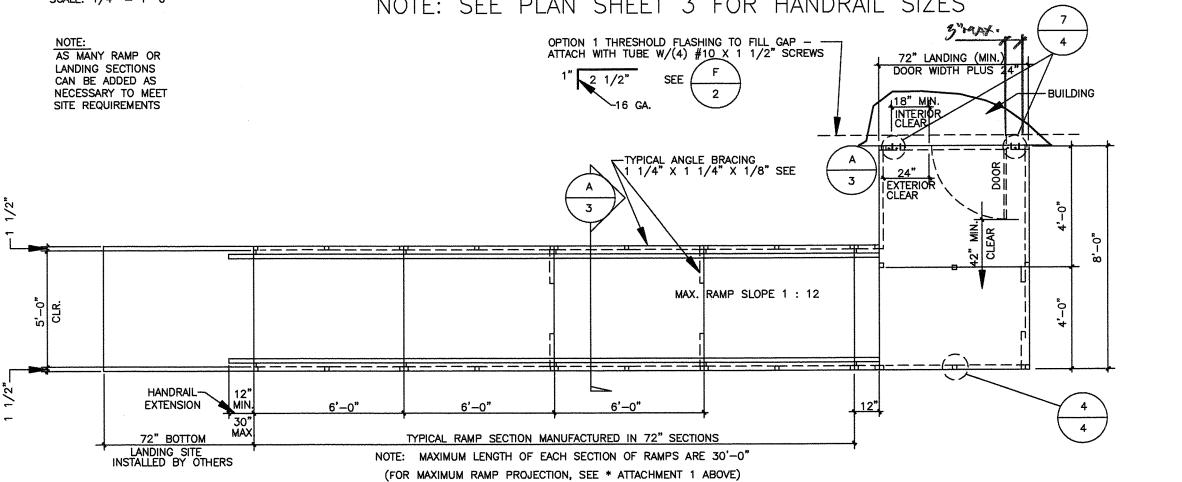
TYPICAL ELEVATION OF ACCESSIBLE RAMP W/SWITCH-BACK RAMP W/ 5'-0" WIDE RAMPS

SCALE: 1/4" = 1'-D"



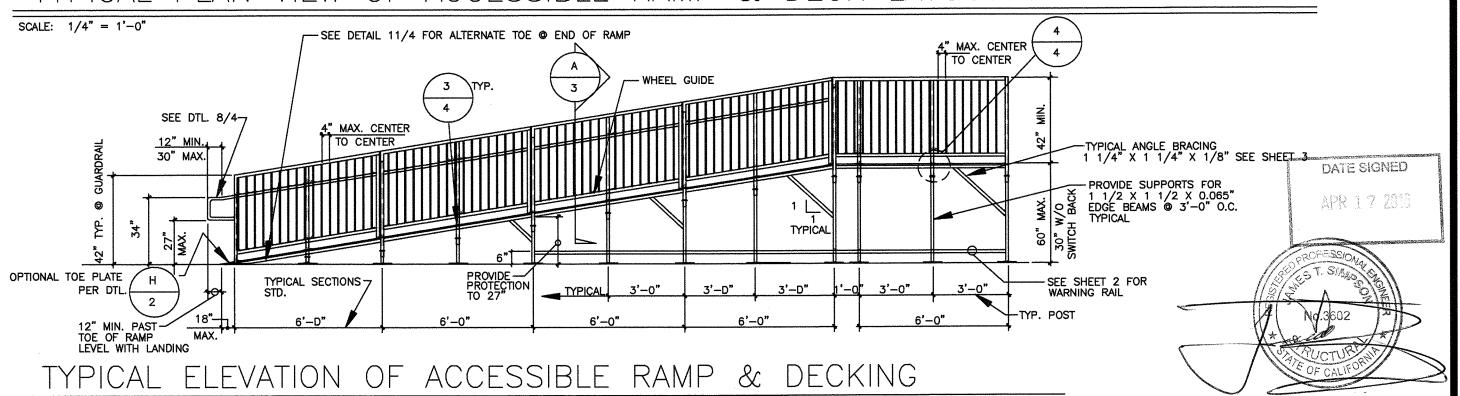
TYPICAL PLAN VIEW OF ACCESSIBLE RAMP & DECK LAYOUT





DSA A# 03-120742 FILE# 19-117

TYPICAL PLAN VIEW OF ACCESSIBLE RAMP & DECK LAYOUT OVER 30" DESIGN



SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-D"

NOTE: SEE PLAN SHEET 3 FOR HANDRAIL/GUARDRAIL SIZES

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STRUCTURAL ENGINEERS, INC.

MEMBER STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA AMERICAN CONCRETE

(909) 613-0234 Fax(909) 613-0238

12 APRIL 2018

JOB NO.

IDENTIFICATION STAMP

DIV. OF THE STATE ARCHITEC

REVIEWED FOR SS FLS ACS

APP: 03-120742 INC:

DATE: 09/09/2020

RELOCATION OF (2) 24'x40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL

40641 PEONZA LANE PALMDALE, CA 93551

WESTSIDE UNION SCHOOL DISTRICT

GENERAL NOTES APPLICABLE CODES PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL 20. CONSTRUCTION AREA OVERLAPS ACTIVE SERVICE AREAS NECESSARY FOR THE 2019 California Building Standards Administrative Code, Title 24 C.C.R. EXISTING AND PROPOSED CONSTRUCTION, PIPING, CONDUITS, CLEAN-OUTS, PULL NORMAL DAILY OPERATION OF THE SCHOOL. CONTRACTOR SHALL AT ALL TIMES BOXES, ETC. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE 2019 California Building Code, Title 24 C.C.R. MAINTAIN AND ALLOW ACCESS ON SITE FOR EMERGENCY VEHICLES, TRASH Part 2 (2015 International Building Code of the International Code Council, with California DISTRICT AND ARCHITECT PRIOR TO COMMENCING WORK. COLLECTION, LANDSCAPE, GENERAL SCHOOL MAINTENANCE AND FOOD SERVICE DELIVERY. CONTRACTOR SHALL COORDINATE CLOSELY WITH DISTRICT FOR ALI CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL GRADES ELEVATIONS, NECESSARY ACCESS. 2019 California Electrical Code, Title 24 C.C.R. Part 3 DIMENSIONS, AND CONDITIONS OF INSTALLATION PRIOR TO PROVIDING BID. ANY DISCREPANCIES DISCOVERED BY THE CONTRACTOR DURING THE ABOVE 21. CONTRACTOR SHALL PROVIDE AND MAINTAIN FOR THE DURATION OF THE CONTRACT OPAQUE VINYL SCREENS (TARP OR SIMILAR) PROPERLY SECURED TO ALL INVESTIGATIONS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT. THE Part 4 CONTRACTOR BY MEANS OF OFFERING A BID SHALL THEREBY CERTIFY THAT THE TEMPORARY CONSTRUCTION FENCING AND GATES AS WELL AS ALL EXISTING ABOVE STATED REQUIREMENTS HAVE BEEN MET FENCING THAT DEFINES A PERIMETER OF ANY DESIGNATED CONSTRUCTION AREA. Mechanical Officials, IAPMO) SCREENING SHALL BE MINIMUM 6'-0" HIGH AND SHALL BE BLACK, GREEN OR TAN IN GENERAL CONTRACTOR SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, AND TRANSPORTATION NECESSARY FOR THE COMPLETE AND PROPER EXECUTION OF 22. DUE TO THE ON-GOING OPERATION OF THE ACTIVE SCHOOL SITE DURING Mechanical Officials, IAPMO) THE ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND HAS NOT AND PARKING SHALL BE SHARED AND SHALL NOT SCHEDULE ANY DELIVERIES AS BEEN CONSIDERED BY THE ARCHITECT AND / OR STRUCTURAL ENGINEER. DURING THE PERIODS REQUIRED FOR STUDENT DROP-OFF AND PICK-UP. ALL WORK SHALL CONFORM TO THE "APPLICABLE CODES" AS LISTED HEREON CONTRACTOR SHALL COORDINATE WITH DISTRICT FOR ALL TIME OFF OPERATION Part 9 CONTRACTOR SHALL REMOVE FROM SITE AND DISPOSE OF IN A LEGAL MANNER ALL EXCESS DIRT / SOIL AND DEBRIS RESULTANT OF THE CONSTRUCTION ACTIVITIES 23. FOR THE DURATION OF THE CONTRACT, THE CONTRACTOR SHALL BE RESPONSIBLE ASSOCIATED WITH THIS PROJECT. FOR STRICT COMPLIANCE WITH LOCAL AGENCY HAVING JURISDICTION FOR ALL, Part 10 2019 California Existing Building Code, Title 24 C.C.R. (2015 International Existing Building Code of the International Code Council, with FUGITIVE DUST AND SHALL BE RESPONSIBLE FOR ALL PENALTIES, FINES, ETC. IF THE PROJECT SHOULD BE CITED FOR VIOLATIONS. CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FOR ALL WORK THAT OCCURS IN ANY PUBLIC RIGHT-OF-WAY AND / OR 2019 California Green Building Standards Code (CALGreen Code), Title 24 C.C.R. EASEMENT. FEES FOR REQUIRED PERMITS SHALL BE PAID FOR DIRECTLY BY 24. DUE TO THE SITE CONSTRAINTS OF THE ACTIVE SCHOOL SITE, THE CONTRACTOR CONTRACTOR AND SHALL BE REIMBURSED BY THE DISTRICT 1:1. MAY BE REQUIRED TO STAGE IN VARIOUS AVAILABLE AREAS ON SITE AND MAY BE Part 12 2019 California Referenced Standards Code, Title 24 C.C.R. REQUIRED TO MOVE OR RELOCATE STAGING DURING THE COURSE OF PROPERLY REMOVE ALL DEMOLISHED ITEMS AND MATERIALS FROM THE SITE AND CONSTRUCTION IN ORDER TO ACCOMMODATE CONSTRUCTION AND SCHEDULE PARTIAL LIST OF APPLICABLE STANDARDS CONTRACTOR SHALL FACTOR IN ALL NECESSARY MEASURES TO ACCOMMODATE THE DISPOSE OF ALL IN A LEGAL MANNER. TIMELY COMPLETION OF THIS CONTRACT REPAIR OR REPLACE EXISTING WALKS, UTILITY LINES, LANDSCAPING, ETC. THAT ARE DAMAGED DURING CONSTRUCTION. PROTECT ALL EXISTING CONSTRUCTION 25. CONTRACTOR SHALL NOT INTERRUPT ANY UTILITY SERVICE TO ACTIVE SCHOOL SITE DESIGNATED TO REMAIN. WITHOUT EXPRESSED PERMISSION AND PRIOR SCHEDULING WITH DISTRICT. NFPA 17 Dry Chemical Extinguishing Systems 10. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY 26. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CONTRACTOR NFPA 17A AN ADDENDA OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE Wet Chemical Extinguishing Systems SUBMITTALS OF DOCUMENTS TO THE DSA BOX. NFPA 20 DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338 PART 1, TITLE Stationary Pumps NFPA 24 24, CCR. 27. CONTRACTOR MAY UTILIZE EXISTING ELECTRICAL SERVICE IN YARD FOR TEMPORARY POWER. ALL TEMPORARY POWER INSTALLATION SHALL ADHERE TO APPLICABLE NFPA 72 11. A DSA CERTIFIED CLASS II PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL "DETERIORATION OR EXISTING NON-COMPLIANT CONSTRUCTION: IF ANY CONDITION IS PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR DISCOVERED WHICH, IF LEFT UNCORRECTED, WOULD MAKE THE BUILDING NON-NFPA 2001 ARE DEFINED IN THE SECTION 4-342 PART 1, TITLE 24, CCR. COMPLIANT WITH THE REQUIREMENTS OF THE EDITION OF CBC IN FORCE AT THE TIME OF ORIGINAL CONSTRUCTION, THE CONDITION MUST BE CORRECTED IN ACCORDANCE WITH 12. D.S.A. APPROVED TESTING LABORATORY DIRECTLY EMPLOYED AND PAID FOR BY THE CURRENT CODE REQUIREMENTS. A CONSTRUCTION CHANGE DOCUMENT (CCD-TYPE A), DISTRICT SHALL CONDUCT ALL REQUIRED TESTS AND INSPECTIONS FOR THE OR A SEPARATE SET OF PLANS AND SPECIFICATIONS DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK. CONTRACTOR SHALL NOTIFY DISTRICT AND ARCHITECT IN WRITING UPON COMPLETION OF SITE PREPARATION. 29. THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE SHALL VERIFY BY APPROPRIATE MEANS, SUBJECT TO DSA APPROVAL, AND SUBMIT A LETTER CERTIFYING PRE-BID JOB WALK ASSUMED SOIL BEARING CAPACITY PER SOILS REPORT. THAT THE BUILDINGS DELIVERED ON SITE CONFORM TO THE ORIGINAL DSA-APPROVED PLANS AND SPECIFICATIONS AND HAS NOT SUFFERED STRUCTURAL DETERIORATION OF BEEN STRUCTURALLY ALTERED. 15. PATCH AND REPAIR ALL SURFACES AFFECTED BY CONTRACT WORK AND BY SELECTIVE DEMOLITION TO A "LIKE NEW" CONDITION OR TO MATCH EXISTING THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ADJACENT FINISHES. DISABLED VETERAN BUSINESS ENTERPRISES (DVBE) ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PROJECT ARE SUCH THAT ALL BIDDERS MUST TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS SUCH 16. FIRE SAFETY DURING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE IN AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT ACCORDANCE WITH 2019 CFC CHAPTER 7, 11 AND 33. COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE 17. ALL CONTRACTORS ARE ADVISED THAT CERTAIN PORTIONS OF THE WORK MAY NOT DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND BE EASY AND MAY EXCEED THE ASSUMED STANDARD OF THE INDUSTRY, INCLUDING SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE MEANS AND METHOD, OPERATIONAL STAGING, SCHEDULING AND COORDINATION OF DIVISION OF THE STATE ARCHITECT BEFORE PROCEEDING WITH THE WORK. REFERENCE: WORK, AS WELL AS TIME AND DURATION OF ACTIVITIES NECESSARY TO SECTION 4-317 (C), CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1 SATISFACTORILY COMPLETE THE PROJECT IN ACCORDANCE WITH THIS CONTRACT FINGERPRINTING TITLE 24, CCR) CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, MATERIALS AND OPERATIONAL SUPPORT NECESSARY TO COMPLETE THE PROJECT AS REQUIRED UNDER THIS CONTRACT 18. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER NECESSARY FOR CONSTRUCTION. WATER CAN BE MADE AVAILABLE ON-SITE VIA EXISTING HYDRANT AND SHALL BE PROPERLY METERED THROUGH LOCAL WATER AGENCY. 19. CONTRACTOR MAY ONLY STAGE AND PERFORM WORK IN AREAS SPECIFICALLY IDENTIFIED FOR THIS CONTRACT. ALL WORK REQUIRED TO BE PERFORMED OUTSIDE QUESTIONS DURING BID OF THE DESIGNATED AREAS SHALL REQUIRE MONITORING BY ASSIGNED DISTRICT FLOOD HAZARD DESIGNATION STAFF OR SHALL BE PERFORMED DURING NON-SCHOOL HOURS. ALL REQUESTS FOR MONITORED WORK SHALL BE MADE IN WRITING 48 HOURS IN ADVANCE BY GENERAL CONTRACTOR AND SCHEDULING SHALL BE SUBJECT TO APPROVAL BY DISTRICT.

(2014 National Electrical Code of the National Fire Protection Association, NFPA) 2019 California Mechanical Code, Title 24 C.C.R. (2015 Uniform Mechanical Code of the International Association of Plumbing and 2019 California Plumbing Code, Title 24 C.C.R. (2015 Uniform Plumbing Code of the International Association of Plumbing and 2019 California Energy Code, Title 24 C.C.R. 2019 California Historical Building Code, Title 24 C.C.R. 2019 California Fire Code, Title 24 C.C.R. (2015 International Fire Code of the International Code Council)

2019 California Building Code (for SFM) Referenced Standards Chapter 35 NFPA 13 Automatic Sprinkler Systems (California Amended) 2019 Edition Standpipe Systems (California Amended) 2019 Edition 2019 Edition 2019 Edition 2019 Edition 2019 Edition Private Fire Service Mains (California Amended) National Fire Alarm and Signaling Code (California Amended) 2019 Edition (Note: See UL Standard 1971 for "Visual Devices") Fire Door and Other Opening Protectives 2019 Edition Critical Radiant Flux of Floor Covering Systems 2015 Edition Clean Agent Fire Extinguishing Systems (California Amended) 2015 Edition

BIDDING NOTES

MANDATORY PRE-BID JOB WALK WILL BE HELD ON DATE AND TIME STATED IN "NOTICE TO CONTRACTOR" AT THE PROJECT SITE. ALL PROSPECTIVE BIDDERS ARE ADMONISH TO ATTEND.

COMPLY WITH THE STATE REQUIREMENTS FOR DVBE CONTRACTOR SOLICITATION, PROJECT ADVERTISEMENT AND SUBSEQUENT DOCUMENTATION FAILURE TO PROPERLY COMPLY WITH ALL NECESSARY REQUIREMENTS AND SUBSEQUENT DOCUMENTATION MAY BE GROUNDS FOR SCHOOL BOARD ACTION TO REJECT A BID AS INVALID AND/OR NON-RESPONSIVE. FOR ADDITIONAL INFORMATION REFER TO PROJECT MANUAL

FINGERPRINTING AND BACKGROUND CHECKS IN ACCORDANCE WITH CURRENT LAWS AND REGULATIONS SHALL BE REQUIRED FOR ALL WORKERS WHO WILL BE PERFORMING WORK OUTSIDE OF THE ESTABLISHED CONSTRUCTION BARRICADES (MINIMUM 6' HIGH FENCE) DURING HOURS THAT THE ADJACENT CAMPUSES ARE OCCUPIED SIMULTANEOUSLY BY THE STUDENTS. ANY WORKER FOUND TO BE IN VIOLATION OF THESE REQUIREMENTS WILL BE ASKED TO LEAVE THE PROJECT SITE UNTIL THE APPROPRIATE DOCUMENTATION IS PROVIDED.

ALL QUESTIONS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT USING THE ATTACHED "BID R.F.I." FORM. ALL "BIDDING R.F.I.'S" SHALL BE SUBMITTED NO LATER THAN FIVE (5) CONSECUTIVE CALENDAR DAYS PRIOR TO SCHEDULED BID OPENING.

THE PROJECT SCOPE OF WORK CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING

PROVIDE WOOD FOUNDATIONS FOR 2 BUILDINGS PER F2.0 A#67715.

RELOCATION OF (2) 24'x40' MODULAR BUILDINGS (STOCKPILE A#67715).

SCOPE OF WORK

CONSTRUCTION OF (2) METAL RAMPS PER PC 04-116740.

PROVIDE CONCRETE LANDING AND PAVING.

PROVIDE SITE LIGHTING FOR SAFE DISPERSAL AREA.

PROVIDE C.L. GATE FOR FIRE ACCESS.

DSA CERTIFICATION NOTE: THIS PROJECT (A#03-121031) WILL NOT BE **CERTIFIED UNTIL THE A#03-120742 FOR ACCESSIBLE PARKING IS CERTIFIED BY DSA.**

PROJECT DATA

BUILDING AREA : 960 S.F. x 2 = 1,920 S.F. TYPE OF OCCUPANCY TYPE OF CONSTRUCTION **BUILDING AREA CALCULATION**

TWO (2) NEW 24'x40' MODULAR BUILDINGS = 1,920 S.F. 1,9200 S.F. TOTAL BUILDING AREA, 9,000 S.F. BASIC ALLOWABLE AREA

THE REQUIRED FIRE FLOW AVAILABILITY ON (E) FIRE HYDRANT PER 2019 CALIFORNIA FIRE 1,500 GPM AT 20 PSI FOR DURATION OF 2 HOURS

MODULAR BUILDING NOTES

THE PROJECT INSPECTOR (PI) IS TO WITNESS AND VERIFY GROUNDING.

THE FOLLOWING DOCUMENTS SHALL BE ON THE JOB SITE PRIOR TO INSTALLATION OF THE UNITS, INCLUDING THE SERIAL NUMBERS FOR EACH UNIT. a. IN-PLANT FINAL VERIFIED REPORT

b. LABORATORY VERIFIED REPORT:

c. WELDING VERIFIED REPORT.

"DETERIORATION OR EXISTING NON-COMPLIANT CONSTRUCTION - IF ANY CONDITION IS DISCOVERED WHICH, IF LEFT UNCORRECTED, WOULD MAKE THE BUILDING NON-COMPLIANT WITH THE REQUIREMENTS OF THE EDITION OF THE CBC IN FORCE AT THE TIME OF ORIGINAL CONSTRUCTION, THE CONDITION MUST BE CORRECTED IN ACCORDANCE WITH CURRENT CODE REQUIREMENTS. A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR

MODULAR BUILDING(S) SHALL HAVE TAGS TO IDENTIFY THE DSA APPLICATION NUMBER AND THE BUILDING SERIAL NUMBER WHEN DELIVERED TO THE SITE. THE PLAN AFFIDAVIT IS ALSO REQUIRED.

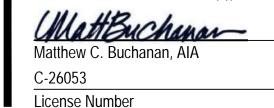
STATEMENT OF GENERAL CONFORMANCE

THESE DRAWINGS AND / OR SPECIFICATIONS AND / OR CALCULATIONS FOR THE ITEMS DESIGNATED WITH A ////// HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND / OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENT

SPECIFICATIONS PREPARED BY ME, AND COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT

OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341 AND 4-344" OF TITLE 24, PAMRT 1. (TITLE 24, PART 1, SECTION 4-317 (b))



CIVIL ENGINEER

DUKE ENGINEERING

7010 WEST AVENUE E-4

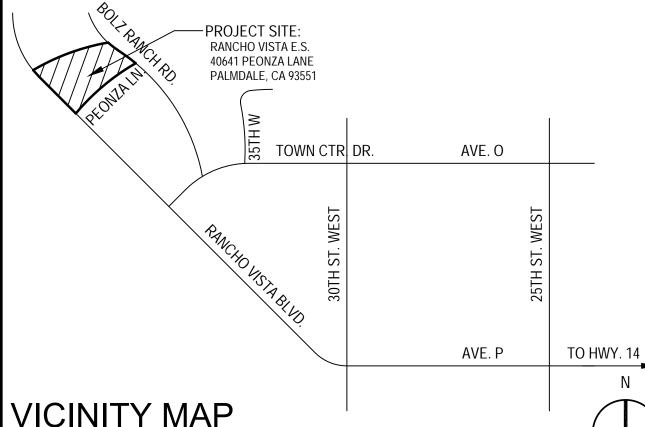
LANCASTER, CA 93536

CONTACT: RYAN DUKE

(661) 992-8199

JULY 22, 2020 Date AUGUST 31, 2021 **Expiration Date**

VICINITY MAP



SHEET INDEX

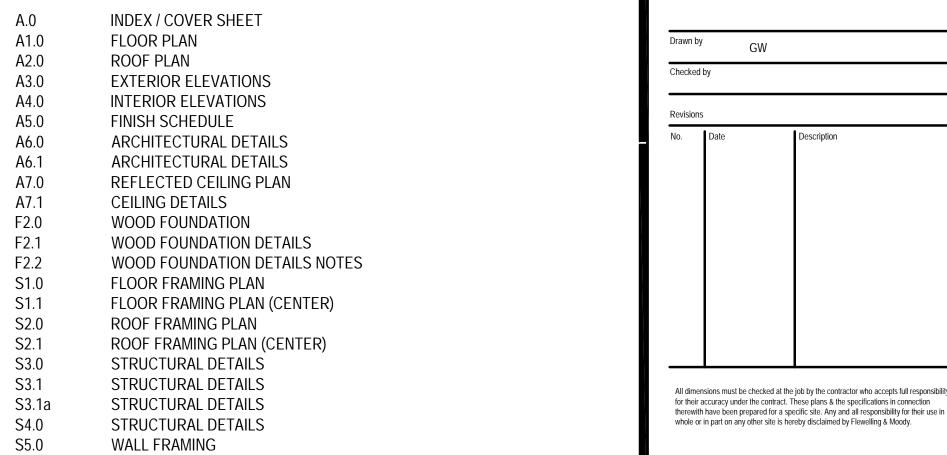
COVER SHEET FIRE ACCESS PLAN **COVER SHEET** GRADING PLAN HORIZONTAL CONTROL SITE PLAN AND ENLARGED PARTIAL SITE PLAN

DETAILS SPECIFICATIONS

SPECIFICATIONS NOTES, SYMBOLS, DETAILS, DIAGRAMS AND CALCULATIONS FIRE ALARM SITE PLAN AND FLOOR PLAN

PLAN AND SLD (2) 24'x40' MODULAR CLASSROOM BUILDING BY DESIGNED FACILITIES CONSTRUCTION, INC. STOCKPILE A#67715, S/N: 1908 / 9 - 'CR.1' AND 1910 / 11 - 'CR.2'

EVACUATION EMERGENCY LIGHTING PT-BY-PT CALCULATIONS, FIRE ALARM



d M1.0 MECHANICAL PLAN ACCESSIBLE RAMPS / LANDINGS / STAIRS BY TMP SERVICES PC 04-116740

ACCESSIBLE RAMP ELEVATIONS AND PLAN VIEWS

COVER SHEET ACCESSIBLE RAMP ELEVATIONS AND DETAILS ACCESSIBLE RAMP DETAILS AND NOTES **DETAILS AND NOTES** ACCESSIBLE RAMP SWITCHBACK DETAILS STAIRS OPTIONAL ACCESSIBLE RAMP OPTIONAL ALUMINUM DECK

WALL FRAMING DETAILS

STRUCTURAL DETAILS

ELECTRICAL PLAN

TOTAL NUMBER OF DRAWING SHEETS: 46

ELECTRICAL ENGINEER

PJK ENGINEERING 7050 CHIMINEAS AVENUE RESEDA, CA 91335 (818) 344-8272 (818) 344-4786 FAX CONTACT: PAUL KASS

2913

07-22-2020

A0.0

RELOCATION OF (2) 24'x40' MODULAR

CLASSROOM BUILDINGS TO

RANCHO VISTA ELEMENTARY SCHOOL

40641 PEONZA LANE

PALMDALE, CA 93551

WESTSIDE UNION SCHOOL DISTRICT

COVER SHEET

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITE(

APP: 03-121031 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

FLEWELLING & MOODY

architecture planning interiors

HEADQUARTERS OFFICE: 815 Colorado Blvd, Suite 200

> Los Angeles, CA 90041 P 323.543.8300

E-Mail: fm-pasadena@flewelling-moody.com

ANTELOPE VALLEY OFFICE:

1035 West Lancaster Boulevard Lancaster, California 93534

P 661.949.0771

E-Mail: fm-lancaster@flewelling-moody.com

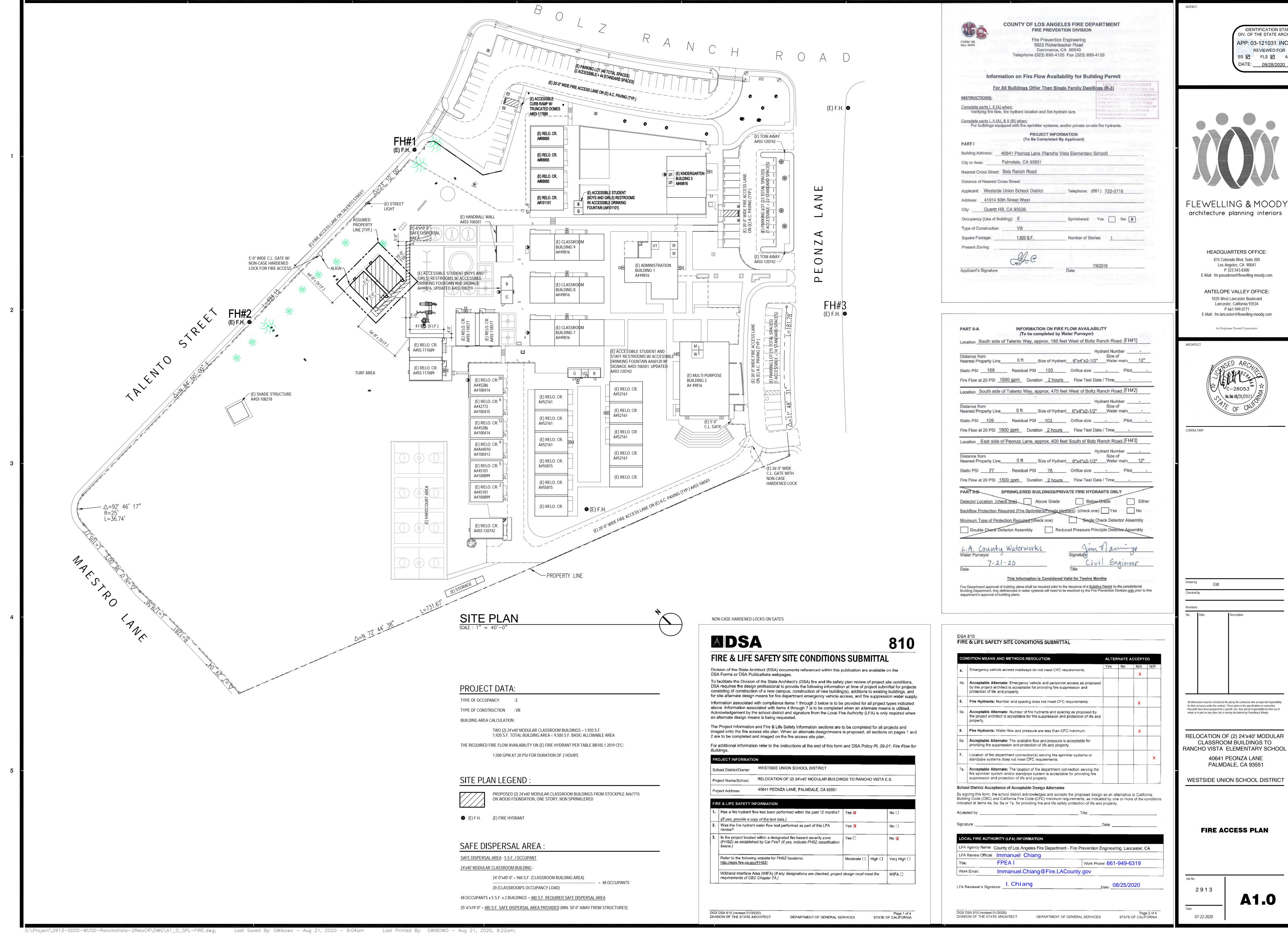
Ren. Date 08/31/2021

CONSULTANT

RANCHO VISTA ELEMENTARY SCHOOL SITE IS IN 'ZONE X' AREAS DETERMINED TO BE

OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

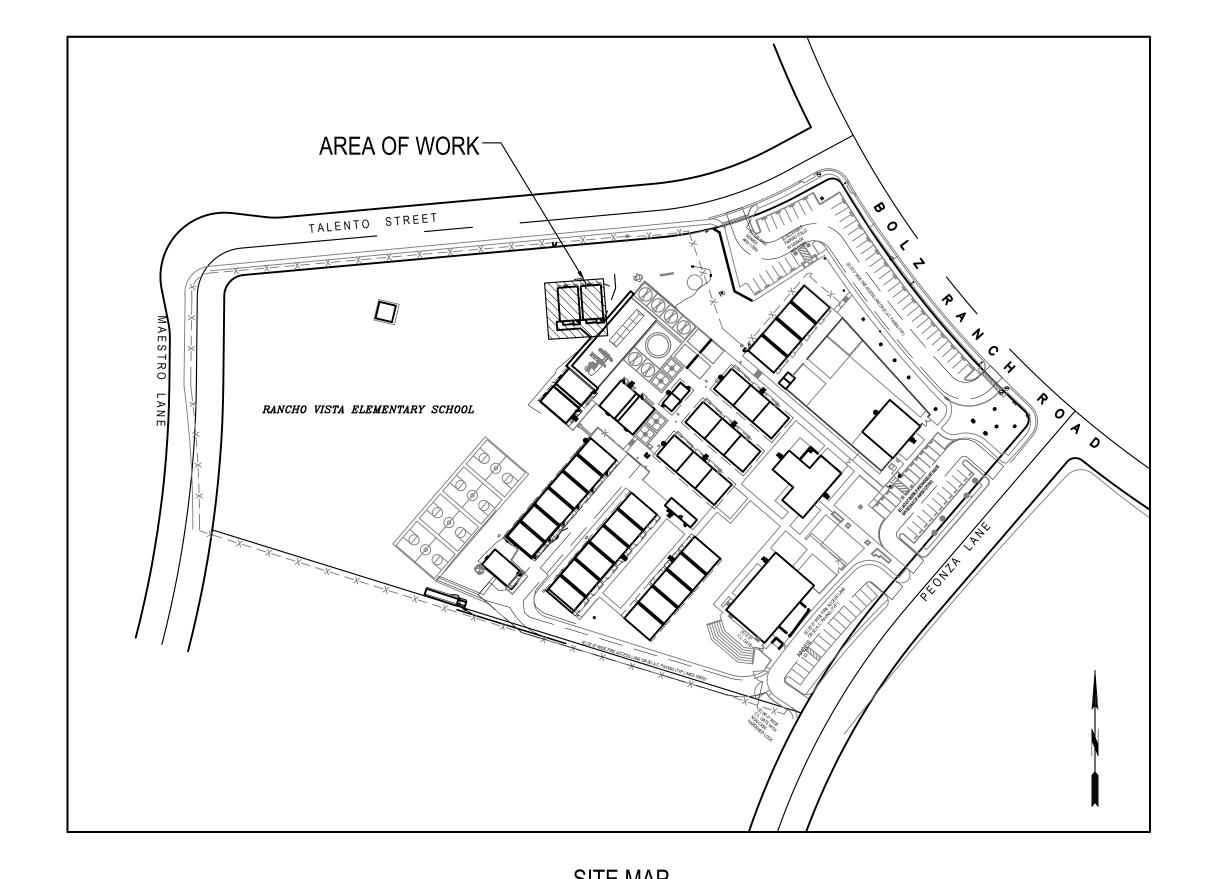
G:\Project\2913—0000—WUSD—RanchoVista—2ReloCR\DWG\A0_0_COVER.dwg; Last Saved By: GWibowo — Aug 28, 2020 — 10:43am Last Printed By: GWIBOWO — Aug 28, 2020, 11:08am;

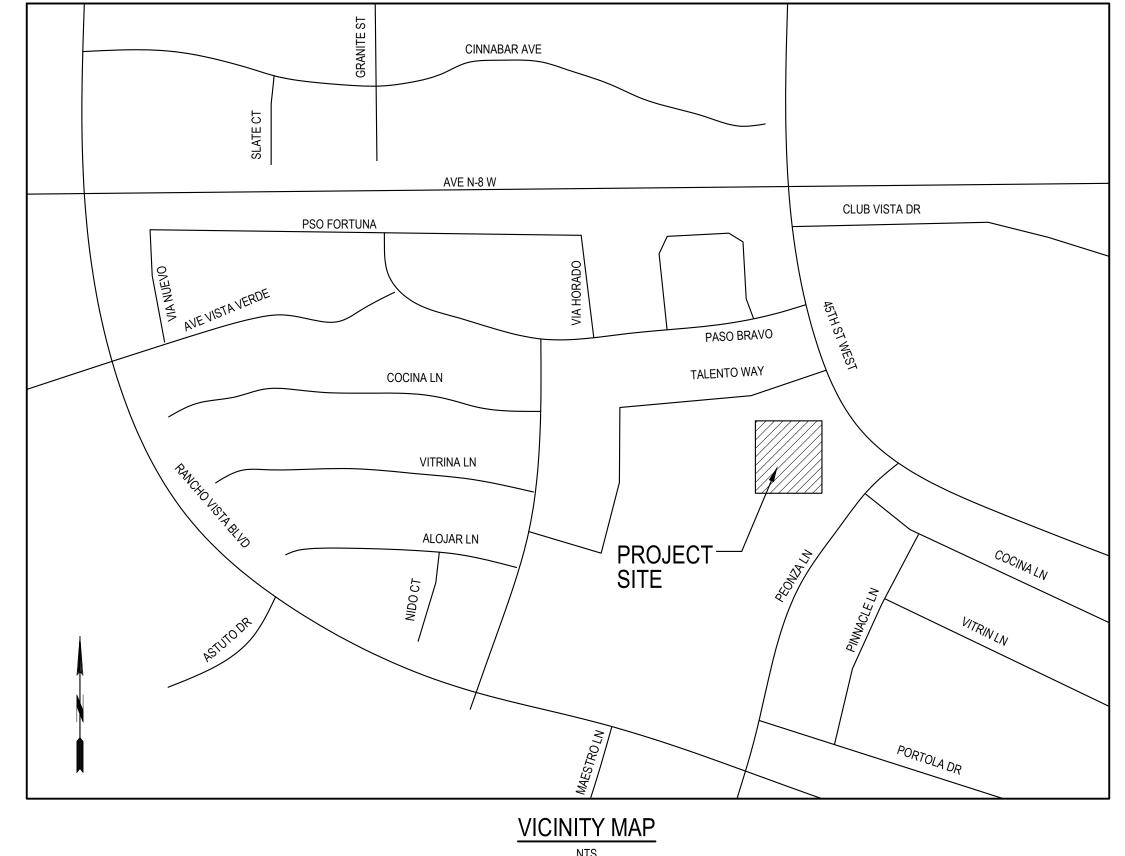


IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-121031 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 DATE: <u>09/28/2020</u>

WESTSIDE UNION SCHOOL DISTRICT

RANCHO VISTA ELEMENTARY 4064 PEONZA LN, PALMDALE, CA 93551





BENCH MARK

TBM USED: C-NAIL ON TOP OF ASPHALT PER TOPOGRAPHIC

BY RANDM SERVICES CAD AND SURVEYING.

BASIS OF BEARINGS

THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING N84°50'00"E OF THE CENTERLINE OF TALENTO WAY AS SHOWN ON TRACT NO. 34724 RECORDED IN BOOK 1081, PAGES 83 THROUGH 95, INCLUSIVE OF MAPS IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA.

LEGAL DESCRIPTION

THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA: LOT 155 OF TRACT NO 34724 AS PER MAP RECORDED IN BOOK 1081, PAGES 83 TO 95 INCLUSIVE OF MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID

APN 3001-036-900

ADDRESS: 40641 PEONZA LN

SHEET INDEX

C1.00 COVER SHEET C1.01 GRADING PLAN C1.02 HORIZONTAL CONTROL

FEMA FLOOD HAZARD DESIGNATION

PER PANEL 0415F FIRM FLOOD INSURANCE RATE MAP LOS ANGELES COUNTY, CALIFORNIA AND INCORPORATED AREAS - MAP NUMBER 06037C0652F:

RANCHO VISTA ELEMENTARY SCHOOL SITE IS IN 'ZONE X' AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

ENGINEER'S/SURVEYOR'S STATEMENT REGARDING THE PRESENCE

OF MONUMENTS WITHIN PROJECT LIMITS

I HEREBY ATTEST THAT I HAVE LOCATED AND REFERENCED ON THESE PLANS THE MONUMENT EXISTING PRIOR TO CONSTRUCTION TO ENSURE PERPETUATION OF THEIR LOCATION IN ACCORDANCE WITH SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE. I FURTHER ATTEST THAT I HAVE PERFORMED A RECORD SEARCH AND FIELD INSPECTION TO IDENTIFY EXISTING MONUMENTS; SHALL SET SUFFICIENT CONTROLLING, WITNESS, AND PERMANENT MONUMENTS; AND SHALL FILE THE REQUISITE CORNER RECORD OF RECORD OF SURVEY OF THE REFERENCES WITH THE COUNTY SURVEYOR.

ENGINEER/SURVEYOR SEAL & SIGNATURE

ENGINEER'S/SURVEYOR'S STATEMENT REGARDING PRIVATE/UTILITY EASEMENT "AS CIVIL ENGINEER/LAND SURVEYOR OF THIS PROJECT, I HAVE IDENTIFIED THE LOCATION OF ALL EASEMENTS WHICH ARE DEPICTED ON THESE PLANS. I HAVE REVIEWED THE EASEMENT DOCUMENTS AND VERIFIED THE PROPOSED CONSTRUCTION DOES NOT CONFLICT OR INTERFERE



WITH THE INTENDED EASEMENT USE.

PRIVATE ENGINEER'S NOTICE TO CONTRACTORS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND ANY DISCREPANCY BETWEEN THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR ALSO AGREES TO DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.



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FLEWELLING & MOODY architecture planning interiors

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ANTELOPE VALLEY OFFICE: 1035 West Lancaster Boulevard Lancaster, California 93534 P 661.949.0771

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E-Mail: fm-lancaster@flewelling-moody.com





44732 YUCCA AVENUE LANCASTER, CA 93534 ryan.duke@duke—engineering.com



Revisio No.	ns Date	Description
110.	Date	Возоправл

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in

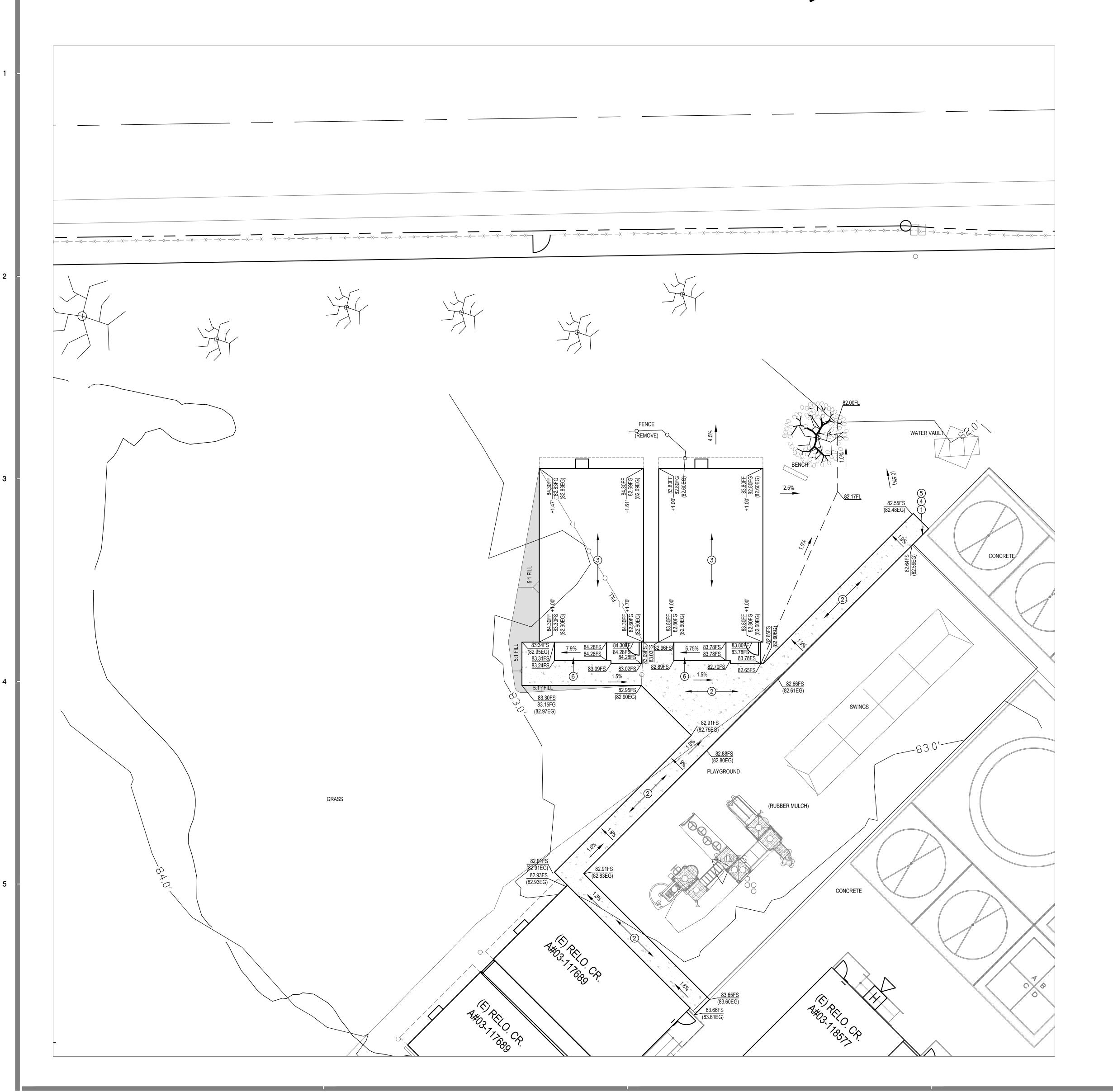
RELOCATION OF (2) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL 40641 PEONZA LANE PALMDALE, CA 93551

WESTSIDE UNION SCHOOL DISTRICT

COVER SHEET

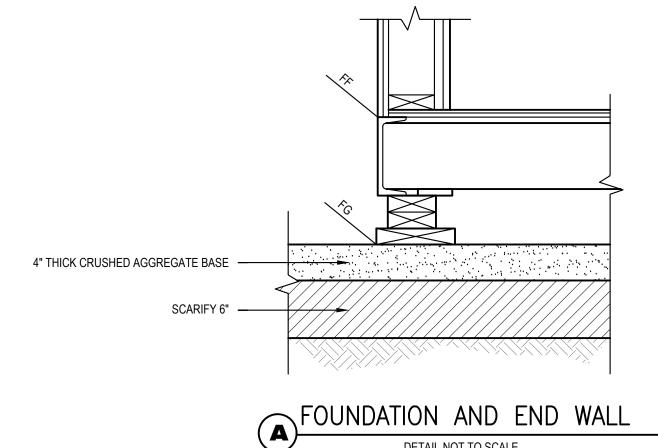
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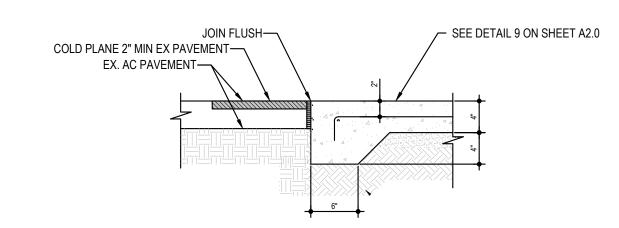
RANCHO VISTA ELEMENTARY 4064 PEONZA LN, PALMDALE, CA 93551



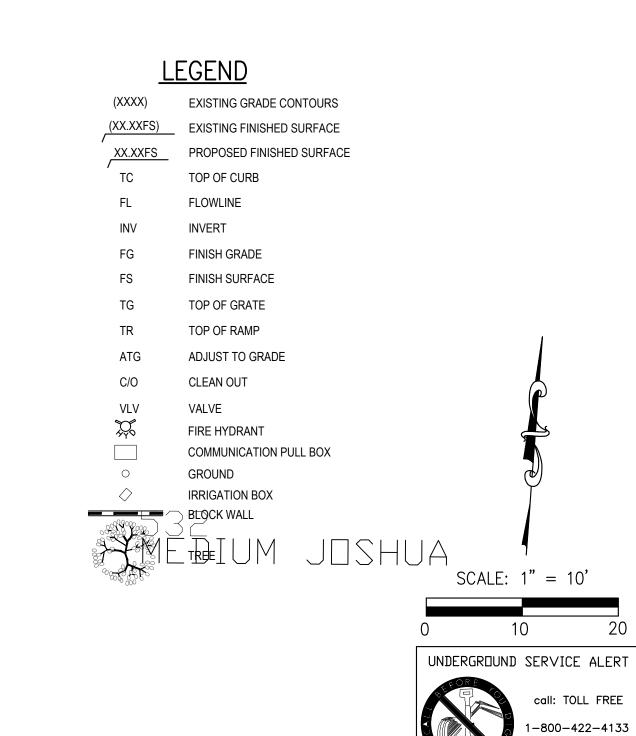
CONSTRUCTION NOTES

- REMOVE 2" THICK SECTION OF EXISTING A.C. PAVEMENT BY COLD PLANING AND CONSTRUCT 2" MIN. THICK A.C. PAVEMENT OVERLAY TO BLEND. SEE DETAIL 'B' HEREON.
- (2) CONSTRUCT 4" THICK CONCRETE WALK PER ARCHITECT PLAN (SEE DETAIL 12 ON SHEET A2.0)
- BUILDING PAD SHALL BE 4" A-BASE OVER 6" OF SCARIFIED AND RECOMPACTED NATIVE SOIL TO MIN. 90% REL. COMPACT (U.N.O).
- 4) SAW CUT AND REMOVE EXISTING 1' OF A.C. PAVEMENT AND BASE.
- (5) CONCRETE THICKENED EDGE PER ARCHITECT PLANS (SEE DETAIL 9 ON SHEET A2.0)
- (6) INSTALL RAMP PER ARCHITECT PLANS. (SEE DETAIL 7 ON SHEET A2.0)





CONCRETE PAVING AT (E) PAVING DETAIL NOT TO SCALE



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Checke	ed by		
Revisio	ns		
No.	Date	Description	

for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

RELOCATION OF (2) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL 40641 PEONZA LANE PALMDALE, CA 93551

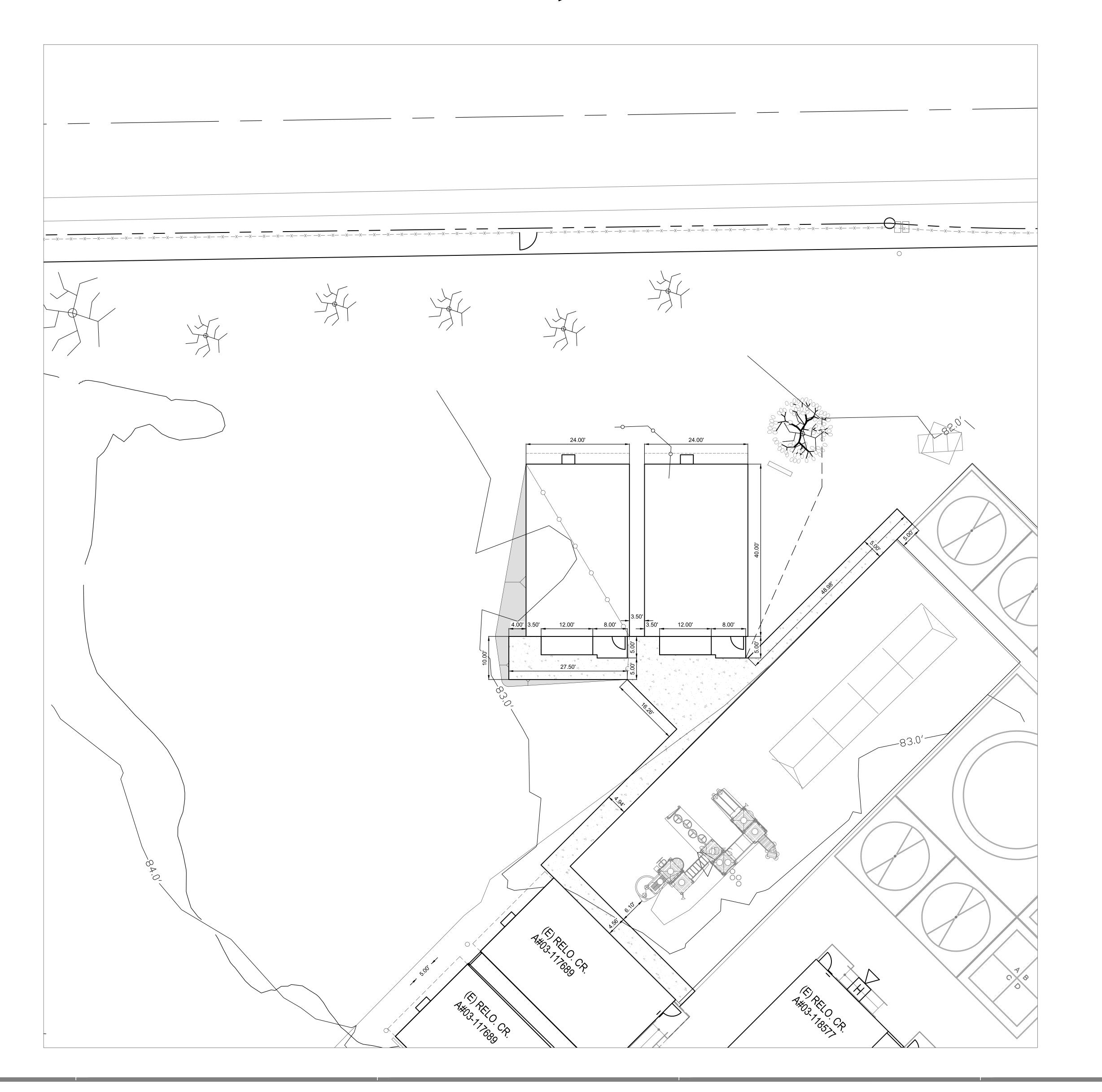
WESTSIDE UNION SCHOOL DISTRICT

GRADING PLAN

3-18-2020

C1.01

RANCHO VISTA ELEMENTARY 4064 PEONZA LN, PALMDALE, CA 93551



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APP: 03-121031 INC:

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DATE: 09/28/2020



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SED ARCHITECT

C-26053

Rm. Inde 08/31/2021

OF CAUSE

CONSULTANT



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Checked by

Revisions
No. Date Description

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

RELOCATION OF (2) 24'x40' MODULAR CLASSROOM BUILDING TO RANCHO VISTA ELEMENTARY SCHOOL 40641 PEONZA LANE PALMDALE, CA 93551

WESTSIDE UNION SCHOOL DISTRICT

HORIZONTAL CONTROL PLAN

Job No.

3-18-2020

C1.02

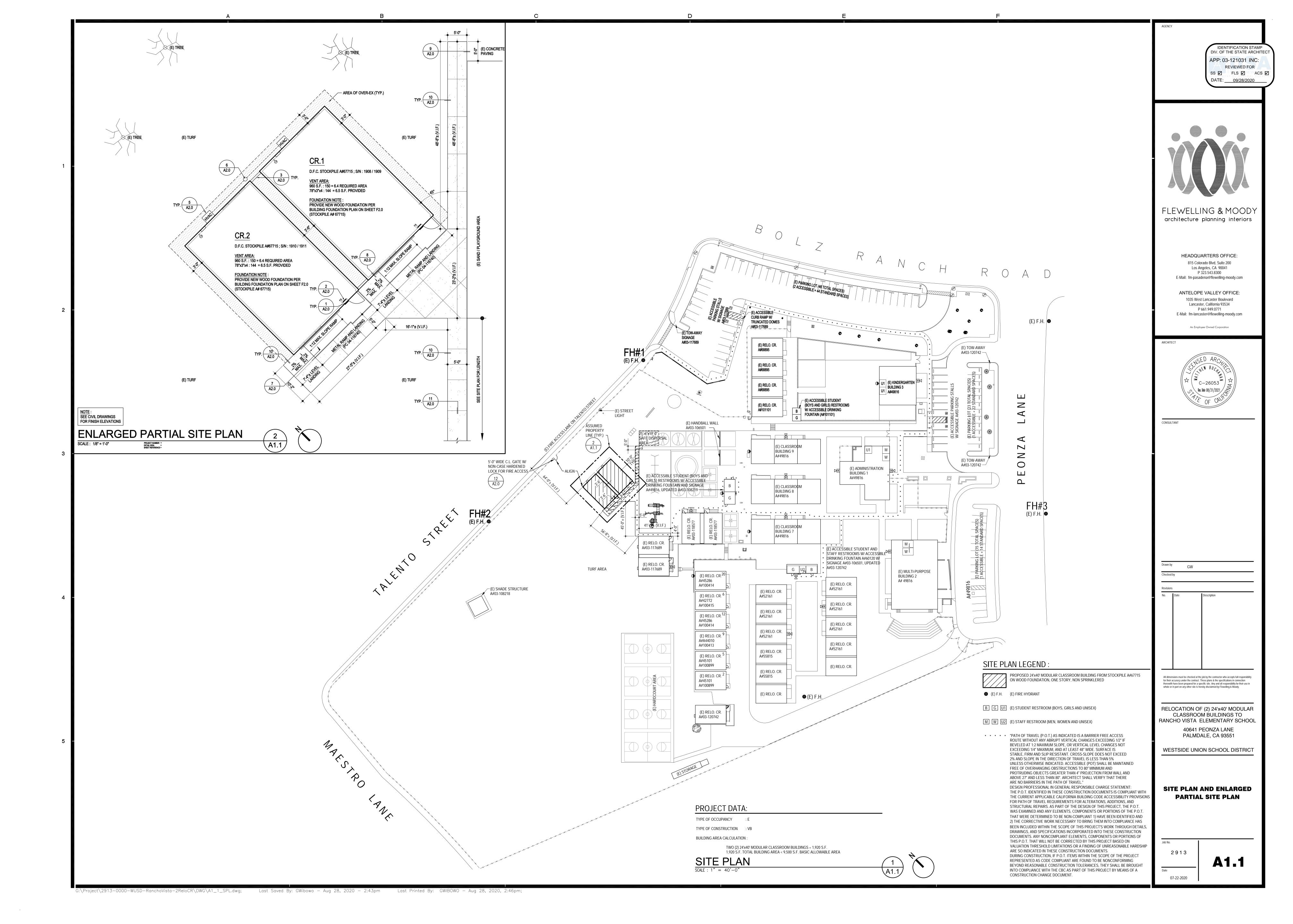
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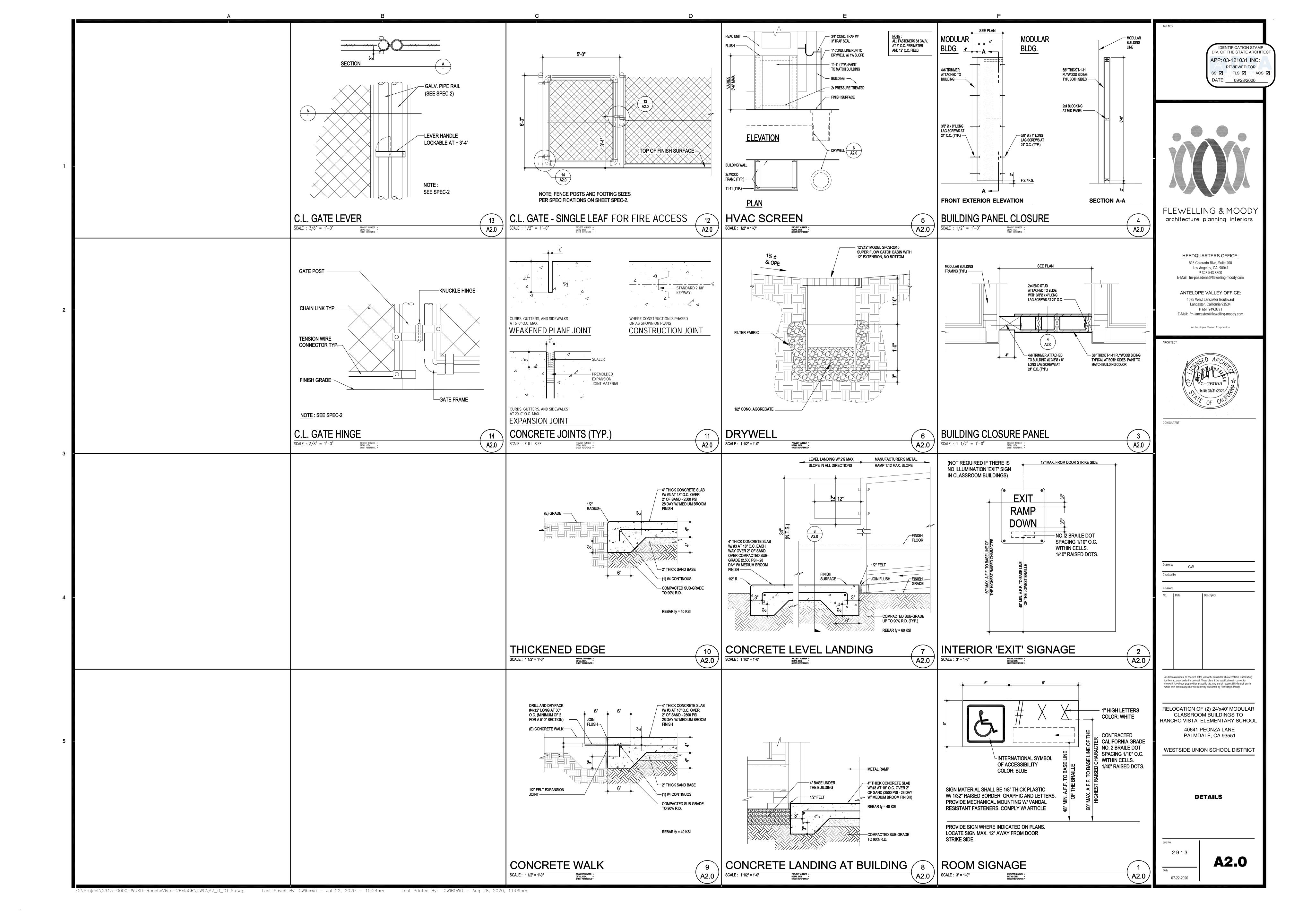
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UNDERGROUND SERVICE ALERT

call: TOLL FREE

1-800-422-4133





1.00 GENERAL

1.01 SCOPE: FURNISH MATERIALS AND PERFORM LABOR REQUIRED TO EXECUTE THIS WORK AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS NECESSARY TO COMPLETE THE CONTRACT, INCLUDING, BUT NOT LIMITED, THESE MAJOR ITEMS:

PROTECTION OF EXISTING WORK TO REMAIN.

BARRICADES, LIGHTS, SIGNS AND SAFETY PRECAUTIONS REQUIRED BY THE GOVERNING CODE. NOTE THE REQUIREMENTS FOR MOVEMENT TO ACCOMMODATE PHASING.

REMOVAL AND DISPOSITION OR SALVAGE (WHERE SPECIFIED) OF ALL SURPLUS MATERIAL RESULTING FROM THIS WORK.

REMOVAL OF UTILITY LINES (GAS, WATER, ELECTRIC, SEWER), AND STRUCTURES INDICATED FOR ABANDONMENT, AND SUCH LINES AND STRUCTURES NOT SHOWN BUT ENCOUNTERED IN THE COURSE OF THE WORK.

REMOVAL OF VEGETATION, INCLUDING IRRIGATION SYSTEM.

G. CUTTING AND REMOVAL OF SLABS, FOOTINGS, WALKS, PAVING, CURBS, GUTTERS, PITS AND OTHER UNDERGROUND STRUCTURES.

REMOVAL OF LIGHT STANDARDS, SIGN POSTS, FENCES, AND MISCELLANEOUS STRUCTURES. 1.02 GENERAL REQUIREMENTS

A. CODES: PERFORM ALL WORK IN ACCORDANCE WITH THE BUILDING CODE OF THE GOVERNING BODY HAVING JURISDICTION, THE GOVERNING STATE INDUSTRIAL SAFETY ORDERS, AND THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND

B. NOISE CONTROL: CARRY ON ALL WORK IN A MANNER WHICH WILL PRODUCE THE LEAST AMOUNT OF NOISE. INSTRUCT ALL WORKMEN IN NOISE CONTROL PROCEDURES. ADHERE TO ALL LOCAL ORDINANCES WITH REGARDS TO WORK HOURS.

2.00 MATERIALS 2.01 BARRICADES

CHAIN LINK FENCING, SIX FEET HIGH MINIMUM WITH SCREENING FABRIC.

3.00 EXECUTION

3.01 DUST CONTROL A. USE WATER AS REQUIRED TO ALLAY DUST IN EARTH AREAS. USE NO OTHER AGENT WITHOUT THE SPECIFIC APPROVAL OF THE ARCHITECT. COMPLY WITH

3.02 PROTECTION OF WORK TO REMAIN

ALL LOCAL DUST CONTROL ORDINANCES.

A. USE STAKES, BARRICADES, AND SUCH OTHER MEANS OF PROTECTION AS REQUIRED TO PREVENT DAMAGE TO EXISTING WORK THAT IS INDICATED TO REMAIN.

3.03 CLEAN-UP

A. ALL MATERIAL RESULTING FROM THESE OPERATIONS, EXCEPT SALVAGE. BECOMES THE PROPERTY OF THE CONTRACTOR, AND SHALL BE REMOVED FROM THE SITE, PROMPTLY.

B. REMOVE MATERIALS AND DEBRIS PROMPTLY, AS GENERATED. BURNING OR BURYING OF DEBRIS ON THE SITE IS PROHIBITED. DISPOSE OF DEBRIS IN A LEGAL MANNER.

END OF SECTION

SECTION 05 50 00 MISCELLANEOUS METALS

1.00 GENERAL

1.01 SCOPE: FURNISH MATERIALS AND PERFORM LABOR REQUIRED TO EXECUTE THIS WORK AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS NECESSARY TO COMPLETE THE CONTRACT, INCLUDING, BUT NOT LIMITED TO, THESE MAJOR ITEMS:

A. SHAPES, SLEEVES, ANCHORS, CONNECTORS, PLATED, BACKING PLATES. SUPPORTS, AND FASTENING REQUIRED, BUT WHICH ARE NOT SPECIFIED IN OTHER SECTIONS.

GATES TO TRASH ENCLOSURE; ORNAMENTAL FENCES WITH GATES.

HANDRAILS AND GUARD RAILS.

D. SIGN STANDARDS.

1.02 GENERAL REQUIREMENTS A. CODES: MATERIALS AND WORK SHALL CONFORM TO THE GOVERNING BUILDING CODE. IN CASE OF CONFLICT BETWEEN THESE SPECIFICATIONS AND THE

BUILDING CODE, THE MORE STRINGENT SHALL GOVERN. B. SHOP DRAWINGS: SUBMIT IN ACCORDANCE WITH SECTION 013323. SHOWING IN COMPLETE DETAIL ALL INFORMATION REQUIRED FOR FABRICATION,

FINISHING AND INSTALLATION OF THIS WORK. 2.00 PRODUCTS

2.01 MATERIALS (AS REQUIRED)

A. STEEL SHAPES: ASTM A36.

B. PIPE FOR RAILINGS: ASTM A53 OR A120. USE STAINLESS STEEL PIPE WHERE INDICATED.

GALVANIZING: ASTM A123.

BOLTS, NUTS, SCREWS: ASTM A307, GRADE A

STEEL TUBING: ASTM A501.

F. PAINT-SHOP PRIME COAT FOR FERROUS METAL: AS SPECIFIED UNDER PAINTING SECTION.

2.02 GALVANIZING A. GALVANIZE ALL EXTERIOR ITEMS AND THOSE INTERIOR ITEMS SO SPECIFIED. USE THE HOT DIP PROCESS, CONFORMING TO ASTM A123.

2.03 FABRICATION A. GENERAL: USING SKILLED MECHANICS, FORM AND FABRICATE ITEMS OF

WORK AS INDICATED AND AS REQUIRED TO MEET INSTALLATION CONDITIONS. MAKE PROVISIONS TO CONNECT WITH OR RECEIVE THE WORK OF OTHER TRADES.

B. CONNECTIONS: UNLESS OTHERWISE INDICATED. WELDED OR BOLT CONNECTIONS BETWEEN MEMBERS. WHERE POSSIBLE, CONCEAL CONNECTIONS IN THE FINISHED WORK. WHERE EXPOSED SCREW FASTENINGS ARE REQUIRED, USE PHILLIPS OVALHEAD SCREWS TO MATCH PARENT MATERIAL. FIT OR MITER EXPOSED JOINTS TO HAIRLINE TOLERANCE OR USE WELDED JOINTS. ON FINISHED FACES, GRIND ALL WELD SMOOTH AND SLUSH WITH BASE METAL.

EMBEDDED ITEMS: WHERE ITEMS ARE TO BE EMBEDDED IN CONCRETE, PROVIDE WELDED-ON ANCHORS OR LUGS AS INDICATED OR REQUIRED. 3.00 EXECUTION

3.01 INSTALLATION

INSTALL ALL ITEMS PLUMB, LEVEL AND SQUARE, SECURELY AND RIGIDLY ATTACHED TO SUPPORTING CONSTRUCTION AND AS DETAILED.

END OF SECTION

SECTION 06 40 00 ROUGH CARPENTRY

1.00 GENERAL

1.01 SUMMARY

A. PRINCIPAL WORK IN THIS SECTION:

WOOD STRUCTURAL FRAMING AND PARTITION FRAMING.

EXTERIOR SHEATING.

3. WOOD GROUNDS, NAILERS AND BLOCKING.

4. MISCELLANEOUS ROUGH CARPENTRY ITEMS AS INDICATED AND REQUIRED FOR COMPLETE INSTALLATION.

1.02 GENERAL REQUIREMENTS

A. GENERAL NOTES ON THE DRAWINGS ARE PART OF THIS SECTION.

1.03 QUALITY ASSURANCE A. REFERENCE STANDARDS: APPLICABLE PROVISIONS OF THE FOLLOWING

GOVERN THE WORK OF THIS SECTION. 1. ALSC, AMERICAN LUMBER STANDARDS COMMITTEE: SOFTWOOD LUMBER

2. AWPA, AMERICAN WOOD PRESERVERS' ASSOCIATION.

3. NFPA, NATIONAL FOREST PRODUCTS ASSOCIATION.

4. PS-1, PLYWOOD GRADING RULES. 5. CALIFORNIA STATE BUILDING CODE, TITLE 24 CCR.

2.00 PRODUCTS

2.01 MATERIALS

A. LUMBER: MANUFACTURED, GRADED AND GRADE-MARKED IN COMPLIANCE WITH THE FOLLOWING REFERENCE SPECIFICATIONS AND GRADING RULES. GRADES AND SPECIES AS HEREINAFTER SPECIFIED OR NOTED ON THE DRAWINGS.

DOUGLAS FIR: GRADE IN COMPLIANCE WITH ONE OF THE FOLLOWING:

UBC STANDARD 23-1.

2. DOUGLAS FIR, LARCH OR HEMLOCK STRUCTURAL AND FRAMING LUMBER SHALL BE GRADED IN ACCORDANCE WITH THE "STANDARD GRADING RULES NO. 17" OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB) OR THE "STANDARD GRADING RULES" OF THE WESTERN WOOD PRODUCTS

C. PLYWOOD: U.S. DEPARTMENT OF COMMERCE, PRODUCT STANDARD PS 1, GRADE AND GRADE-MARKED BY THE AMERICAN PLYWOOD ASSOCIATION.

ASSOCIATION (WWPA) LATEST EDITIONS.

D. BOLTS: ASTM A 307, GRADE A SQUARE OR HEXAGONAL HEAD, SIZES AND SPACING AS REQUIRED BY THE DRAWINGS. ALL HEADS AND NUTS BEARING ON WOOD SHALL BE FITTED WITH WASHERS.

1. BOLTS, NUTS AND WASHERS FOR USE IN LOCATIONS SUBJECT TO MOISTURE, FOR OUTSIDE USE OR IN PORTIONS OF THE STRUCTURE, WHICH ARE NOT COMPLETELY ENCLOSED, OR ELSEWHERE AS SPECIFIED OR INDICATED. GALVANIZED IN COMPLIANCE WITH ASTM A 153.

E. NAILS: COMMON NAILS, SIZES AND TYPE INDICATED, SPECIFIED, OR AS REQUIRED FOR THE PURPOSE, IN COMPLIANCE WITH FS FF-N-105A.

F. TIMBER CONNECTORS: ICBO APPROVED CONNECTORS, SIMPSON OR EQUAL.

3.00 EXECUTION

3.01 CARPENTRY INSTALLATION

A. WORKMANSHIP: PERFORM WORK IN ACCORDANCE WITH THE BEST STANDARDS OF PRACTICE RELATING TO THE TRADES AND CAREFULLY PLAN AND LAY OUT THE WORK AS REQUIRED. PROPERLY ACCOMMODATE THE WORK OF OTHER TRADES. ACCURATELY SAW-CUT AND FIT LUMBER INTO THE RESPECTIVE LOCATIONS, TRUE TO LINE, GRADE, AND LEVEL, AS INDICATED OR REQUIRED, AND PERMANENTLY SECURE IN PROPER POSITION WITH SPIKES, NAILS, LAG SCREWS, BOLTS, HANGERS, OR OTHER FASTENINGS TO MAKE THE WORK SUBSTANTIAL AND RIGID IN ALL PARTS AND CONNECTIONS.

B. CONNECTION: MAKE CONNECTIONS BETWEEN MEMBERS TIGHT ACCURATE AND SECURE. PLACE FASTENINGS WITH OUT SPLITTING WOOD: PREDRILL WHEN REQUIRED. DRILL BOLT HOLE SAME SIZE AS BOLT DIAMETER. DRILL HOLE FOR LAG SCREWS SAME AS THREAD ROOT DIAMETER: AND CANTERBURY, SAME DEPTH AND DIAMETER AS SHANK. TURN LAG SCREWS INTO PLACE; DO NOT DRIVE. PROVIDE BOLTS AND LAG SCREWS WITH WASHERS UNDER EVERY HEAD AND NUT BEARING ON WOOD. TIGHTEN BOLTS AND LAG SCREWS AT INSTALLATION; CAREFULLY RETIGHTEN JUST PRIOR TO CLOSING, OR AT COMPLETION OF THE PROJECT.

3.02 CLEAN-UP

A. COMPLY WITH THE REQUIREMENTS OF SECTION 01740. DISPOSE OF PRESSURE-TREATED WOOD IN AN AUTHORIZED DISPOSAL AREA. DO NOT BURN TREATED WOOD. DO NOT BURY WOOD OF ANY TYPE ON THE JOBSITE. END OF SECTION

SECTION 07 92 00 JOINT SEALANTS

1.00 GENERAL

1.01 SUMMARY

A. THIS SECTION INCLUDES JOINT SEALANTS FOR THE FOLLOWING LOCATIONS:

1. EXTERIOR JOINTS IN VERTICAL SURFACES AND NON-TRAFFIC HORIZONTAL SURFACES AS INDICATED BELOW:

a. CONTROL AND EXPANSION JOINTS IN CAST-IN-PLACE CONCRETE.

b. JOINTS BETWEEN DIFFERENT MATERIALS LISTED ABOVE.

2. EXTERIOR JOINTS IN HORIZONTAL TRAFFIC SURFACES AS INDICATED BELOW: a. CONTROL, EXPANSION AND ISOLATION JOINTS IN CAST-IN-PLACE

b. JOINTS BETWEEN DIFFERENT MATERIALS LISTED ABOVE.

1.02 SUBMITTALS

A. PROCEDURE: IN ACCORDANCE WITH SECTION 01340.

CONCRETE SLABS.

1.03 JOB CONDITIONS

A. DO NOT INSTALL SEALANTS UNDER ADVERSE WEATHER CONDITIONS, OR WHEN TEMPERATURES ARE BEYOND MANUFACTURER'S RECOMMENDED LIMITS.

B. PROCEED WITH THE INSTALLATION ONLY WHEN FORECASTED WEATHER CONDITIONS ARE FAVORABLE FOR PROPER SEALANT CURE AND DEVELOPMENT OF EARLY BOND STRENGTH.

2.00 PRODUCTS

2.01 MATERIALS

A. COLORS: MATCH SEALANT COLOR TO COLOR OF ADJACENT MATERIALS AS CLOSELY AS POSSIBLE USING COLORS SELECTED FROM THE MANUFACTURER'S STANDARD PALETTE. AS APPROVED BY THE ARCHITECT.

B. COMPATIBILITY: VERIFY THAT SELECTED SEALANTS WILL NOT CAUSE STAINING. DEGRADATION AND PREMATURE AGING OF THE ADJACENT SURFACES AND THE SEALANT ITSELF WHEN IN CONTACT WITH THESE SURFACES.

1. FOR ALL OTHER EXTERIOR APPLICATIONS:

A. GENERAL ELECTRIC CORP.: SILPRUF. b. DOW CORNING CORP.: 123, 790 OR 795.

c. PECORA CORP.: 90 OR 895.

d. TREMCO CORP.: SPECTREM I OR SPECTREM II

C. MISCELLANEOUS MATERIALS:

e. OR APPROVED EQUAL.

1. JOINT CLEANER, PRIMER AND SEALER: AS RECOMMENDED BY THE SEALANT MANUFACTURER, FOR THE SURFACES TO BE CLEANED, PRIMED OR SEALED.

2. SEALANT BACKER ROD:

a. COMPRESSIBLE ROD STOCK FORMED OF CLOSED-CELL POLYETHYLENE FOAM, POLYETHYLENE JACKETED POLYURETHANE FOAM, BUTYL RUBBER NEOPRENE FOAM OR OTHER FLEXIBLE, PERMANENT, DURABLE NON-ABSORPTIVE MATERIAL RECOMMENDED BY THE SEALANT MANUFACTURER.

3.00 EXECUTION

3.01 INSTALLATION

A. COMPLY WITH SEALANT MANUFACTURER'S PRINTED INSTRUCTIONS AND ASTM C 1193, EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE SPECIFIED HEREIN. AT THE ARCHITECT'S OPTION, ASTM C 1193 MAY ALSO BE USED FOR REJECTION OF UNACCEPTABLE INSTALLATIONS.

END OF SECTION

SECTION 09 91 00 PAINTING

PAINTING AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN,

INCLUDING, BUT NOT LIMITED TO THESE MAJOR ITEMS:

1. ALL SURFACES SCHEDULED, SPECIFIED OR INDICATED.

B. EXTERIOR SURFACES NOT TO BE PAINTED. 1. CONCRETE PAVING AND BASE, INCLUDING METAL INSERTS.

3. GRATINGS, CHECKER PLATE OR CAST IRON COVERS AND FRAMES.

1.02 RELATED WORK SPECIFIED ELSEWHERE AS REQUIRED

PROJECT SIGN, IN DIVISION 0. TEMPORARY FACILITIES.

C. SIGNAGE

A. DELIVER MATERIALS TO THE PROJECT SITE IN UNOPENED CONTAINERS BEARING MANUFACTURER'S NAME AND PRODUCT DESCRIPTIONS CORRESPONDING TO

SPATTERS, AND DROPPINGS. USE DROP-CLOTHS TO PROTECT FLOORS. COVER

2.00 PRODUCTS

2.01 GENERAL

A. MATERIALS SHALL CONFORM TO GOVERNING REQUIREMENTS OF SOUTH COAST AIR QUALITY CONTROL DISTRICT.

2.03 MANUFACTURERS

A. MATERIALS NECESSARY TO COMPLETE THE PAINTING HEREIN SPECIFIED AND LISTED BY MATERIAL NUMBER AND NAMES ARE STANDARDS FOR KINDS, QUALITY AND FUNCTION, AND ARE TAKEN FROM THE STOCK LIST OF ARCHITECTURAL FINISHES OF THE DUNN EDWARDS CORPORATION, LOS ANGELES.

ARCHITECTS' APPROVAL.

3. MISCELLANEOUS BASIC MATERIALS SUCH AS LINSEED OILS, SHELLAC, WHITE LEAD, PUTTY AND SOLVENTS SHALL BE PURE AND OF HIGHEST QUALITY.

MANUFACTURER AS FINISH PAINT.

2.03 MATERIALS A. SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE FOLLOWING

B. EXTERIOR FINISHES:

 SURFACE - GALVANIZED METAL PRETREATMENT - GE123 GALVA-ETCH 1ST COAT - QD43-7 GALVA-ALUM

PRIMER ULTRA-GRIP, EXTERIOR MULTI-SURFACE PRIMER LUGSLOO. FIRST COAT: SPARTASHILED, EXTERIOR

SECOND COAT: 100% ACRYLIC SEMI-GLOSS PAINT (SSHL50)

A. GENERAL: SURFACES TO RECEIVE PAINT FINISH SHALL BE PREPARED AS INDICATED BY PRIMER PAINT PRINTED INSTRUCTIONS.

B. METAL SHALL BE FREE OF RUST. DAMAGED SHOP PRIMER SHALL BE RE-TOUCHED. ROUGH EDGES SHALL BE SANDED.

3.02 APPLICATION

A. MISCELLANEOUS FINISHES:

1. FINISHES NOT SCHEDULED ON DRAWINGS:

(1) PIPES, CONDUITS OR DUCTS: APPLY SAME FINISH AS SPECIFIED FOR WALL OR CEILING ADJACENT TO SURFACES TO BE PAINTED. PRIME SURFACES AS FOLLOWS BEFORE WALL OR CEILING FINISH IS APPLIED.

MATERIALS SPECIFIED.

MISPLACED PAINT MATERIAL. IN MANNER THAT WILL NOT DAMAGE SURFACES, PATCH. REPAIR OR MAKE RESTITUTION FOR WORK OF OTHERS DAMAGED BY PAINTING OPERATIONS, TO SATISFACTION OF ARCHITECT. 3.04 ATTIC STOCK

END OF SECTION

A. PROVIDE TO OWNER AN ADDITIONAL 5% OF ALL TYPES AND COLORS OF ALL

SECTION 10 14 00 SIGNAGE

1.00 GENERAL

1.01 SCOPE A. SIGNAGE AS SHOWN ON THE DRAWINGS AND AS SPECIFIED, INCLUDING BUT NOT LIMITED TO THE FOLLOWING MAJOR ITEMS:

1. DOOR SIGNS AS SCHEDULED AND NOTED.

DISABLED ACCESS SIGNS.

DISABLED ACCESS SYMBOL SIGNS FOR TOILET ROOMS.

EXIT SIGNS.

5. DISABLED ACCESS PARKING SIGNS AND GATE SIGNS.

ROOM OCCUPANCY SIGNS.

TOILET ROOM SIGNS.

8. BUILDING IDENTIFICATION SIGNS

A. WORK SHALL CONFORM TO 2013 CBC 11B AND THE AMERICAN WITH DISABILITIES ACT.

APPROVED SYSTEMS (MANUFACTURERS):

1. ASI/MODULEX, INC. (213) 645-1400.

2. KROY, (800) 733-5769. 3. MOWHAWK SIGN SYSTEMS, INC. (518) 370-3433.

4. CALIFORNIA CONTRACT, (818) 503-7241

5. OR APPROVED EQUAL

2.00 MATERIALS

2.01 PLAQUE SIGNS

B. TEXT SIGNS: MOUNT ON A BASE - 1 1/8 INCH HIGH X VARYING LENGTHS. TYPE FACE - MODIFIED HELVETICA. LETTER SIZE - 9/16" INCH HIGH, SUPPER AND LOWER CASE. PROVIDE BRAILLE SYMBOLS. SECURE ADJACENT TO DOOR, WHERE

A. NUMBER SIGNS: MOUNT ON A BASE - 1 1/8" INCH HIGH X 5 INCHES LONG.

TYPE FACE - MODIFIED HELVETICA. NUMBER SIZE 9/16 INCH HIGH. PROVIDE BRAILLE

SYMBOLS. SECURE ADJACENT TO DOOR, WHERE INDICATED. SIMILAR TO: ASI INFINITY;

INDICATED. SIMILAR TO: ASI INFINITY; SPE-SA.

2.02 PERMANENT TEXT SIGNS A. DIRECTIONAL AND INFORMATIONAL SIGNS REQUIRED BY TITLE 24 CCR AND THE ADA AS SHOWN ON THE DRAWINGS SHALL HAVE THE TEST SILVER OR VINYL DIE CUT IN SIGNS AS NOTED. SIMILAR TO ASI INFINITY SOG-SA.

2.03 PERMANENT TEXT - EXTERIOR A. SIZE AS REQUIRED TO PROVIDE TEXT STATED USING 1 INCH HIGH LETTERS. UPPER AND LOWER CASE MODIFIED HELVETICA, AND OTHER TEXT.

MATERIAL: FIBERGLASS BASE, WITH URETHANE FINISH AND SILK SCREENED GRAPHICS, PROTECTED WITH A TRANSPARENT MATTE FINISH. SIMILAR TO ASI GOF

C. MOUNTING: SCREWS 1/4 INCH DIAMETER, CORROSION AND VANDAL

RESISTANT, SELF DRILLING. 2.04 DISABLE ACCESS SIGNS, OCCUPANCY SIGNS

A. TOILET ROOM SYMBOLS

1. MEN'S AND BOYS' SIGN IS A 12" TRIANGLE. PANEL IS PAINTED ACRYLIC WITH SUB-SURFACE TEXT AND PICTOGRAM. 2. WOMEN'S AND GIRLS' ROOM SIGNS IS A 12" CIRCLE. PANEL IS PAINTED

ACRYLIC WITH SUB-SURFACE TEXT AND PICTOGRAM.

B. FREE-STANDING EXTERIOR ACCESSIBILITY SIGNS, TRAFFIC CONTROL AND OTHER EXTERIOR SIGNS: TRAFFIC CONTROL SERVICE, INC. (800) 222-8274, ZUMAR INDUSTRIES (323) 724-8450 OR WESTERN HIGHWAY PRODUCTS, INC. (714) 761-4811, OR

3.02 INSTALLATION

EQUAL.

3.00 EXECUTION

UNISEX.

3.01 PERMANENT TEXT A. PERMANENT TEXT NOT INDICATED IN CONTRACT DRAWINGS WILL BE FURNISHED AT THE TIME THAT SUBMITTALS ARE RETURNED.

A. INSTALL WHERE INDICATED. SIGNS SHALL BE A COMPLETE VANDAL RESISTANT INSTALLATION. FASTENERS SHALL BE CONCEALED, IN DRILLED HOLES, COUNTER SUNK WHERE INDICATED. SIGNS SHALL ALIGN WITH ADJACENT LINES AND EDGES, BE LEVEL, FLAT ON THE MOUNTING SURFACE.

MANUFACTURER. FASTENERS SHALL BE CONCEALED, IN DRILLED HOLES, COUNTER SUNK WHERE INDICATED. SIGNS SHALL ALIGN WITH ADJACENT LINES AND EDGES, BE LEVEL, FLAT ON THE MOUNTING SURFACE. C. POST MOUNTED SIGNS SHALL FOLLOW SAME REQUIREMENTS AS SPECIFIED

B. BUILDING WALL SIGNS: INSTALL AS RECOMMENDED BY THE

SECTION 31 10 00 SITE CLEARING

END OF SECTION

PART 1 - GENERAL 1.1 SUMMARY A. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, SERVICES, TESTING, TRANSPORTATION AND EQUIPMENT NECESSARY FOR THE COMPLETION OF ALL SITE CLEARING WORK AS REQUIRED AND AS INDICATED ON DRAWINGS AND SPECIFIED HEREIN. WORK MATERIALS AND EQUIPMENT NOT INDICATED OR SPECIFIED WHICH IS NECESSARY FOR THE COMPLETE AND PROPER OPERATION OF THE WORK OF THIS SECTION IN ACCORDANCE WITH THE TRUE INTENT AND MEANING OF THE CONTRACT DOCUMENTS SHALL BE PROVIDED AND INCORPORATED AT NO ADDITIONAL COST TO

THE OWNER. B. REMOVAL OF SURFACE DEBRIS; REMOVAL OF PAVING AND CURBS; REMOVAL OF TREES, SHRUBS, AND OTHER PLANT LIFE; TOPSOIL EXCAVATION; AND REPAIR OF DAMAGED VEGETATION AND/OR IRRIGATION SYSTEMS/SYSTEM

C. REMOVAL OF CONCRETE AND BITUMINOUS SURFACING. 1.2 RELATED SECTIONS

FOR LINE POSTS OF SAME HEIGHT IN SECTION 32 31 15.

A. SECTION 02 41 19: DEMOLITION.

COMPONENTS.

1.3 REGULATORY REQUIREMENTS A. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, LICENSES, OR AGREEMENTS REQUIRED BY ANY LEGALLY CONSTITUTED AGENCY, PAY FOR ALL FEES AND GIVE ALL NECESSARY NOTICES REQUIRED FOR THE CONSTRUCTION OF THE WORK. THE SCHOOL DISTRICT SHALL REIMBURSE THE CONTRACTOR FOR ALL NECESSARY PERMITS OR INSPECTION FEES BY ANY LEGALLY CONSTITUTED AGENCY AT A ONE TO ONE BASIS.

APPLICABLE GOVERNMENT CODES AND REGULATIONS ESPECIALLY MEETING ALL SAFETY STANDARDS AND REQUIREMENTS OF CAL/OSHA. C. COMPLY STRICTLY TO ALL LOCAL AIR QUALITY MANAGEMENT DISTRICT'S RULES AND REGULATIONS.

A. OBTAIN APPROVED CLEAN BORROW SOIL MATERIALS OFF-SITE WHEN

B. PERFORM ALL WORK OF THIS SECTION IN STRICT ACCORDANCE WITH

SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE. SEE SPECIFICATION SECTION 31 20 00 FOR REQUIREMENTS. PART 3 - EXECUTION

2.1 SATISFACTORY SOIL MATERIALS:

PART 2 - PRODUCTS

3.1 PROTECTION A. PROTECT EXISTING STRUCTURES AND SITE IMPROVEMENTS INDICATED TO REMAIN, FROM DAMAGE BY APPROVED METHODS AND/OR AS AUTHORIZED BY THE DISTRICT REPRESENTATIVE. REMOVAL OF ALL PROTECTIONS SHALL BE WHEN WORK OF THIS SECTION IS COMPLETED OR WHEN SO AUTHORIZED BY THE DISTRICT

REPRESENTATIVE. B. PROTECT EXISTING UTILITIES INDICATED OR MADE KNOWN TO REMAIN TRAVERSING THE JOB-SITE AND SERVING EXISTING ADJACENT FACILITIES.

3.2 EXCESS MATERIALS DISPOSAL

A. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS, INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY. END OF SECTION

SECTION 31 20 00 EARTH MOVING

1.1 SUMMARY

PART 1 - GENERAL

A. SECTION INCLUDES:

1. PREPARING SUBGRADES FOR WALKS, PAVEMENTS, TURF AND GRASSES, AND

2. DRAINAGE COURSE FOR CONCRETE SLABS-ON-GRADE.

SUBBASE COURSE FOR CONCRETE WALKS.

1.2 DEFINITIONS A. BACKFILL: SOIL MATERIAL USED TO FILL AN EXCAVATION.

1. INITIAL BACKFILL: BACKFILL PLACED BESIDE AND OVER PIPE IN A TRENCH, INCLUDING HAUNCHES TO SUPPORT SIDES OF PIPE. 2. FINAL BACKFILL: BACKFILL PLACED OVER INITIAL BACKFILL TO FILL A TRENCH. B. BASE COURSE: AGGREGATE LAYER PLACED BETWEEN THE SUBBASE

COURSE AND HOT-MIX ASPHALT PAVING. C. BEDDING COURSE: AGGREGATE LAYER PLACED OVER THE EXCAVATED SUBGRADE IN A TRENCH BEFORE LAYING PIPE. D. BORROW SOIL: SATISFACTORY SOIL IMPORTED FROM OFF-SITE FOR USE AS FILL OR BACKFILL.

E. FILL: SOIL MATERIALS USED TO RAISE EXISTING GRADES.

1.3 PROJECT CONDITIONS

UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE BEGINNING EARTH MOVING OPERATIONS.

A. OBTAIN APPROVED CLEAN BORROW SOIL MATERIALS OFF-SITE WHEN SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE, ALL BORROW SITES REQUIRE APPROVAL BY GEOTECHNICAL ENGINEER OF RECORD AND SHALL BE DTSC

PART 2 - PRODUCTS

APPROVED SITE. PART 3 - EXECUTION

UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTH MOVING B. PROTECT AND MAINTAIN EROSION AND SEDIMENTATION CONTROLS DURING

A. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER

FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT,

3.2 EXCAVATION, GENERAL

EARTH MOVING OPERATIONS.

OBSTRUCTIONS.

A. UNCLASSIFIED EXCAVATION: EXCAVATE TO SUBGRADE ELEVATIONS REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. UNCLASSIFIED EXCAVATED MATERIALS MAY INCLUDE ROCK, SOIL MATERIALS, AND OBSTRUCTIONS. NO CHANGES IN THE CONTRACT SUM OR THE CONTRACT TIME WILL BE AUTHORIZED FOR ROCK EXCAVATION OR REMOVAL OF

1. IF EXCAVATED MATERIALS INTENDED FOR FILL AND BACKFILL INCLUDE

A. STOCKPILE BORROW SOIL MATERIALS AND EXCAVATED SATISFACTORY

UNSATISFACTORY SOIL MATERIALS AND ROCK, REPLACE WITH SATISFACTORY SOIL MATERIALS.

3.3 EXCAVATION FOR WALKS AND PAVEMENTS A. EXCAVATE SURFACES UNDER WALKS AND PAVEMENTS TO INDICATED LINES, CROSS SECTIONS, ELEVATIONS, AND SUBGRADES.

SOIL MATERIALS WITHOUT INTERMIXING. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.

3.5 SOIL MOISTURE CONTROL

3.4 STORAGE OF SOIL MATERIALS

UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL SOIL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT. 3.6 COMPACTION OF SOIL BACKFILLS AND FILLS

NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. RETAIN ONE OPTION IN PARAGRAPH BELOW BASED ON ASTM LABORATORY-TEST METHOD REQUIRED. REPLACE THE TERM "UNIT WEIGHT" WITH "DENSITY" IF

PLACE BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 6 INCHES IN

LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND

B. COMPACT SOIL MATERIALS TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 ASTM D 1557:

RETAIN APPLICABLE SUBPARAGRAPHS BELOW. PERCENTAGES OF MAXIMUM DRY UNIT

BELOW SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL SOIL

WEIGHT ARE EXAMPLES ONLY; REVISE TO SUIT PROJECT. DELETE SCARIFYING AND RECOMPACTING EXISTING SUBGRADE WHEN PROOF-ROLLING WILL SUFFICE. 1. UNDER WALKWAYS, SCARIFY AND RECOMPACT TOP 6 INCHES (150 MM)

MATERIAL AT 90 PERCENT. 2. FOR UTILITY TRENCHES, COMPACT EACH LAYER OF INITIAL AND FINAL BACKFILL SOIL MATERIAL AT 90 PERCENT.

SNOW, OR ICE.

3.7 GRADING A. GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED. B. SITE ROUGH GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM

BUILDINGS AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS

TURF OR UNPAVED AREAS: PLUS OR MINUS 1 INCH (25 MM)] 3. WALKS: PLUS OR MINUS 1 INCH (25 MM)

3.10 DISPOSAL OF SURPLUS AND WASTE MATERIALS

3.8 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

WITHIN THE FOLLOWING TOLERANCES:

C. ON PREPARED SUBGRADE, PLACE SUBBASE COURSE AND BASE COURSE UNDER PAVEMENTS AND WALKS AS FOLLOWS:

RETAIN OPTION IN THREE SUBPARAGRAPHS BELOW IF RETAINING "AND BASE COURSE"

. COMPACT SUBBASE COURSE AND BASE COURSE AT OPTIMUM MOISTURE

CONTENT TO REQUIRED GRADES, LINES, CROSS SECTIONS, AND THICKNESS

PLACE SUBBASE COURSE AND BASE COURSE ON SUBGRADES FREE OF MUD, FROST,

TO NOT LESS THAN 90 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 ASTM D 1557.

OWNER'S PROPERTY

OPTION IN PARAGRAPHS ABOVE.

3.9 FIELD QUALITY CONTROL A. TESTING AGENCY: OWNER WILL ENGAGE A QUALIFIED GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM TESTS AND INSPECTIONS.

END OF SECTION

A. REMOVE SURPLUS SATISFACTORY SOIL AND WASTE MATERIALS. INCLUDING

UNSATISFACTORY SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-121031 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 DATE: <u>09/28/2020</u>



FLEWELLING & MOODY architecture planning interiors

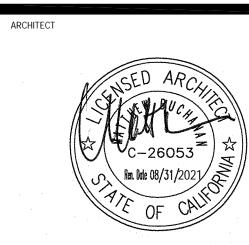
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CONSULTANT

GW

II dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

RELOCATION OF (2) 24'x40' MODULAR

RANCHO VISTA ELEMENTARY SCHOOL

WESTSIDE UNION SCHOOL DISTRICT

SPECIFICATIONS

CLASSROOM BUILDINGS TO

40641 PEONZA LANE PALMDALE, CA 93551

07-22-2020

1.00 GENERAL 1.01 DESCRIPTION

A. PROTECT FLOORS AND ALL ADJACENT SURFACES FROM PAINT SMEARS, FIXTURES AND REMOVE HARDWARE NOT TO BE PAINTED. MASK OFF AREAS WHERE

2. EXCEPT FOR SPECIALTY ITEMS, OR OTHERWISE SPECIFIED, ALL MATERIALS SHALL BE BY ONE MANUFACTURER. PRIMER SHALL BE FROM SAME

3RD COAT - W960 PERMAGLOSS 2. SURFACE - WOOD

3.00 EXECUTION 3.01 PREPARATION OF SURFACES

G:\Project\2913—0000—WUSD—RanchoVista—2ReloCR\DWG\SPEC—1.dwg; Last Saved By: GWibowo — Jul 22, 2020 — 10:28am Last Printed By: GWIBOWO — Aug 21, 2020, 11:07am;

STAINLESS STEEL.

4. ALUMINUM WITH ANODIC (COLOR) FINISH, OR CLEAR ANODIZE.

A. SHOP PRIMED METAL.

ELASTOMERIC COATING 1.04 PRODUCT HANDLING

DESIGNATION ON MATERIAL LIST. 1.05 PROTECTION

1. EQUIVALENT MATERIALS FROM THE ARCHITECTURAL PRODUCT LINE OF SINCLAIR/ICI DULUX PAINT COMPANY, SHERWIN WILLIAMS, FRAZEE INDUSTRIES INC. OR VISTA PAINT CORP. WILL BE ACCEPTABLE, SUBJECT TO

PROCEDURES FOR THE SURFACE AND FINISH DESIRED THEREON.

2ND COAT - W960 PERMAGLOSS

a. WHERE WALLS ARE PAINTED:

3.03 CLEANING AND PATCHING A. UPON COMPLETION, REMOVED SPILLAGE, SPATTER SPOTS AND OTHER MISCELLANEOUS FINISH/EQUIPMENT SPECIFICATIONS

CARPETING:

ALL CARPETING SHALL BE FABRICATED BY A SINGLE MANUFACTURER. EXPERT UMP BY SHAW CONTRACT GROUP, PERFORMANCE BROADLOOM, 26 OZ.

RUBBER BASE:

SOLID RUBBER BASES BY THE JOHNSON RUBBER CO., BURKE, FLEXCO CO. OR ROPPE RUBBER CORP. OF THE COLOR SELECTED BY THE ARCHITECT.

SHEET VINYL:

TARKETT, STYLE IQ OPTIMA, 12' WIDTH X 90' LONG ROLLS WITH 6" HIGH COVED BASE.

TACKABLE WALL PANELS:

KOROSEAL/HARBORWEAVE 1/2" THICK NCFR FLAME SPEC BOARD BACKING PANEL MANUFACTURED BY HOMASOTE, OR 1/2" THICK FIBERBOARD MANUFACTURED BY NACO OR BP CELOTEX

CERAMIC WALL TILE:

4-1/4 IN. X 4-1/4 IN. AND 6 IN. X 6 IN. X 5/16 IN. THICK, WITH CUSHIONED EDGES, STAIN MATTE GLAZED, BY AMERICAN OLEAN, DAL-TILE, HUNTINGTON/PACIFIC OR EQUAL.

SUSPENDED CEILING GRID AND TILES:

GRID: CHICAGO METALLIC 660 SERIES, OR EQUAL BY ARMSTRONG WORLD INDUSTRIES OR DONN CORP. "HEAVY DUTY" CLASSIFICATION COMPLYING WITH

TILES: 24 INCH X 48 INCH X 5/8 INCH THICK, WHITE, CORTEGA MINATONE, 703

LEAVEX "475BCSHGY" HORIZONTAL BABY CHANGING STATION.

SECTION 32 16 00 CONCRETE SITEWORK

PART 1 - GENERAL

1.1 SECTION INCLUDES:

A. CONCRETE WALKS, PAVING, RAMPS, CURBS, WALLS, MOW STRIPS, FENCE FOOTINGS AND CATCH BASINS, AND MISCELLANEOUS CONCRETE SITE WORK AS INDICATED ON THE DRAWINGS.

B. FURNISHING AND INSTALLING FORMWORK.

C. FURNISHING AND INSTALLING REINFORCING STEEL.

D. FURNISHING AND PLACING CONCRETE, INCLUDING JOINTS AND FINISHING.

E. CURING CONCRETE.

A. DIVISION 31: EARTHWORK

PART 2 - PRODUCTS

1.2 RELATED SECTIONS:

2.1 MATERIALS

A. CONFORM TO SECTION 201 - "CONCRETE, MORTAR AND RELATED MATERIALS" OF THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION.

B. FORMS: STEEL, WOOD, OR OTHER SUITABLE MATERIAL OF SIZE AND STRENGTH TO RESIST MOVING DURING CONCRETE PLACEMENT AND TO RETAIN HORIZONTAL AND VERTICAL ALIGNMENT UNTIL REMOVAL. USE STRAIGHT FORMS, FREE OF DISTORTION AND DEFECTS.

2. COAT FORMS WITH A NON-STAINING FORM RELEASE AGENT THAT WILL NOT DISCOLOR OR DEFACE SURFACE OF CONCRETE.

1. USE FLEXIBLE SPRING STEEL FORMS OR LAMINATED BOARDS TO FORM

C. REINFORCING STEEL:

1. REINFORCING BARS: ASTM A615, GRADE 60.

2. WELDED WIRE MESH: ASTM A185.

RADIUS BENDS AS REQUIRED.

D. CONCRETE MATERIALS:

1. FINISHED CONCRETE: CONCRETE CLASS PER PWC SPECIFICATIONS SECTION 201-1 12, EXCEPT 6-INCH REINFORCED CONCRETE PAVING SHALL BE 560-C-3500 CONCRETE.

2. COMBINED AGGREGATE: GRADATION PER PWC SPECIFICATIONS, SECTION

3. CEMENT: PORTLAND CEMENT, TYPE II CONFORMING TO ASTM C-150.

4. WATER: CLEAR, CLEAN AND FREE FROM OIL, VEGETABLE MATTER AND OTHER DELETERIOUS SUBSTANCES.

E. CONTROL JOINT MATERIAL:

1. PLASTIC: "QUICKJOINT" T-SHAPED 1/16" PLASTIC STRIP, 1 INCH MINIMUM DEPTH AS DISTRIBUTED BY J.A. CRAWFORD CO. PHONE (562) 698-0901, OR APPROVED EQUAL.

2. PRE-MOLDED EXPANSION JOINT FILLER: ASTM 1751 NON-EXTRUDING BITUMINOUS SATURATED RESILIENT JOINT FILLER.

F. CURING MATERIALS:

1. LIQUID CURING COMPOUND: NON-STAINING, COMPLYING WITH ASTM C309 AT MANUFACTURERS RECOMMENDED RATE OF APPLICATION. DELIVER CURING COMPOUND IN UNOPENED LABELED CONTAINERS.

PART 3 - EXECUTION

3.1 PREPARATION

A. GENERAL: COORDINATE WORK WITH RELATED TRADES. DO NOT LOCATE RELATED WORK IN CONCRETE EXCEPT AS DETAILED. PLACE CONDUITS IN CONCRETE SLABS WITH A MINIMUM COVER OF 2" ABOVE AND BELOW CONDUIT. LOCATE ACCURATELY AND SECURE IN PLACE ALL INSERTS, BOLTS, TIES, DOWELS, MISCELLANEOUS PLATES, ETC., BEFORE POURING. THEY SHALL BE CLEAN AND FREE FROM ANY COATING WHICH WOULD REDUCE THEIR BOND.

B. REINFORCING STEEL: POSITION, SUPPORT AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. LOCATE AND SUPPORT WITH METAL CHAIRS, RUNNERS, BOLSTER, SPACERS AND HANGERS, AS REQUIRED. SET WIRE TIE SO ENDS ARE DIRECTED INTO CONCRETE, NOT TOWARD EXPOSED CONCRETE SURFACES.

3.2 CONCRETE MIX

A. COMPLY WITH REQUIREMENTS OF PWC SPECIFICATIONS, SECTION 201-1.3 PROPORTIONING AND SECTION 201-1.4 MIXING AND AS HEREIN SPECIFIED. CONCRETE STRENGTH SHALL BE 2500 PSI AT 28 DAYS UNLESS SPECIFIED BY ARCHITECT TO BE OF A GREATER STRENGTH FOR THE APPLICATION-SPECIFIC PURPOSE.

3.3 PLACING CONCRETE

A. GENERAL: PLACE CONCRETE IN ACCORDANCE WITH PWC SPECIFICATIONS SECTION 303-5.3.

3.4 FINISHING

A. MEDIUM BROOM FINISH: BROOM FINISH BY DRAWING A FINE-HAIR BROOM ACROSS CONCRETE SURFACE, PERPENDICULAR TO LINE OF TRAFFIC. REPEAT OPERATION IF REQUIRED TO PROVIDE A FINE LINE TEXTURE ACCEPTABLE TO

3.5 CURLNG

ARCHITECT.

A. LIQUID CURING COMPOUND FOR NATURAL CONCRETE: LOCATIONS AS APPROVED BY ARCHITECT. APPLY A UNIFORM COATING WITHIN 2 HOURS OF FINAL TROWELING.

END OF SECTION

SECTION 32 31 15 CHAIN LINK FENCING AND GATES

PART 1 - GENERAL

1.1 DESCRIPTION

A. PRINCIPAL WORK ITEMS ARE:

1. CHAIN LINK FENCE. CONCRETE POST FOUNDATIONS. ALL HARDWARE, EXCEPT PADLOCKS.

1.2 QUALITY ASSURANCE

A. REQUIREMENTS OF REGULATORY AGENCIES RELATIVE TO GATES AND HARDWARE IN THE PATH OF TRAVEL:

1. CODES: CONFORM TO 2016 TITLE 24 CBC SECTION 1007.3.11 AND CALIFORNIA FIRE CODE (CFC) SECTION 1208.

B. QUALITY STANDARDS: ALL WORK SHALL COMPLY WITH CHAIN LINK FENCE MANUFACTURERS INSTITUTE (CLFMI) STANDARDS, ASTM F567, AND ALL REQUIREMENTS IN THESE SPECIFICATIONS: THE MOST STRINGENT REQUIREMENTS SHALL APPLY WHERE THERE ARE CONFLICTS.

PART 2 - PRODUCTS

2.1 GENERAL

A. ALL FENCE COMPONENTS TO BE GALVANICALLY COMPATIBLE.

2.2 MATERIALS; FABRIC

A. GENERAL: DRAWN STEEL WIRE, HOT-DIPPED ZINC COATED AFTER WEAVING, ASTM A-392 CLASS 1, 1.2 OZ/SQ. FT. OF WIRE SURFACE, PER ASTM A-90

STRIPPING TEST; WITHSTAND 5 ONE-MINUTE IMMERSIONS PER PREECE TEST PER ASTM A-392 & A-90.

B. FENCE & GATE FABRIC:

1. ONE-PIECE FABRIC FULL-HEIGHT FOR FENCE THRU 12'-0"; EDGES KNUCKLED SELVAGE. TOP EDGES OVER 6'-0" ABOVE ADJACENT FINISH SURFACE.

2. MESH SIZE: 2" TYPICAL.

WIRE DIA.: #9 GA. TYPICAL.

4. FABRIC SHALL BE FREE FROM BARBS, ICICLES, OR OTHER PROJECTIONS RESULTING FROM THE GALVANIZING PROCESS, WHICH MIGHT BE HAZARDOUS. FENCE FABRIC HAVING SUCH DEFECTS WILL BE REJECTED AND CONTRACTOR SHALL REPLACE IT WITH SUITABLE FABRIC AT NO COST TO DISTRICT EVEN IF IT HAS BEEN INSTALLED.

2.3 MATERIALS; FRAMEWORK

A. PIPE: ASTM F-1083, GROUP IA, SCHED. 40, STANDARD WELDED OR SEAMLESS STEEL PIPE, COMMERCIAL HOT-DIPPED ZINC COATED, 1.8 OZ/SQ. FT. MIN. EVENLY DEPOSITED; REASONABLY STRAIGHT, BURRS REMOVED, FREE OF DEFECTS AND ALL ROUGHNESS.

B. SIZES: FOR FENCING 8' HIGH OR LESS;

ITEM		O.D INCHES	WGT. LBS/L.F.		
1. LINE	POSTS:	2.375	3.65		
2. COR	NER, TERMINAL & PULL POSTS:	2.875	5.80		
3. PEDI	ESTRIAN GATE POSTS:				
3.1. I	FOR GATE LEAF 0' THRU 6'	2.875	5.80		
3.2. I	_EFT 6'-1" THRU 13'	3.500	7.58		
GATI	E POSTS: FOR GATE LEAD WIDTHS	S AS LISTED):		
4.1.	D' THRU 6':	3.500	7.58		
4.2.	6'-1" THRU 13':	4.500	10.80		
4.3.	13'-1" THRU 18':	6.625	18.99		
5. TOP RAILS, BOTTOM RAILS, BRACE RAILS, &					
-	BOTTOM RAILS:	1.660	2.27		
6. GATI	ES: FOR GATE LEAF WIDTHS AS LI	STED:			
6.1. I	FRAME THRU 12':	1.900	2.72		
6.2. I	FRAME OVER 12':	2.375	3.65		
6.3. I	BRACING:	1.660	2.27		
7. FOR	8' TO 12' HIGH FENCING:				
7.1. I	LINE POST:	2.875	5.80		
7.2.	CORNER & TERMINAL POSTS:	3.500	3.58		
	GATE POSTS (GATE LEAF < 6')	4.00	9.12		
7.4.	TOP RAILS, BOTTOM RAILS,				
ļ	BRACE RAILS & TRANSOM RAIL:	1.900	2.72		

2.4 MATERIALS; ACCESSORIES

A. WIRE: ALL GALVANIZED.

1. TENSION: #9 GA. STEEL, COLD DRAWN, MARCELLED; ASTM A-82.

2. TIES: SOFT ANNEALED STEEL; FS QQ-W-461; FOR FASTENING FABRIC TO POSTS, TOP RAILS, BOTTOM RAILS AND BRACE RAILS: a. #9 GA. TO POSTS.

b. #14 GA. TO TOP & BOTTOM RAILS, AND TENSION WIRE.

B. GALVANIZING; ALL ACCESSORIES, EXCEPT WIRE: ASTM A-153.

C. FITTINGS:

1. TENSION BARS: 3/16" X 3/4", MILD STEEL.

2. STEEL BANDS: 1/8" X 1" TYPICAL. 1/8" X 3/4" AT GATES: MILD STEEL.

3. POST EYE CAPS: CAST MALLEABLE IRON OR PRESSED STEEL: SNUG FIT TO EXCLUDE MOISTURE FROM POSTS; HOLE TO ACCOMMODATE TOP RAIL.

4. TRUSS RODS: 3/8" DIA. STEEL; ADJUSTABLE LENGTH.

5. TURNBUCKLES FOR TENSION WIRE: EYE/EYE TYPE, DROP FORGED STEEL, 5/16" MIN. SCREWS WITH 4-1/2" MIN. TAKE-UP.

6. BOLTS: 3/8" DIA. MIN.; CADMIUM PLATED.

7. EXPANSION COUPLINGS FOR RAILS: STEEL, 6" LONG; DESIGNED TO FIT TIGHTLY INSIDE RAIL, FITTED WITH RAISED CENTER.

8. HOG RINGS: SIZES AND GAGES AS REQUIRED; #9 GA. MINIMUM GALVANIZED STEEL.

9. RAIL ENDS FOR TOP RAILS AND BRACE RAILS: MALLEABLE IRON (ASTM A47, GRADE 32510) WITH HOLES TO RECEIVE 3/8" BOLTS FOR SECURING TO RAIL END BANDS.

10. MISC.: ALL OTHER REQUIRED FITTINGS.

11. 1 1/4" TO 1 1/2" BOTTOM RAIL, FULLY WELDED IN PLACE BOTTOM RAIL ONLY.

2.5 MATERIALS; GATE HARDWARE A. GENERAL:

1. MFR.'S STANDARD GALVANIZED HEAVY DUTY HARDWARE, UNLESS NOTED

OTHERWISE ON DRAWINGS. 2. GALVANIZING FOR ALL PARTS: ASTM A-153; GALVANIZE AFTER

B. HINGES: TYPICALLY, MALLEABLE IRON, DOUBLE CLAMPING, NON-LIFT-OFF, OFFSET TYPE FOR 180 DEG. SWING. INSTALL AND ADJUST HINGES; BURR OR CENTER PUNCH THREADS OF GATE HINGE BOLTS TO PREVENT REMOVAL OF

C. LATCHES: TYPICALLY, MALLEABLE IRON, FORKED OR PLUNGER-BAR TYPE, PERMIT OPERATION FROM EITHER SIDE OF GATE, GRAVITY TYPE AUTOMATICALLY ENGAGING GATE FRAME; WITH PADLOCK EYES FOR LOCKING GATES IN BOTH THE OPEN AND CLOSED POSITIONS; MOUNTING HEIGHT AT 30" TO 44" ABOVE FINISHED FLOOR.

D. KEEPER: MALLEABLE IRON; AUTOMATICALLY ENGAGE GATE WHEN SWUNG OPEN 180 DEG., AND HOLD UNTIL MANUALLY RELEASED.

E. PAIRS OF GATES:

1. STOPS: FLUSH STEEL PLATE, WITH ANCHORS.

2. LATCH: CENTER DROP ROD OR PLUNGER BAR; WITH INTEGRAL PADLOCK

2.6 MATERIALS; MISC.

A. PORTLAND CEMENT CONCRETE: 1: 2-L/2: 3-L/2 MIX (2500 PSI MIN.) DELIVERED BY READY-MIX TRUCK. CONCRETE BAG MIXES OR CONCRETE MIXED ON-SITE ARE NOT ACCEPTABLE. 2.7 FABRICATION; GATES

A. FRAME: WELD FRAMES WITH INTEGRAL RADIUS OR MITERED AND FULLY WELDED CORNERS; HORIZONTAL BRACING RAILS FOR GATES EXCEEDING 6' HIGH: VERTICAL BRACING RAILS AT 6' O.C. MAX. FOR GATES EXCEEDING 9' WIDE; DIAGONAL CROSS-BRACING TRUSS RODS TO INSURE GATES STAY SQUARE AND OPERATE PROPERLY. GRIND ALL WELDS FLUSH AND SMOOTH. GALVANIZE AFTER FABRICATION.

B. FABRIC: STRETCH TAUT; TENSION BARS AND BANDS A 15" O.C. MAX. AT VERTICAL EDGES. TENSION BARS SHALL EXTEND FULL HEIGHT OF GATES. WIRE TIE FABRIC AT 12" O.C. MAX. TOP, BOTTOM, AND BRACING RAILS.

PART 3 - EXECUTION

3.1 PREPARATION

A. EXISTING CONDITIONS: VERIFY LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES AND WATER LINES PRIOR TO EXCAVATING FOR FOOTINGS.

B. LAYOUT: MEASURE AND LAY OUT COMPLETE FENCE LINE, GATE(S), AND MODIFICATIONS TO EXISTING FENCE. C. POST SPACING:

1. GENERAL: LOCATE LINE POSTS AT EQUAL-DISTANCE SPACING IN A RUN, BUT DO NOT EXCEED 10-FEET ON CENTER, UNLESS NOTED OTHERWISE.

3.2 INSTALLATION; FOOTINGS

A. SIZES; FOR FENCING 8' HIGH OR LESS: DIAMETER (INCHES) CORNER POSTS: 3. GATE POSTS: FOR GATE LEAF WIDTHS AS LISTED. a. LEAF 0' THRU 8'

b. LEAF 8'-1" THRU 13': B. POSTS; FOR 8' HIGH OR GREATER FENCING: LINE POSTS: CORNER POSTS: 3. GATE POSTS: FOR GATE LEAF WIDTHS AS LISTED. a. LEAF 0' THRU 8' b. LEAF 8'-1" THRU 13':

C. HOLES: DRILL HOLES IN FIRM, UNDISTURBED, OR COMPACTED SOIL

3.3 ERECTION; FRAMEWORK

1. TYPICAL INSTALLATION; POSTS SET INTO CONCRETE FOOTINGS:

a. GENERAL: SET POSTS INTO CONCRETE FOOTINGS PLUMB, CENTERED, AND ALIGNED; 3" CONCRETE COVER BETWEEN POST BOTTOM AND

b. CONCRETE: PLACE IN CONTINUOUS POUR IN HOLE; TAMP TO CONSOLIDATE; CROWN CONCRETE TO DRAIN WATER AWAY FROM

c. REBAR: WHERE INDICATED, INSTALL REBAR CAGES.

d. SET POSTS AND FOOTINGS PRIOR TO INSTALLATION OF ADJACENT PAVING. LOCATE TOP OF FOOTING A MINIMUM OF 3 INCHES (4" AT CONCRETE) BELOW INDICATED FINISH ELEVATION OF TOP OF ADJACENT PAVING OR MOW STRIP, TO ALLOW PAVING OR MOW STRIP TO COVER FOOTING AND FINISH TIGHT TO POST.

2. CORNER/TERMINAL/PULL POSTS: INSTALL AT ENDS OF RUNS, HORIZONTAL DIRECTION CHANGES OF 15 DEG. OR MORE, VERTICAL GRADE CHANGES OF 5 DEG. OR MORE, ENDS OF CURVED FENCE SECTION; PULL POST EACH 500' RUN OF FENCE.

3. GATE POSTS: INSTALL EACH SIDE OF GATES.

3.4 ERECTION; FENCE FABRIC

A. FABRIC: INSTALL IN ONE CONTINUOUS PIECE WHEREVER POSSIBLE; STRETCH 1. ADJOINING EXISTING FENCING: MATCH EXISTING.

2. AT REPLACEMENT OF FENCE FABRIC: MATCH EXISTING, UNLESS NOTED OTHERWISE.

B. FASTENINGS:

1. AT TERMINAL/CORNER/PULL/GATES POSTS, THREAD TENSION BARS THRU MESH; SECURE TO POSTS WITH BANDS AT 15" O.C. MAX. 2. WIRE-TIE FABRIC TO LINE POSTS AT 16" O.C.; TO TOP RAIL, BOTTOM RAILS,

BRACE RAILS, AND INTERMEDIATE RAILS AT 18" O.C. 3. HOG-RING TO BOTTOM TENSION WIRE AT 18" O.C., WHERE BOTTOM RAILS

DO NOT OCCUR. 4. HOOKED TIES WITH LINKS ARE NOT PERMITTED.

3.5 ERECTION; GATES

A. INSTALL GATES PLUMB AND LEVEL TO A TOLERANCE OF 1/4 IN. IN 10 FT.

B. INSTALL GROUND-SET ITEMS IN CONCRETE.

C. ADJUST HARDWARE TO PROVIDE SMOOTH OPERATION. LUBRICATE WHERE REQUIRED.

D. KNUCKLE ENDS OF FABRIC TO ELIMINATE HAZARDS. ALLOW CLEARANCE ON GATES OF 1-1/2" AT BOTTOM.

3.6 EXISTING FENCING; REMOVAL, REUSE, SALVAGE, & MODIFICATIONS

A. REMOVAL WORK: 1. REMOVE EXISTING FENCING AS INDICATED, INCLUDING CONCRETE POST

FOOTINGS AND MOW STRIPS. 2. POST HOLES: FILL WITH EARTH, COMPACT TO SAME DENSITY AS SURROUNDING EARTH. AT PAVING AREAS, COMPACT FILL TO 95% MAX. DRY DENSITY, AND FLUSH WITH ADJOINING SURFACES.

3. DISPOSAL: DISPOSE OF ALL REMOVED MATERIALS WHICH ARE NOT INDICATED TO BE REUSED OR SALVAGED, OFF-SITE AT CONTRACTOR'S

B. REUSE OF EXISTING FENCING; WHERE INDICATED AND APPROVED BY

1. REMOVE EXISTING FENCE FABRIC AS INDICATED. LEAVE POSTS AND FOOTINGS IN PLACE. 2. FULLY CLEAN EXISTING POSTS OF ALL RUST, PROPERLY PREP, AND APPLY GALVANIZING PAINT PER MFR.'S SPECIFICATIONS. FINISH SURFACE TO BE CLEAN AND SMOOTH AND WITH CONSISTENT GALVANIZED COATING

EQUAL TO G-90 HOT-DIPPED GALVANIZING. 3. REPLACE ANY DAMAGED POSTS AS DETERMINED BY THE ARCHITECT.

4. PROVIDE NEW POSTS AND FRAMING MEMBERS AS INDICATED ON

5. INSTALL NEW FENCE FABRIC AND HARDWARE TO SAME REQUIREMENTS AS SPECIFIED FOR ALL-NEW WORK.

6. DO NOT REUSE DEFECTIVE MATERIALS OR PARTS. 7. SUPPLY ANY MISSING AND/OR ADDITIONAL PARTS NECESSARY FOR A

COMPLETE INSTALLATION. 8. CONFORM TO SAME STANDARDS AS FOR ALL-NEW WORK.

9. DISPOSE OF ALL REMOVED MATERIALS WHICH ARE NOT INDICATED TO BE REUSED, OFF-SITE AT CONTRACTOR'S EXPENSE.

3.7 ADJUSTMENT & CLEANING A. ADJUSTMENT: ADJUST BRACE RAILS AND TENSION RODS FOR RIGID INSTALLATION. TIGHTEN HARDWARE, FASTENERS, AND ACCESSORIES.

B. REPAIR OF DAMAGED WORK: WHERE OPERATIONS DAMAGE WORK TO REMAIN,

REPAIR, REPLACE OR RESTORE WORK AS DIRECTED BY ARCHITECT AND/OR

DISTRICT USING QUALIFIED WORKMEN OF RESPECTIVE TRADES. CLOSELY

COORDINATE WORK WITH IRRIGATION, PAVING, CONCRETE, LANDSCAPING,

ELECTRICAL AND UTILITIES, AND ALL OTHER RELATED OR ADJACENT WORK. C. CLEANING: REMOVE EXCESS AND WASTE MATERIALS FROM PROJECT SITE.

END OF SECTION

DIV. OF THE STATE ARCHITEC APP: 03-121031 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 09/28/2020

IDENTIFICATION STAMP

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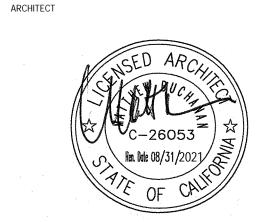
> **HEADQUARTERS OFFICE:** 815 Colorado Blvd, Suite 200 Los Angeles, CA 90041 P 323.543.8300

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RELOCATION OF (2) 24'x40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL

WESTSIDE UNION SCHOOL DISTRICT

40641 PEONZA LANE

PALMDALE, CA 93551

SPECIFICATIONS

07-22-2020

G:\Project\2913—0000—WUSD—RanchoVista—2ReloCR\DWG\SPEC—2.dwg; Last Saved By: GWibowo — Jul 22, 2020 — 10:30am Last Printed By: GWIBOWO — Aug 21, 2020, 11:08am;

GENERAL NOTES

- SCOPE OF WORK: PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND FACILITIES FOR A COMPLETE SATISFACTORY AND OPERABLE ELECTRICAL INSTALLATION AS SHOWN AND SPECIFIED.
- ALL WORK, MATERIALS, FIXTURES, EQUIPMENT, APPARATUS, DEVICES, ITEMS, OPERATIONS AND INSTALLATION OF METHODS PERFORMED UNDER THIS DIVISION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ALL LOCALLY CONSTITUTED AUTHORITITES HAVING JURISDICTION INCLUDING, BUT NOT LIMITED TO, THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION, NATIONAL ELECTRICAL CODE, UNDERWRITERS LABORATORIES, STATE OF CALIFORNIA, DIV. OF INDUSTRIAL SAFETY, ELECTRICAL SAFETY ORDERS, APPLICABLE COUNTY AND CITY ORDINANCES CODES AND REGULATIONS OF THE STATE FIRE MARSHALL, APPLICABLE REGULATION OF THE POWER COMPANY.
- ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BEAR THE LABEL OF THE UNDERWRITER'S LABORATORIES, SHALL BE ON THEIR LIST OF ELECTRICAL FITTINGS AND SHALL BE USED FOR THE PURPOSES FOR WHICH THEY ARE APPROVED, UNLESS THE MATERIAL AND EQUIPMENT ARE OF THE TYPE WHICH THE UNDERWRITER'S LABORATORIES DO NOT LIST OR LABEL.
- CONTRACTOR SHALL VISIT THE SITE, DETERMINE ALL THE WORK TO BE DONE AND ALL CONDITIONS AFFECTING THE WORK AND THE COSTS THEREOF. ALL COSTS OF WHATEVER NATURE ARISING OUT OF THIS WORK SHALL BE INCLUDED IN THE BID.
- SERVICE EQUIPMENT SHALL BEAR THE U.L. LABEL AND SHALL CONFORM TO THE POWER COMPANY'S REQUIREMENTS AND BE AS MANUFACTURED BY SQUARE - D OR EQUAL. EACH DISCONNECTING DEVICE SHALL BEAR AN ENGRAVED DESIGNATION OF THE EQUIPMENT CONTROLLED.
- SUBMIT 5 COPIES OF SHOP DRAWINGS AND MATERIAL LISTS TO OWNER FOR APPROVAL BEFORE PURCHASE.
- VERIFY AVAILABLE SHORT CIRCUIT WITH POWER COMPANY AND PROVIDE CIRCUIT BREAKERS AND SWITCHBOARD BUSSES FOR THAT DUTY.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHERS AND SHALL INSTRUCT THE OWNER ON THE USE AND MAINTENANCE OF THE ELECTRICAL EQUIPMENT INSTALLED.
- DISCONNECTING MEANS AND OVERLOAD PROTECTION SHALL BE INSTALLED FOR ALL MOTORS TO COMPLY WITH N.E.C. AND LOCAL CODES.
- 10. VERIFY EXACT LOCATIONS OF OUTLETS AND EQUIPMENT IN FIELD.
- 11. ALL ELECTRICAL EQUIPMENT EXPOSED TO WEATHER SHALL BE WEATHERPROOF.
- FURNISH, INSTALL AND CONNECT A/C SYSTEM CONTROL COMPONENTS AS REQUIRED BY MECHANICAL SECTION.
- THE ELECTRICAL CONTRACTOR SHALL EXAMINE ALL CONTRACT DOCUMENTS IN ORDER TO LOCATE OUTLETS AND EQUIPMENT IN COORDINATION WITH CONSTRUCTION SUCH AS BEAMS, FURRING, CABINETS, DOOR SWINGS, DUCTS PIPES, ETC.
- WIRING SYSTEM SHALL BE INSTALLED IN CONDUIT OR DUCT. DUCT UNDER GROUND SHALL BE RIGID SCHEDULE 40 PVC CONDUIT, IN CONCRETE SLABS OR WHERE EXPOSED SHALL BE GALVANIZED RIGID STEEL. CONDUITS IN STUD WALL SHALL BE FLEXIBLE. USE FLEXIBLE CONDUITS FOR FINAL EQUIPMENT CONNNECTIONS.
- ALL CONDUITS SHALL BE CLEANED OF WATER DEBRIS AND OTHER FOREIGN MATERIALS BEFORE PULLING OF WIRE.
- CONDUITS WHICH ARE INSTALLED AT THIS TIME AND LEFT EMPTY FOR FUTURE USE SHALL HAVE A NYLON PULL ROPE LEFT IN PLACE FOR PULLING WIRES.
- PANEL BOARDS SHALL HAVE HINGED LOCKABLE DOORS, ENGRAVED I.D. PLATES AND TYPEWRITTEN CIRCUIT INDEX CARDS. FINISH SHALL BE FACTORY STANDARD GRAY IN EQUIPMENT ROOMS.
- ALL FLUORESCENT FIXTURE BALLAST SHALL BE CMB-ETL CERTIFIED AS CLASS "P" AND SHALL HAVE U.L. APPROVAL. THE BALLAST SHALL BE THE LOWEST HEAT PRODUCING, ENERGY CONSERVATION TYPE AVAILABLE.
- CONDUCTORS IN FLUORESCENT FIXTURES SHALL BE TYPE THHN OR AVA.
- 20. CONDUCTORS #10 AND SMALLER SHALL BE SOLID TYPE THHN, #8 AND LARGER SHALL BE STRANDED TYPE THHN OR XHHW. ALL CONDUCTORS SHALL BE COPPER.
- CONDUCTORS ON ROOF OR IN ROOF STRUCTURE SHALL BE 90 DEGREE CENTIGRADE RATED.
- 22. CONTRACTOR, AT HIS OPTION, MAY COMBINE CONDUIT HOME RUNS WHILE PROPERLY DERATING CURRENT CARRYING CAPACITY OF CONDUCTORS ACCORDING TO THE NUMBER OF WIRES USED IN ONE CONDUIT.
- CONTRACTOR SHALL PROVIDE A ONE YEAR WRITTEN GUARANTEE FOR MATERIALS AND LABOR.
- PROVIDE GROUND CONNECTIONS OF SYSTEMS AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. USE SEPARATE BONDING WIRE IN FLEXIBLE CONDUITS.
- THE CONTRACTOR SHALL PERFORM HIS WORK IN AN ACCEPTABLE MANNER MAINTAINING MAINTAINING GOOD HOUSEKEEPING DURING CONSTRUCTION AND LEAVING THE JOB SITE CLEARED OF ALL REFUSE TO MEET THE OWNER'S APPROVAL. ALL ELECTRICAL EQUIPMENT BOTH INSIDE AND OUTSIDE, SHALL BE LEFT CLEAN AND CLEAR OF STAIN, GREASE, SPATTER, FINGER MARKS OR OTHER SOIL, FINISHED SURFACES SUCH AS PANEL BOARDS. CABINETS AND THE LIKE SHALL HAVE PAINT SCARS RETOUCHED AND POLISHED.
- EXISTING SOURCE OF POWER HAS BEEN INVESTIGATED AND IS ADEQUATE FOR ADDITIONAL
- EXISTING FIRE ALARM SYSTEM HAS AUTOMATIC FIRE WATCH DIAL OUT CAPABILITY

FIRE ALARM WIRING SCHEDULE

ALL WIRING SHALL BE INSTALLED IN METALLIC CONDUIT MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS OTHERWISE NOTED. S = (1) 2C #18 THH CABLE - SIGNALING CIRCUIT P = 2 #14 THHN ANNUNCIATOR POWER A = 2 #14 THHN AUDIBLE CIRCUIT V = 2 #12 THHN VISUAL CIRCUIT D = 2C #18 TW-SH CABLE AND 2 #14 THHN DETECTOR CIRCUIT

R = 2 #14 THHN DOOR RELEASE CIRCUIT.

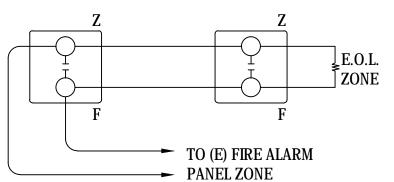
SEQUENCE OF OPERATIONS (PER CBC/CFC 907.5.2.2 AND 907.5.2.3 REQUIREMENTS)

ALARM

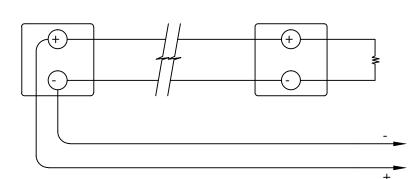
- WHEN AN INITIATING DEVICE IS ACTIVATED. THE FIRE ALARM CONTROL PANEL DOES THE FOLLOWING:
- a. SHOWS THE NAME OF THE THE ACTIVATED ZONE ON THE PANEL DISPLAY WINDOW. b. SENDS ALARM SIGNAL TO ALL FIRE SIGNALLING SPEAKERS.
- c. ACTIVATES ALL STROBES AND SPEAKERS.
- d. LOGS EVENT TO MEMORY.
- THE ALARM WILL CONTINUE UNTIL THE PANEL SILENCE SWITCH IS ACTIVATED. THE PANEL CAN BE RESET ONLY AFTER AN ACTIVATED PULL STATION IS RESTORED.

TROUBLE

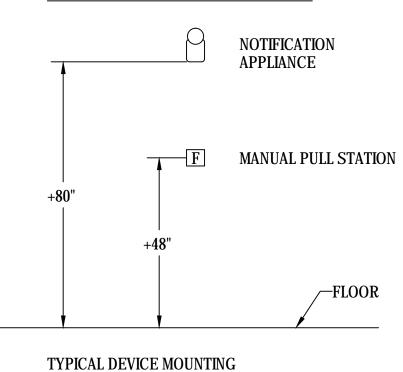
THE PANEL WILL SOUND A TROUBLE TONE, SHOW THE TYPE OF TROUBLE AND LOCATION IN THE PANEL DISPLAY WINDOW. THE TONE CAN BE SILENCED BY ACTIVATING THE ACKNOWLEDGE SWITCH. TROUBLE WILL BE DISPLAYED UNTIL CORRECTED. TROUBLE CONDITIONS ARE LOGGED IN THE SYSTEM MEMORY.



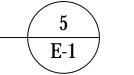
MANUAL PULL STATION



STROBE LIGHT / HORN STROBE / HORN



FIRE ALARM DETAILS



FIRE ALARM EQUIPMENT LIST							
SYMBOL	MFG.	MODEL	DESCRIPTION	C.S.F.M. #			
FA	NOTIFIER	NFS2-640(E)	CONTROL PANEL	7165-0028:243			
\otimes	NOTIFIER	FSP 851	SMOKE DETECTOR	7272-0028:206			
\otimes	NOTIFIER	FST 851	HEAT DETECTOR	7270-0028:196			
⊳ S	SYSTEM SENSOR	SPSR	SPEAKER STROBE-SELECTABLE 15, 15/75, 30, 75, 110	7125-1653:201			
⊳ <u>S</u> EXT	SYSTEM SENSOR	SPRK	EXTERIOR SPEAKER W.P.	7320-1653 :505			
F	NOTIFIER	NBG-12LX	PULL STATION	7150-0028:199			

EQUIDMENT MODEL	QUANTITY	SUPERVISORY	CURRENT A.	ALARM CURRENT A.		
EQUIPMENT MODEL	QUANTITI	UNIT	TOTAL	UNIT	TOTAL	
FA	1	0.100	0.100	0.100	0.100	
\otimes	4	0.00065	0.0026	0.00065	0.0026	
\otimes	4	0.00065	0.0026	0.00065	0.0026	
<u>⊳s</u>	2			0.170	0.340	
⊳ <u>s</u> _{ext}	1			0.242	0.242	
STANDBY 2.544 AH ALARM 0.172 AH	SU	B TOTAL O.106 x 24	A HRS	SUB TOTAL	0.687 A x .25 HRS	
2.72 AH F	REQUIRED	2.544	AH		0.172 AH	
7 .AH BAT	TERY PACK PR	OVIDED		0.25 HRS :	15 MIN	

WORST CASE VOLTAGE DROP CALCULATION

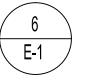
- F.A. SIGNAL CIRCUIT #12 AWG
- = TOTAL CURRENT IN ALARM CONDITION = 0.587 = LENGTH OF CIRCUIT FROM SUPPLY TO LAST DEVICE = 450'
- 21.6 = RESISTIVITY OF Cu CONDUCTOR PER CIRCULAR MILL C.M. = CROSS SECTIONAL AREA OF CONDUCTOR #12 = 6530 CIRC. MILL.

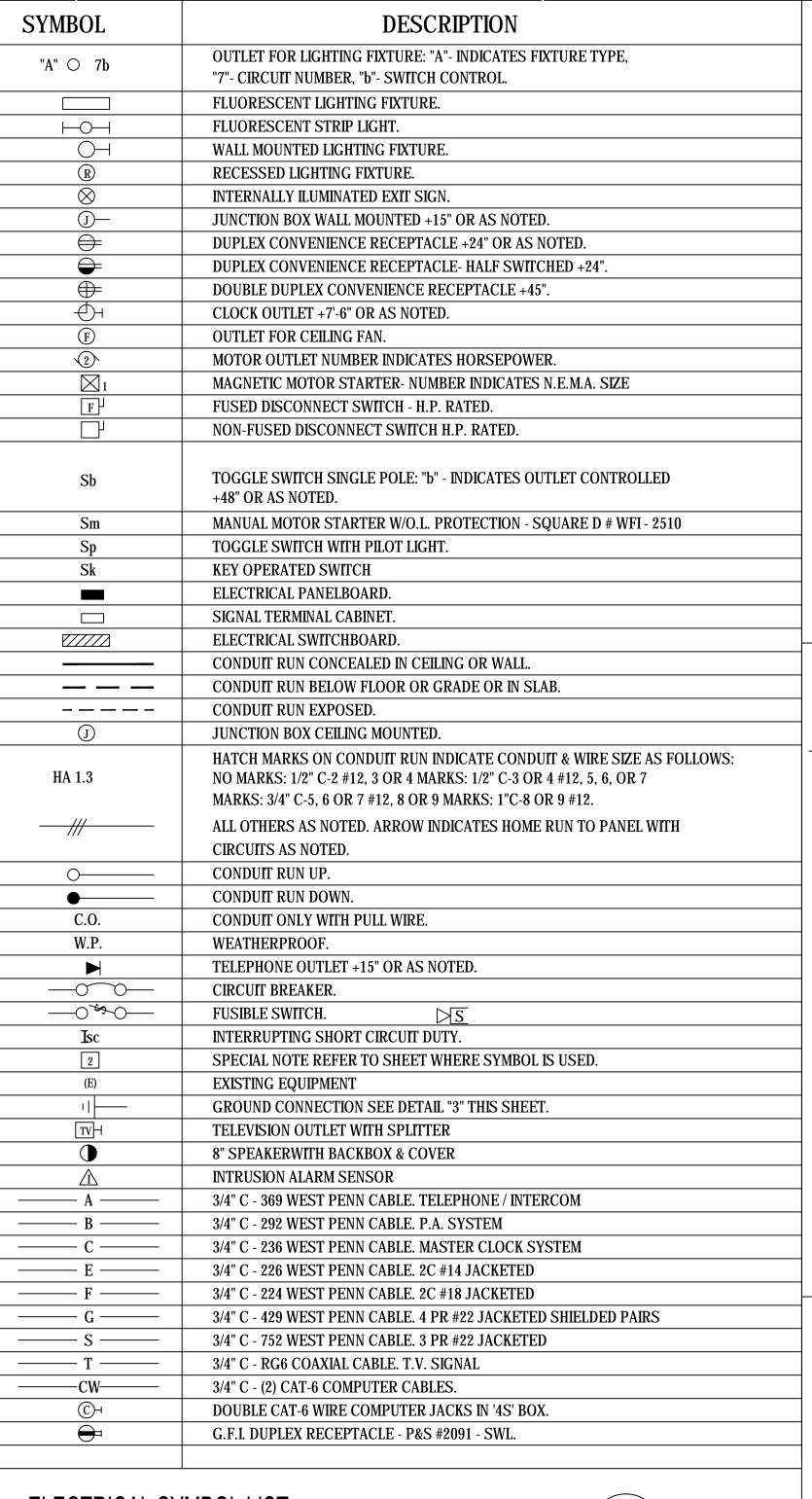
I x L x 21.6 ---- = VOLTS DROP C.M.

> 0.587 x 450 x 21.6 = 0.874 VOLTS DROP 6530

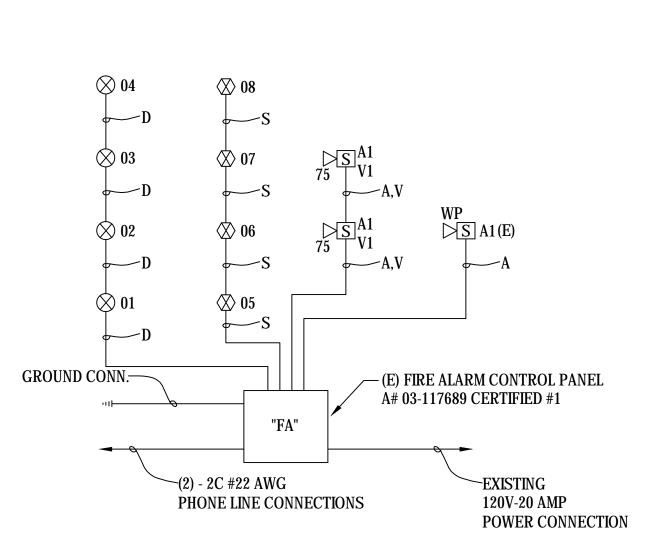
3.64% VOLTAGE DROP

FIRE ALARM CALCULATIONS





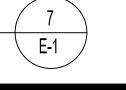
ELECTRICAL SYMBOL LIST

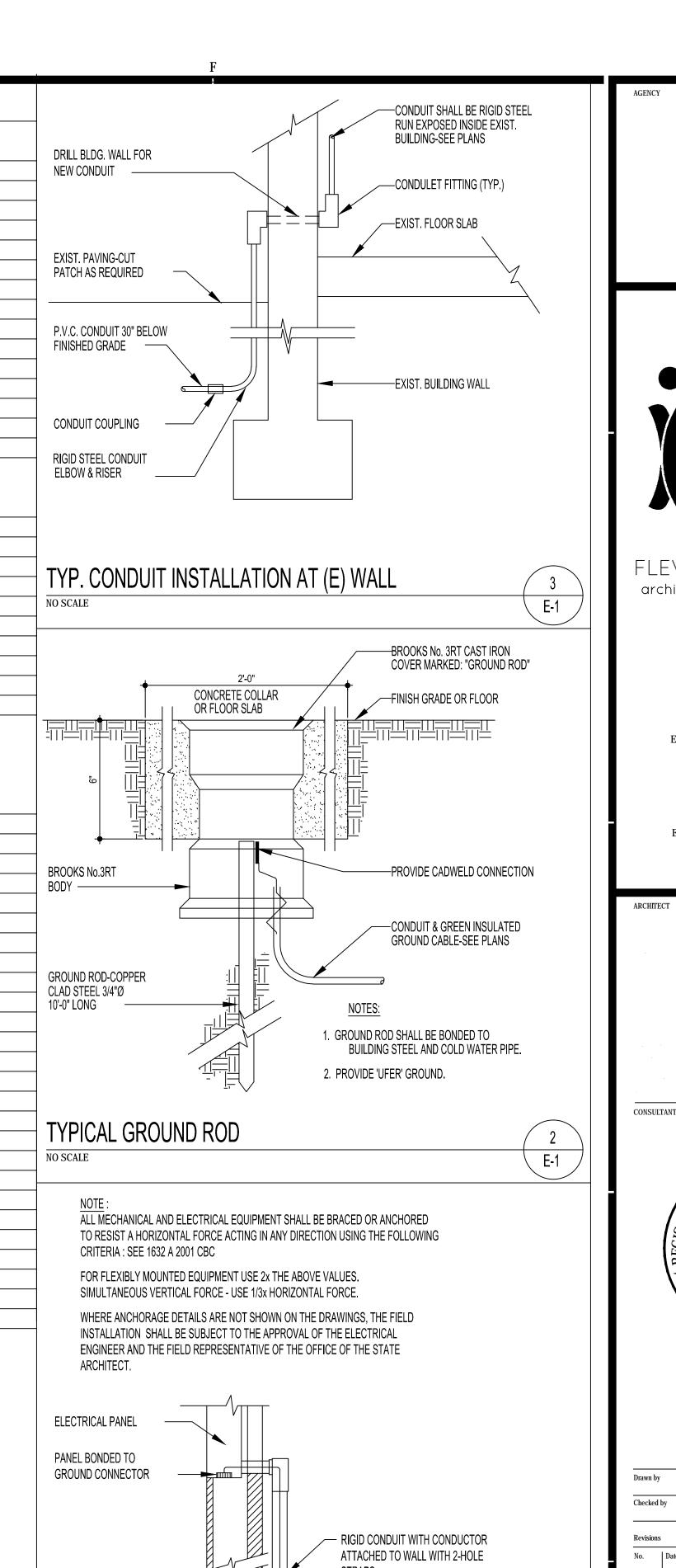


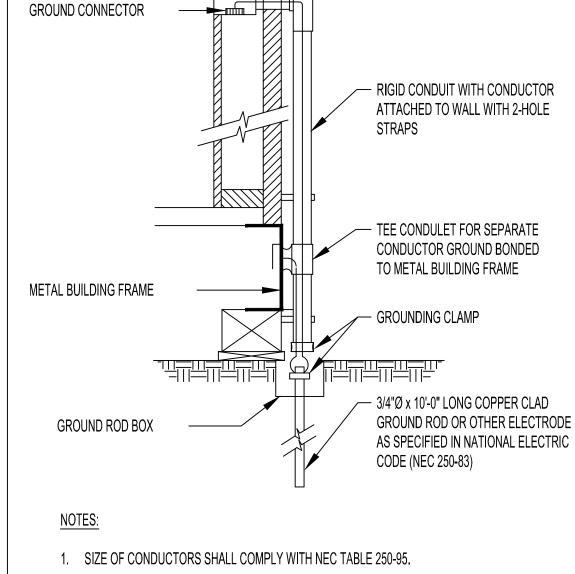
NOTE: USE SPARE CIRCUITS IN EXISTING FIRE ALARM CONTROL PANEL FOR THESE (2) NEW CLASSROOMS FIRE ALARMS SYSTEMS BEING INSTALLED.

EVACUATION FIRE ALARM SYSTEM IS FULLY AUTOMATIC

FIRE ALARM RISER DIAGRAM







- 2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME (NEC 250-81) IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. INTO
- 3. ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING).

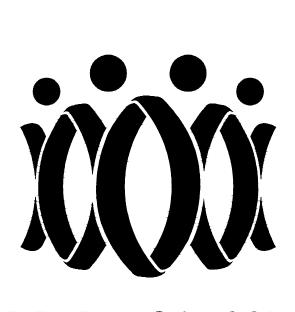
THE SOIL IF AVAILABLE (NEC 250-81 AND 250-83).

- 4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN, SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS. (NEC 250-84).
- 5. SITE INSPECTOR IS TO WITNESS AND VERIFY GROUNDING TEST.

BUILDING GROUNDING

E-1 06-11-2020

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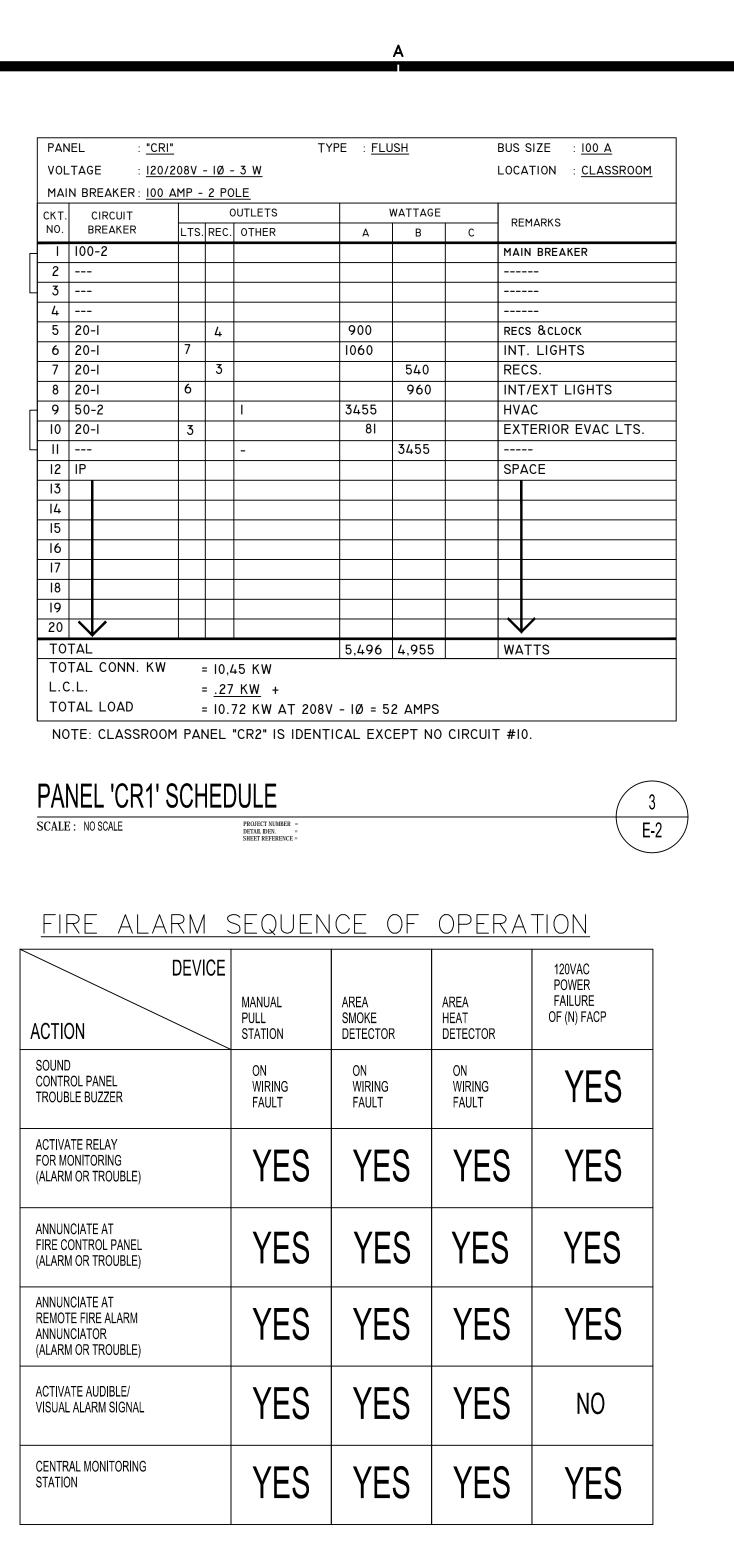
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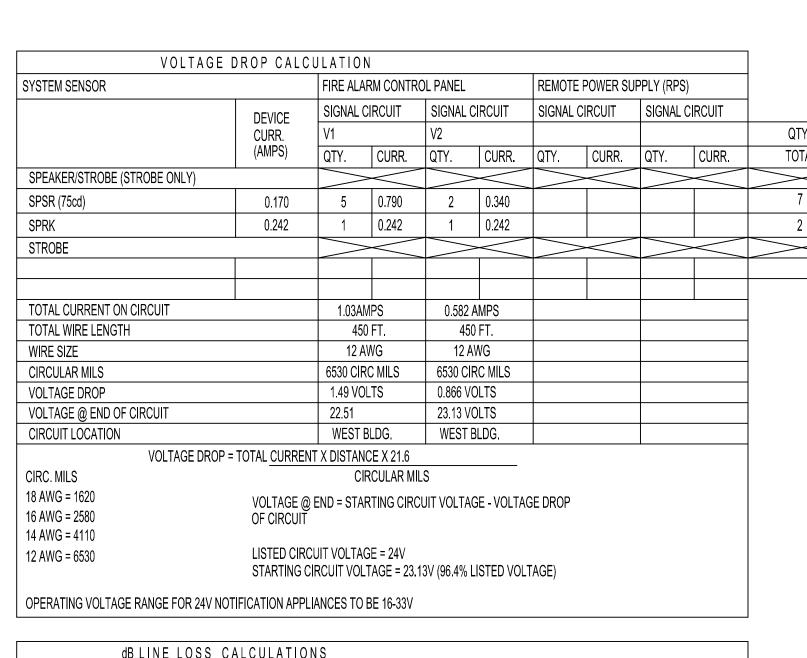
> RELOCATION OF (2) 24'x40' MODULAR CLASSROOM BUILDINGS TO RANCHO VISTA ELEMENTARY SCHOOL **40641 PEONZA LANE** PALMDALE, CA 93551

WESTSIDE UNION SCHOOL DISTRICT

NOTES, SYMBOLS, DETAILS DIAGRAMS & CALCULATIONS

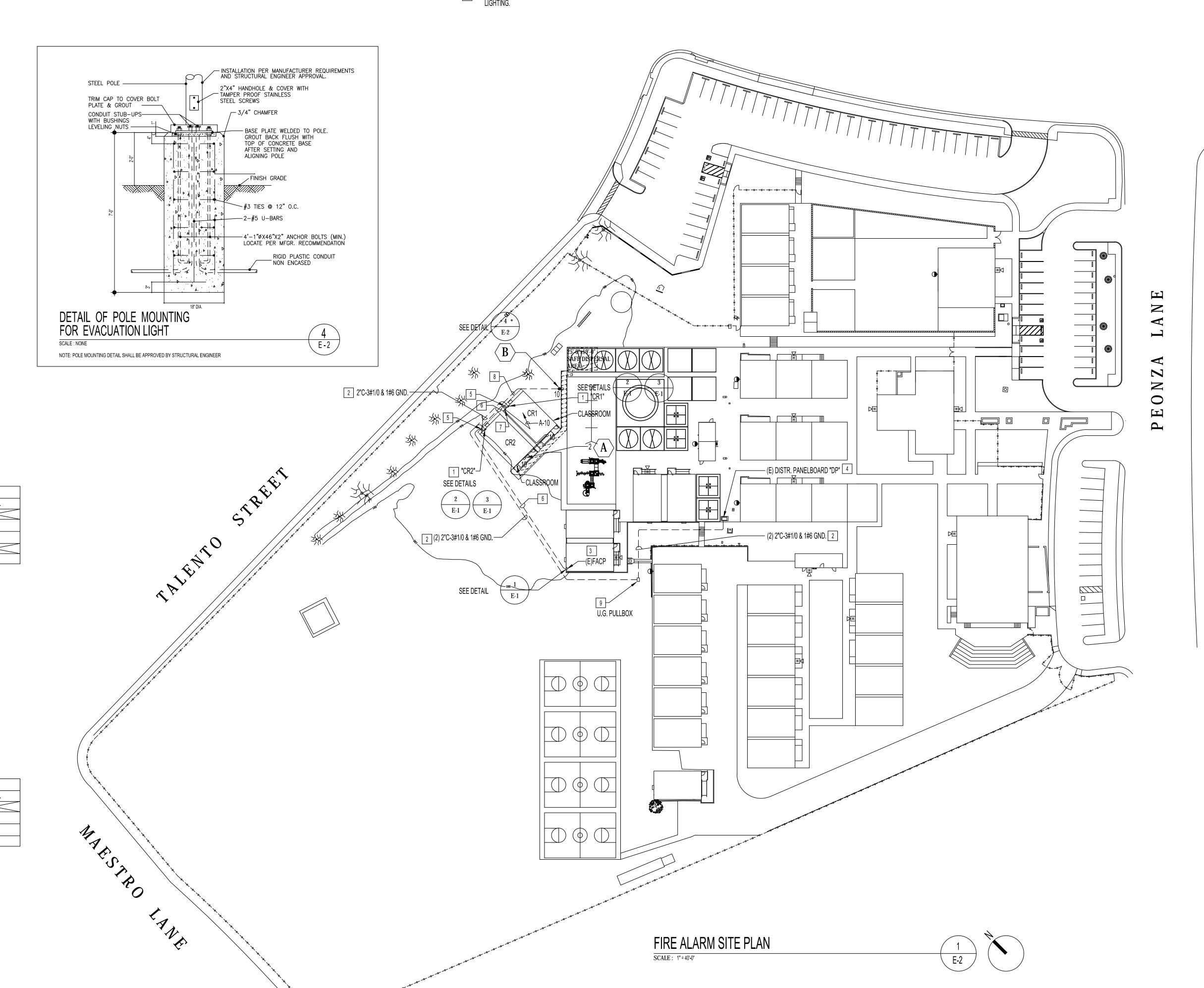
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dB LINE LOS	S CALCULATIO	NS								
SPEAKERS		VOICE	PANEL	/ CARD						
50.00 WATTS AVAILABLE FOR	DEVICE	SIGNAL CIRCUIT		SIGNAL	SIGNAL CIRCUIT		SIGNAL CIRCUIT		CIRCUIT	
SIGNAL CIRCUIT A1	POWER	A1		A2		A3		A4		QTY
	(WATTS)	QTY.	CURR.	QTY.	CURR.	QTY.	CURR.	QTY.	CURR.	TO
SPEAKER 70.7V	'									>
SPEAKER - 1 WATT TAP	1.00	5	5.00	2	2.00					7
SPEAKER - 2 WATT TAP	2.00	1	2.00	1	2.00					2
TOTAL POWER ON CIRCUIT		7.00 W	 'ATTS	4.00 V	 VATTS					
LOAD RESISTANCE		82.3 C			OHMS					
TOTAL WIRE LENGTH		450 FT.		450 FT.						
WIRE SIZE		14 AWG		14 AWG						
TOTAL WIRE RESISTANCE		0.21OHMS		0.12OHMS						
POWER LINE LOSS (dB)		-0.05		-0.03	31 dB					
CIRCUIT LOCATION		SCHOO	SCHOOL							
TOTAL WIRE	RESISTANCE (WR)= (RESISTANC	E/1000) X D	ISTANCE			A1	USE		
WIRE RESISTANCE (Ohms/Kft)*										
18 AWG = 8.08	LOAD RESIS	STANCE (LR)) = (VOLTAG	SE X VOLTA	(GE)		_			
16 AWG = 5.08				POWER	₹		_			
14 AWG = 3.26	POWER LIN	E I OSS (4B)	= 10 X I OG	(1_ (\MR / (\	MR+I R\\					
12 AWG = 2.05 * VALUES PER NFPA 70	VOLTAGE =	, ,			· · · · · · · · · ///					

			LIGHTING FIXTUR	E SCHEDULE		
FIXTURE SYMBOL	N O	LAMPS TYPE	FIXTURE DESCRIPTION	MANUFACTURER CATA. No.	FINISH	MOUNTING
$\overline{\langle A \rangle}$	1	LED 15W 4000K	9" W X 8"H X 5-1/2" D WALL PACK EXTERIOR TYPE LED WALL SCOUNCE.	LITHONIA # WDGE1-LED-P2-40K-80CRI-VW-DBLXD	WHITE	SURFACE WALL MOUNTI 12' A.F.F.
$\overline{\left\langle \mathbf{B}\right\rangle }$	1	LED 51W 4000K	POLE MOUNTED EXTERIOR LED AREA LIGHTING FIXTURE ON 10' SQUARE POLE WITH 2' HIGH CYLINDRICAL BASE.	LITHONIA # RSX1-LED-P1-40K-R4-DBLXD WITH # SSS-10-4C-DBL POLE	BLACK	POLE MOUNTED 12' A.F.F.



ELECTRICAL SPECIAL NOTES:

STARTING WORK.

WITH SCREW COVER.

PROVIDE 1"C-(A, D, S, V) FIRE ALARM CABLES.

EVACUATION LIGHTING TO BE WALL MOUNTED.

1 PREFABRICATED CLASSROOM BUILDING IS FURNISED WITH CIRCUIT BREAKERS

FURNISH AND INSTALL GROUND ROD. SEE DETAIL #3 ON SEET E-1. PROVIDE

#5 ON SEET E-1. VERIFY EXACT PANEL LOCATION IN THE FIELD PRIOR TO

THWN FOR DRY LOCATION AND XHHW FOR WET LOCATIONS.

FOR DEVICES INSTALLED IN NEW MODULAR CLASSROOM.

CONNECTION TO BUILDING STEEL AND PANEL GROUNDING TERMINAL. SEE DETAIL

ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 P.V.C. MINIMUM 24" BELOW

FINISED GRADE WITH 3" CONCRETE ENCASEMENT, INSTALL SEPARATE, CODE SIZED

SHALL BE RIGID STEEL (TYPICAL). ALL CONDUCTORS SHALL BE COPPER, USE THHN-

EXISTING FIRE ALARM PANEL SHALL BE USED TO SUPPLY FIRE ALARM WIRING

EXISTING 120/208V-3PHASE-4WIRE 800A SWITCHBOARD "PD". PROVIDE NEW (2) 125A-2P BREAKERS FOR FEEDING NEW PORTABLE CLASSROOM BUILDINGS "CR1" &

PROVIDE EMERGENCY LIGHTING INVERTER TYPE MYERS # 1-LVM-1-W FOR EXTERIOR

PROVIDE 3/4"C 2# 10 AND 1#10 GND FOR UNDERGROUND CIRCUITING FOR POLE

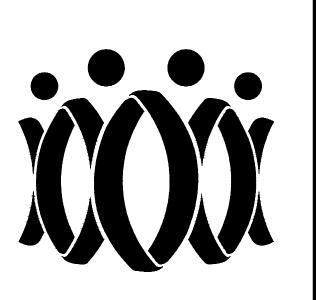
5 FURNISH AND INSTALL WEATHERPROOF FIRE ALARM PULL BOX 6" X 4" DEEP

GROUNDING WIRE IN ALL NONMETALLIC CONDUIT RUNS. BENDS, ELBOWS AND RISERS

PANELBOARD. ELECTRICALCONTRACTOR SHALL MAKE ALL REQUIRED CONNECTIONS.

PROVIDE UNDER GROUND 24" X 36" X 36" DEEP CONCRETE PULLBOX WITH CONCRETE COVER. BROOKS TYPE #67 FOR BODY, COVER AND (2) EXTENSIONS RINGS.

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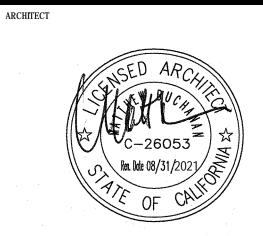


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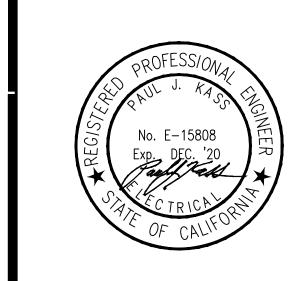
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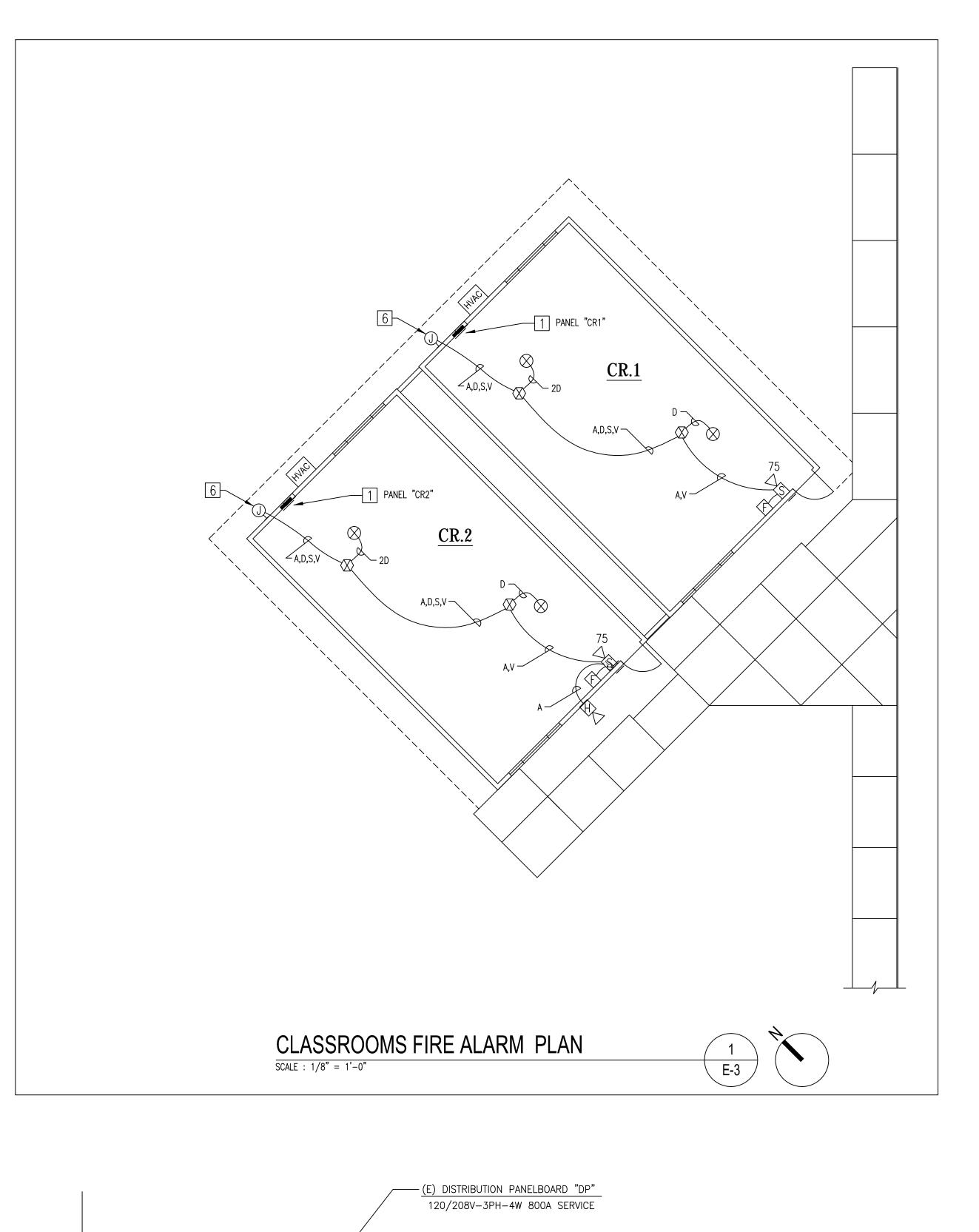
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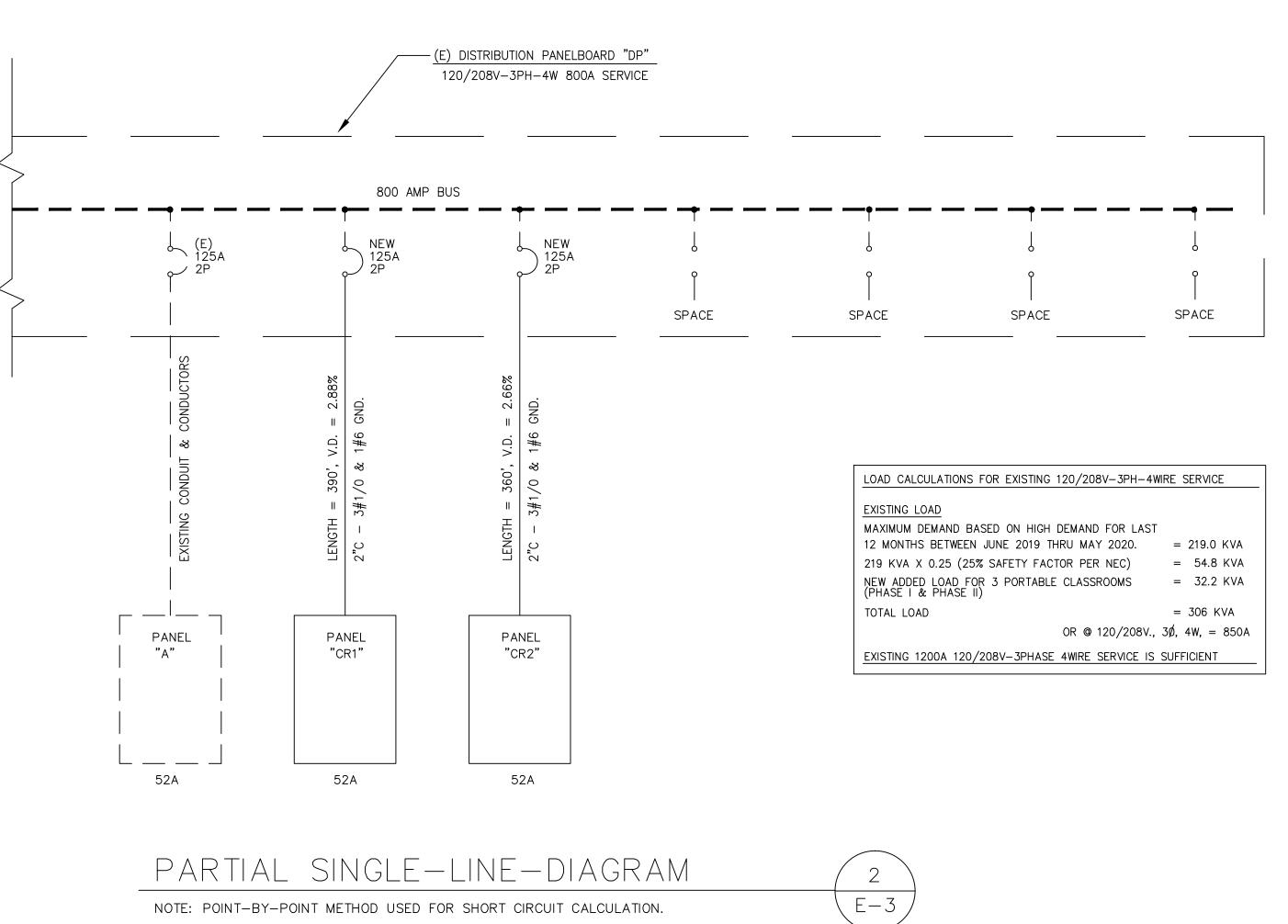
WESTSIDE UNION SCHOOL DISTRICT

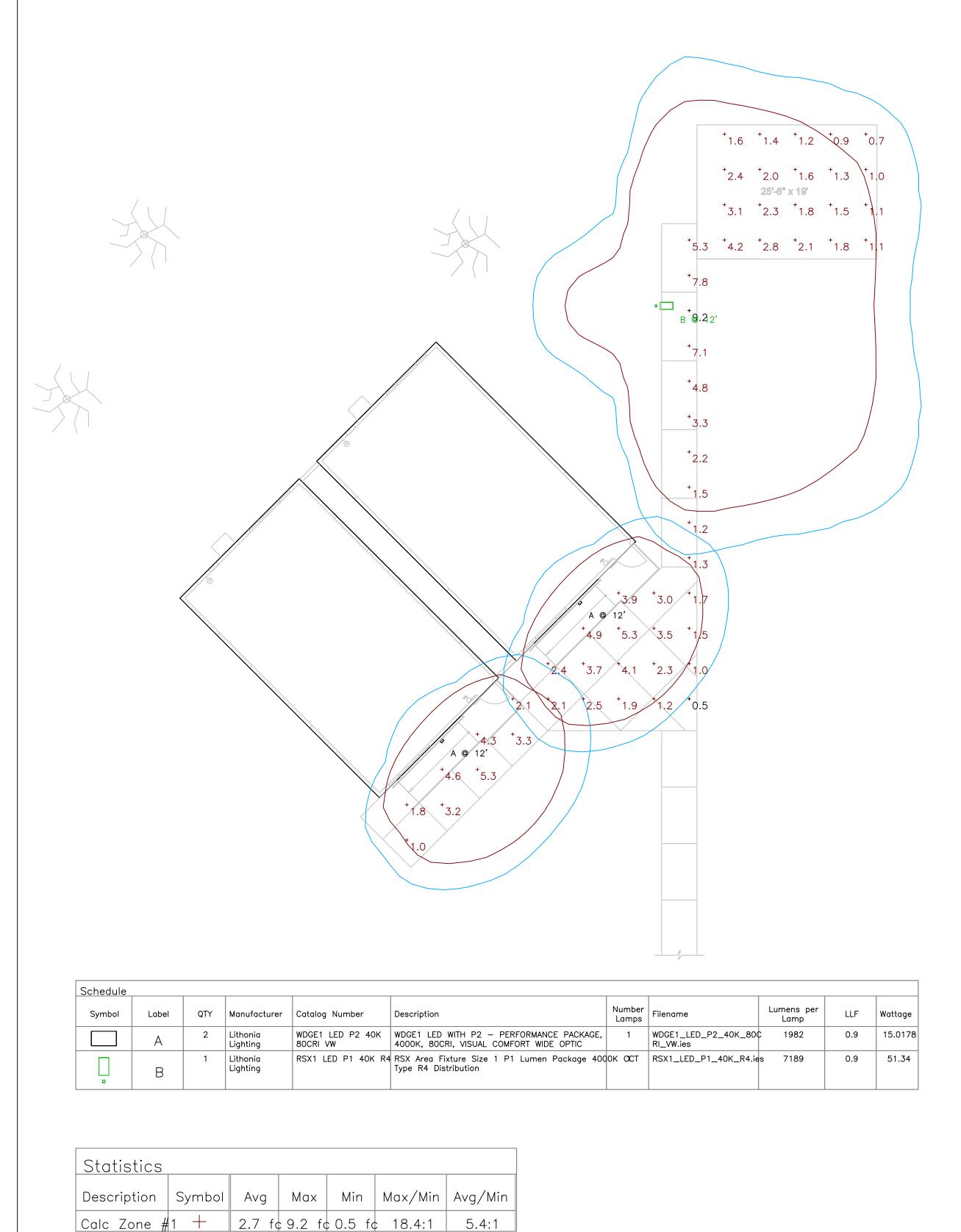
FIRE ALARM SITE PLAN & FIRE ALARM FLOOR PLAN

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06-11-2020



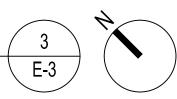




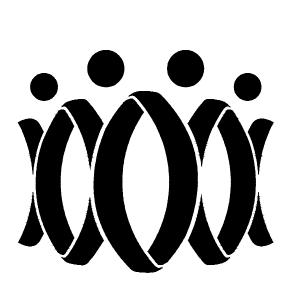
Calc Zone #1 + 2.7 fc 9.2 fc 0.5 fc 18.4:1 5.4:1

EVACUATION EMERGENCY LIGHTING POINT-BY-POINT CALCULATIONS

SCALE: 1" = 10'-0"



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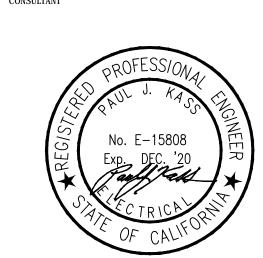
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Drawn	by	PJK		
Checked by		PJK		
Revisio	ns			
No.	Date		Description	

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WESTSIDE UNION SCHOOL DISTRICT

EVACUATION EMERGENCY LIGHTING PT-BY-PT CALCULATIONS, FIRE ALARM PLAN & SLD

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06-11-2020

E-3

DRAWING INDEX

ARCHITECTURAL

0.0 INDEX / COVER SHEET A1.0 FLOOR PLAN A1.0A FLOOR PLAN (W/RESTROOM & CASEWORK) A2.0 ROOF PLAN

A3.0 EXTERIOR ELEVATIONS A4.0 INTERIOR ELEVATIONS A4.1A INTERIOR ELEVATIONS

A5.0 FINISH SCHEDULE A6.0 ARCHITECTURAL DETAILS

A6.1 ARCHITECTURAL DETAILS A7.0 REFLECTED CEILING PLAN

FOUNDATION

A7.1 CEILING DETAILS

F2.0 WOOD FOUNDATION F2.1 WOOD FOUNDATION DETAILS F2.2 WOOD FOUNDATION DETAILS NOTES

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STRUCTURAL

S1.0 FLOOR FRAMING PLAN S1.1 FLOOR FRAMING PLAN (CENTER)

S2.0 ROOF FRAMING PLAN S2.1 ROOF FRAMING PLAN (CENTER)

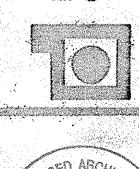
S3.0 STRUCTURAL DETAILS S3.1 STRUCTURAL DETAILS S3.1A STRUCTURAL DETAILS

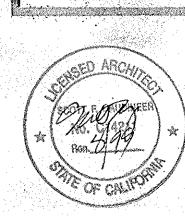
S4.0 STRUCTURAL DETAILS S5.0 WALL FRAMING S5.1 WALL FRAMING DETAILS

S5.2 WALL FRAMING DETAILS

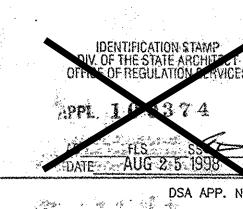
ELECTRICAL

· CC





O DESIGN FACILITIES 1996



LICEANT EXPINES NO J-000

A. PIERCE

9/13/96

2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.

(OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

APPLICABLE CODES

on the product of the control of the

TITLE 24, C.C.R, PART 2, VOL 1 1995 C.B.C (1994 UBC W/CALIF. AMENDMENTS) TITLE 24, C.C. PART 2, VOL 2 1995 C.B.C (1994 UBC W/CALIF. AMENDMENTS)

TITLE 24, C.C.R, PART 3, 1995 C.E.C. (1993 NEC W/CALIF. AMENDMENTS) TITLE, 24, C.C.R, PART 4, 1995 C.M.C. (1994 UMC W/CALIF. AMENDMENTS)

TITLE, 24, C.C.R, PART 5, 1995 C.P.C. (1994 UPC W/CALIF. AMENDMENTS) TITLE, 19, C.C.R, PUBLIC SAFETY, DIV. 1 STATE FIRE MARSHAL REGULATIONS

E1.0 ELECTRICAL PLAN

BUILDING DATA: OCCUPANCY: E1, E2, & E3 - ALLOW BLDG, AREA # 9100 SQ. FT > BLDG. AREA = 960 SQ. FT. TYPE OF CONSTRUCTION VN FLOOR LOAD 50 PSF

ROOF LOAD 20 PSF (REDUCIBLE PER AREA) WIND LOAD 70 MPH EXPOSURE "C" BUILDING AREA 960 SQ. FT.

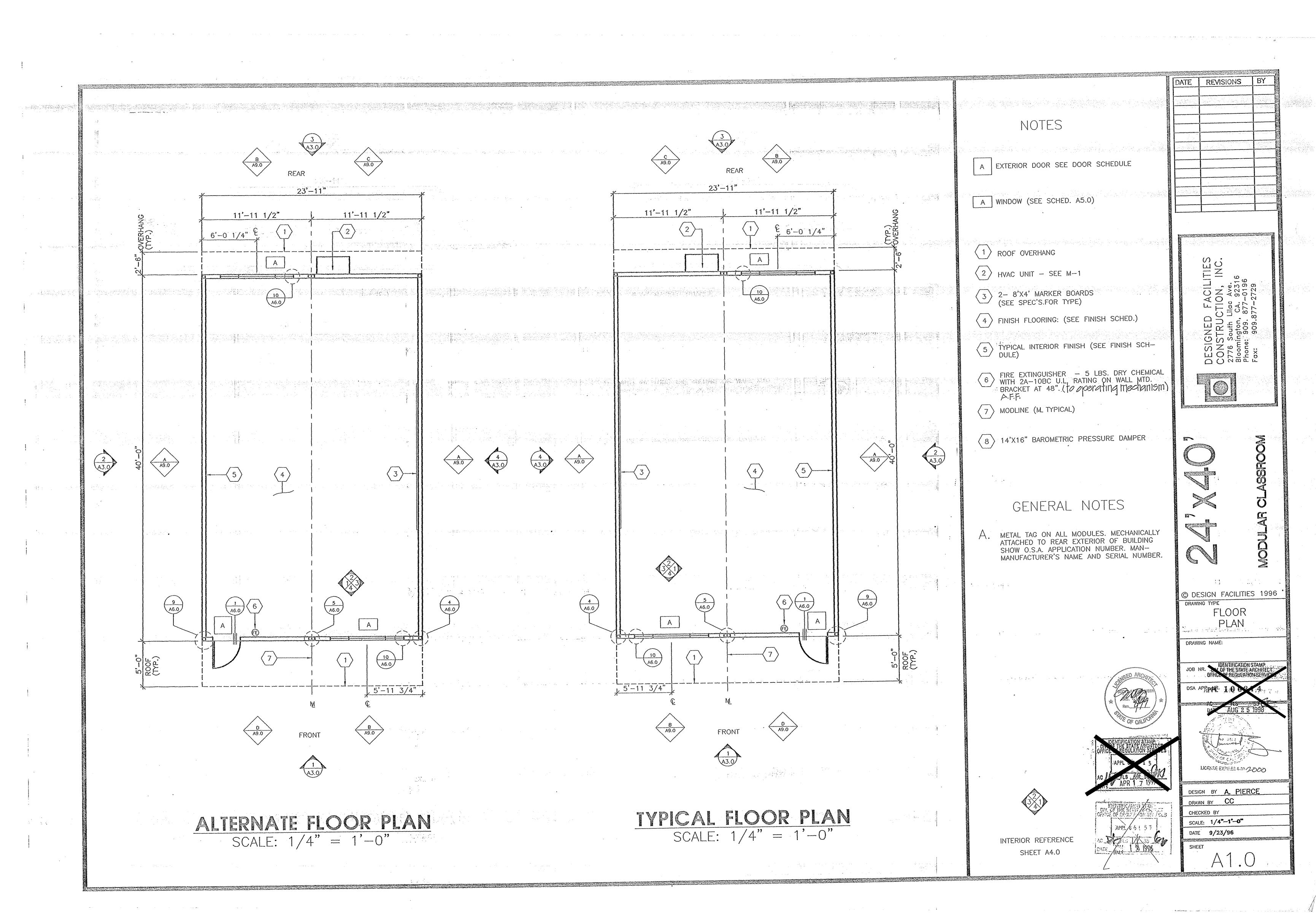
STRUCTURAL DESIGN RIGID FRAME (ORDINARY STEEL MOMENT RESISTING FRAME)

MECHINAL

M1.0 MECHANICAL PLAN

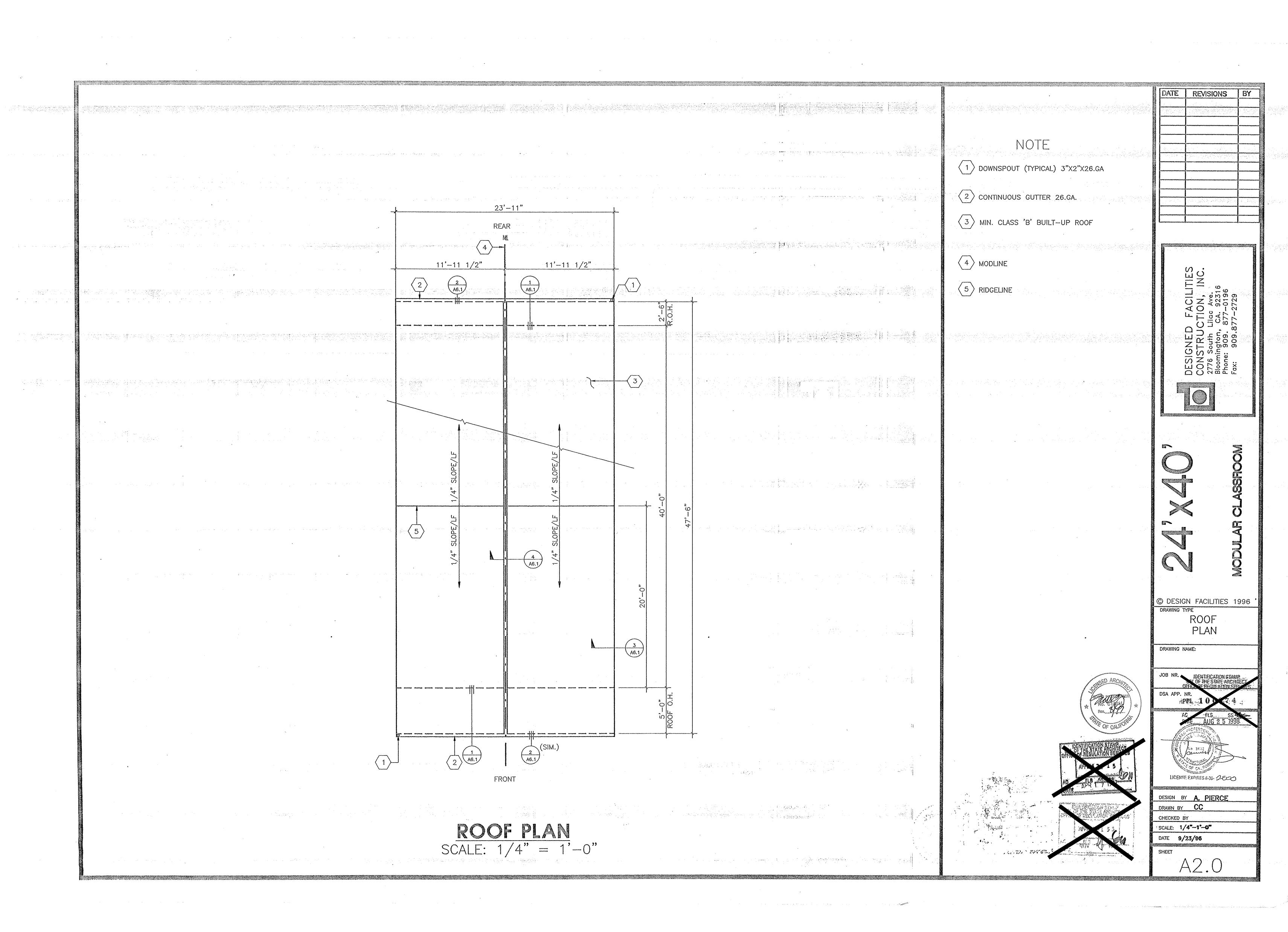
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-121031 INC:

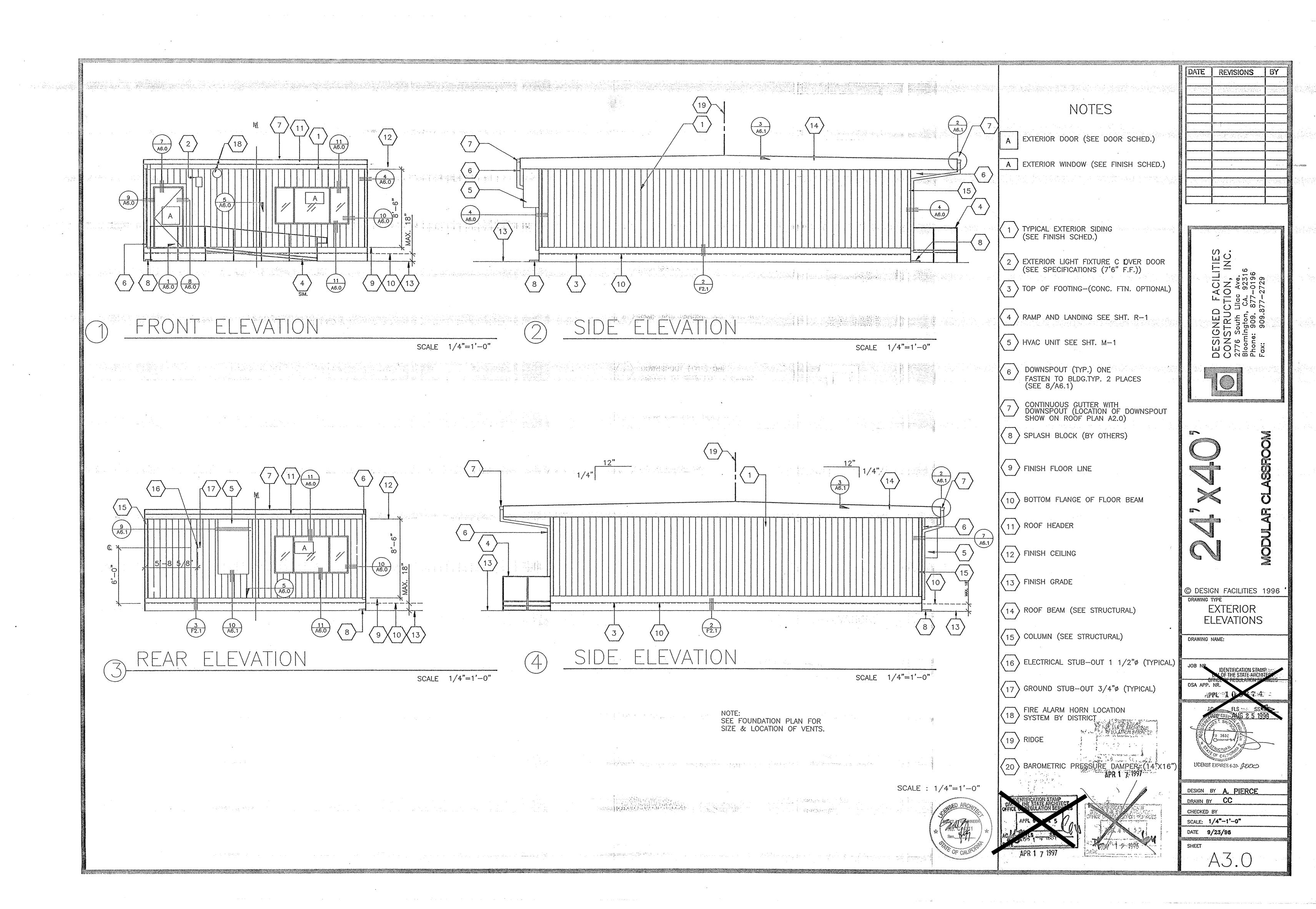
REVIEWED FOR SS FLS ACS DATE: 09/28/2020



IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-121031 INC:

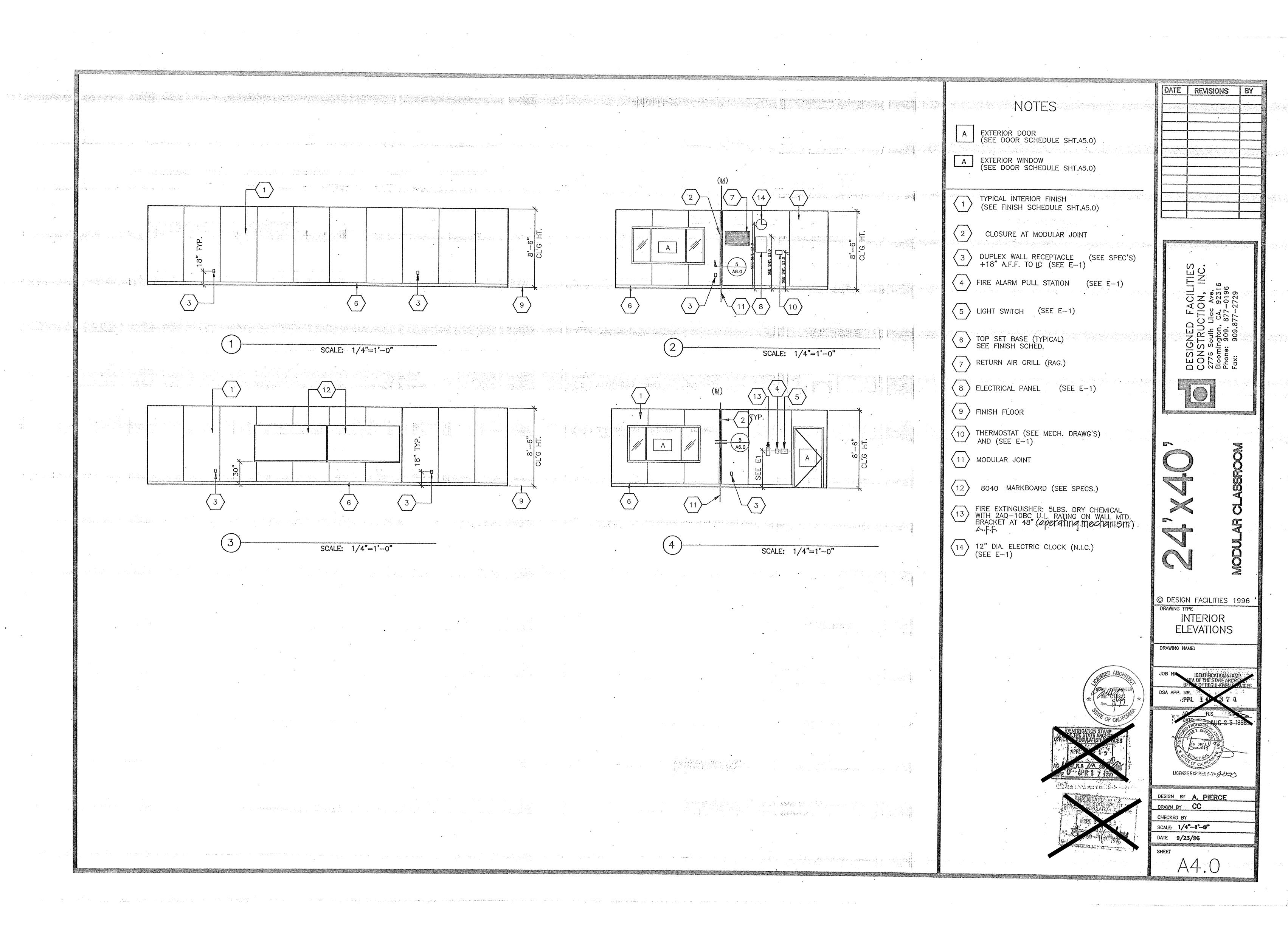
REVIEWED FOR SS ACS ACS DATE: 09/28/2020





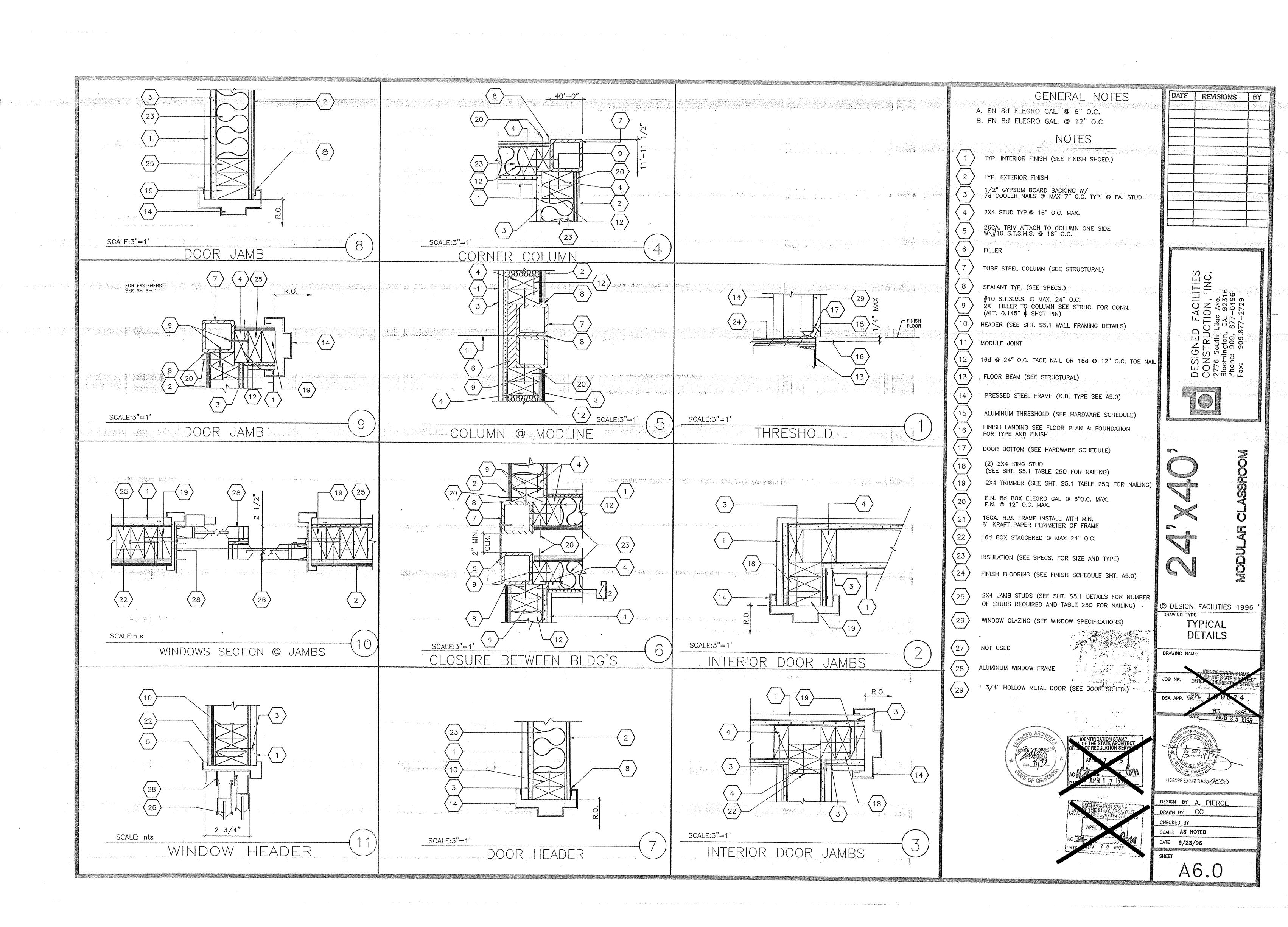
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DOOR SCHEDULE	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	ROOM FINISH SCHEDULE RM. NAME	DATE REVISIONS BY
DOORS FRAMES	NOTES: 1. DOOR HANDLES FOR LOCKSETS TO PARTICIPATE BE CENTERED @ 38" A.F.F. & DEADBOLTS @ 44" A.F.F. 2. HARDWARE TO BE OR OPENABLE FROM THE INSIDE WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT. LEVERS TO RETURN TO WITHIN 1/2" OF DOOR. 3. ALL DOORS SHALL BE 1-3/4" THICK, U.N.O. 4. DOUBLE LETTERS IN SCHEDULE, INDICATES A PAIR OF DOORS. 5. SAFETY GLASS, CLEAR. 6. WIRE GLASS 7. UNDERCUT DOOR	FINISHES REMARKS WALLS SUBJECT OF CALIFORNIA SPEC. COMPLYING WITH GROUP 1, TYPE A OR TYPE B, CLASS 2, DENSITY 4600, DIRECT GLUE DOWN WITH 4" TOPSET BASE. B - SHEET VINYL FLOORINGW/6" INTEGRAL SELFCOVED BASE ARMSTRONG CLASSIC CORLON B - SHEET VINYL FLOORINGW/6" INTEGRAL SELFCOVED BASE ARMSTRONG CLASSIC CORLON WALLS WALLS WALLS SHEET VINYL FLOORINGW/6" INTEGRAL SELFCOVED BASE ARMSTRONG CLASSIC CORLON WALLS WALLS O J J J J J J J J J J J J J J J J J J	
DOOR TYPES	8. FIXED LOUVER 9. FUSIBLE LINK LOUVER 10. VISION PANEL 11. CLOSURE SHALL BE SET FOR MAX. OPENING	WITH PAINTED FINISH H - 5/8" W.R. GYP. BOARD TAPE TEXTURE WITH PAINTED FINISH U - 1/2" GYP. BOARD TAPE/TEXTURE PAINTED WITH PAINTED FINISH U - 5/8" GYP. BOARD TAPE/TEXTURE PAINTED WITH PAINTED FINISH WITH PAINTED FINISH	FACILITIES FION, INC. AVE. 92504 52-5500 52-5501
60" AF. Ed.	WWF — WINDOW WALL FRAME SC — SOLID CORE WOOD HC — HOLLOW CORE WOOD SCL — SOLID CORE WOOD W/ LAMINATED PLASTIC FACES.	WINDOW TYPE (B) - 1/2" MARLITE\FRP OVER 1/2" W.R. GYP BOARD (D) - ACCOUSTICAL LAY IN GRID CEILING PANELS (SEE SPECIFICATIONS)	DESIGNED CONSTRUCT 7888 LINCOLN / RIVERSIDE, CA. Phone: 909. 35 Fax: 909. 35
HARDWARE SCHEDULE HARDWARE PACKAGE #1	ACCESS SIGNAGE	QTY. WIDTH HEIGHT TYPE FINISH GLASS TYPE WINDOW TYPES 2 8'-0" 4'-0" - TYPE 1 MIN. 3/16" TEMMPFRED SOLAR XOX GRAY DEPTIFICATION STAND OF THE STATE ARCUMANCES APPL 7.15	ASSRoom Land Control of the Control
LOCKSET - D70 SCHLAGE PD RHODES LEVER BUTTS - 1-1/2 PR. HAGER 1279 BB 4-1/2 X 4-1/2 NRP 26D OR EQUAL CLOSER - NORTON 1604 OR EQUAL THRESHOLD - PEMKO 271A OR EQUAL DOOR BOTTOM - PEMKO 216AV OR EQUAL WEATHERSTRIP - PEMKO 299AV OR EQUAL HARDWARE PACKAGE #2 (INTERIOR) LOCKSET - D10 (PASSAGE) WITH RHODES LEVER BUTTS - 1-1/2 PR. HAGER 1279 4-1/2 X 4-1/2 26D OR EQUAL	ACCESS SIGNAGE 12" SYMBOL MOUNTED @ +60" ON REST ROOM DOORS	WUMEN 5	© DESIGNED FACILITIES 1998 DRAWING TYPE FINISH SCHEDULE
NOTES:	6		DRAWING NAME: JOB NA IDENTIFICATION STAMP DESCRIPTION STAMP OFFICE REGULATION
PREPARTION FOR SUB FLOOR TO ACCEPT FINISH FLOORING IS BY FLOORING CONTRACTOR. PLYWOOD SUB FLOOR IS 2.4.1 PLYWOOD. OUTER PLY IS PLUGGED AND TOUCH SANDED, ANY DEFORMITIES DUE TO STANDARD CONSTRUCTION PRACTICES SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR. THE JOINT AT THE MODULE JOINING SHALL NOT BE LARGER THAN 1/8" AND SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR.	MOTE: PROVIDE ONE SIGN WHERE INDICATED ON PLANS LOCATE SIGN MAX, 12" AWAY FROM DOOR STRIKE SIDE. MOTE: PROVIDE ONE SIGN WHERE INDICATED ON PLANS LOCATE SIGN MAX, 12" AWAY FROM DOOR STRIKE SIDE.	ROOM NAME TEXT 1" HIGH HIGH LETTERS COLOR WHITE BRAILLE LETTERS CONTRACTED GRADE 2 BRAILLE DOTS 1/10" O.C. 2/10" BETWEEN CELLS CONTRACTED GRADE CELLS CONTRACTED GRADE 2 BRAILLE DOTS 1/10" O.C. 2/10" BETWEEN CELLS CONTRACTED GRADE CELLS CONTRACTED GRADE ATTACH SIGNS USING (3) THREE FLATHEAD WOOD SCREWS, COUNTERSUNK AND ADHESIVE. SIGNS SHALL BE CENTERED ON THE DOOR AND MOUNTED 60" ABOVE FIN. FLOOR. (TYPE.)	DESIGN BY A. PIERCE DRAWN BY CHECKED BY SCALE: DATE SHEET

to Note that the second of the



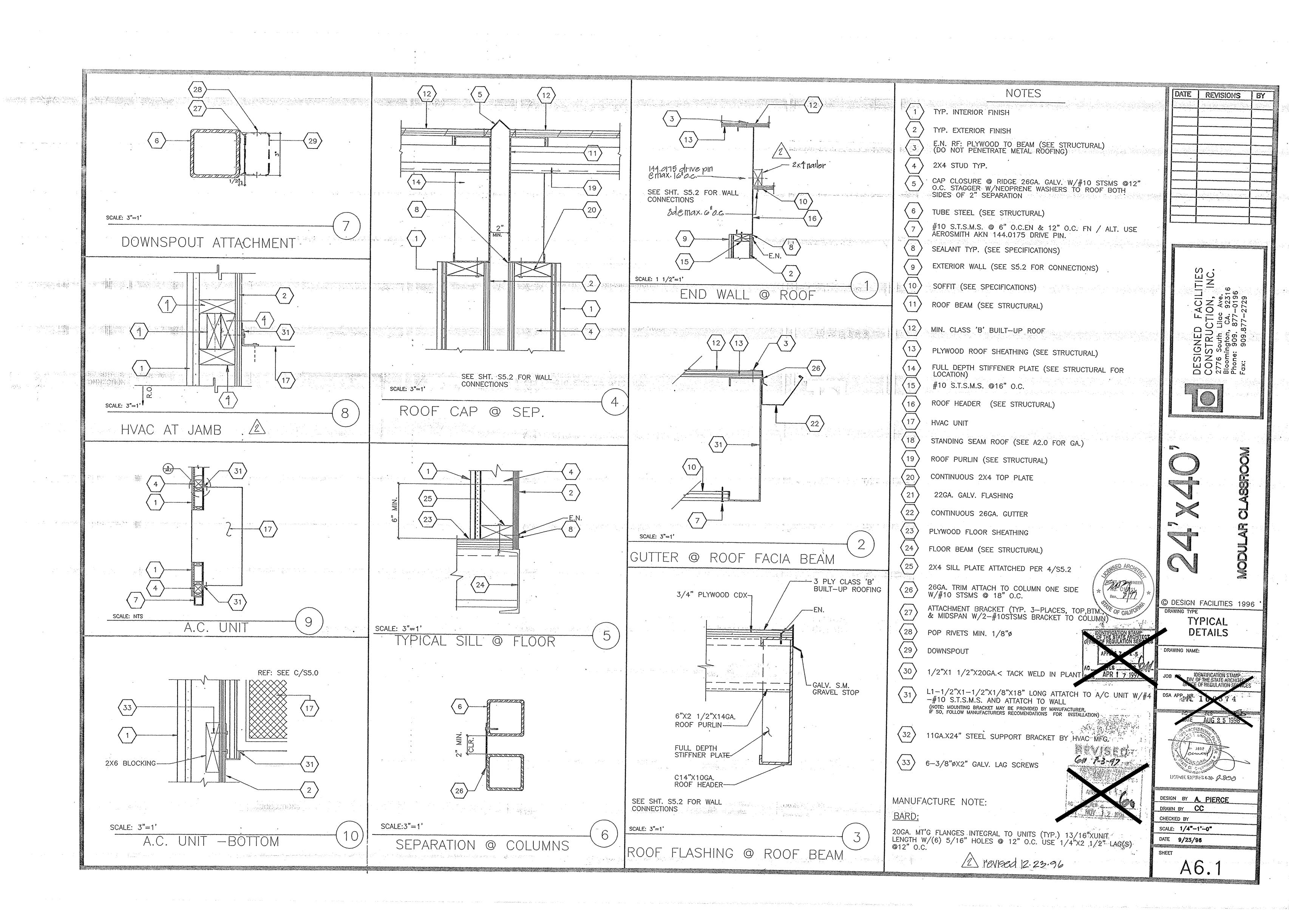
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

APP: 03-121031 INC:

REVIEWED FOR

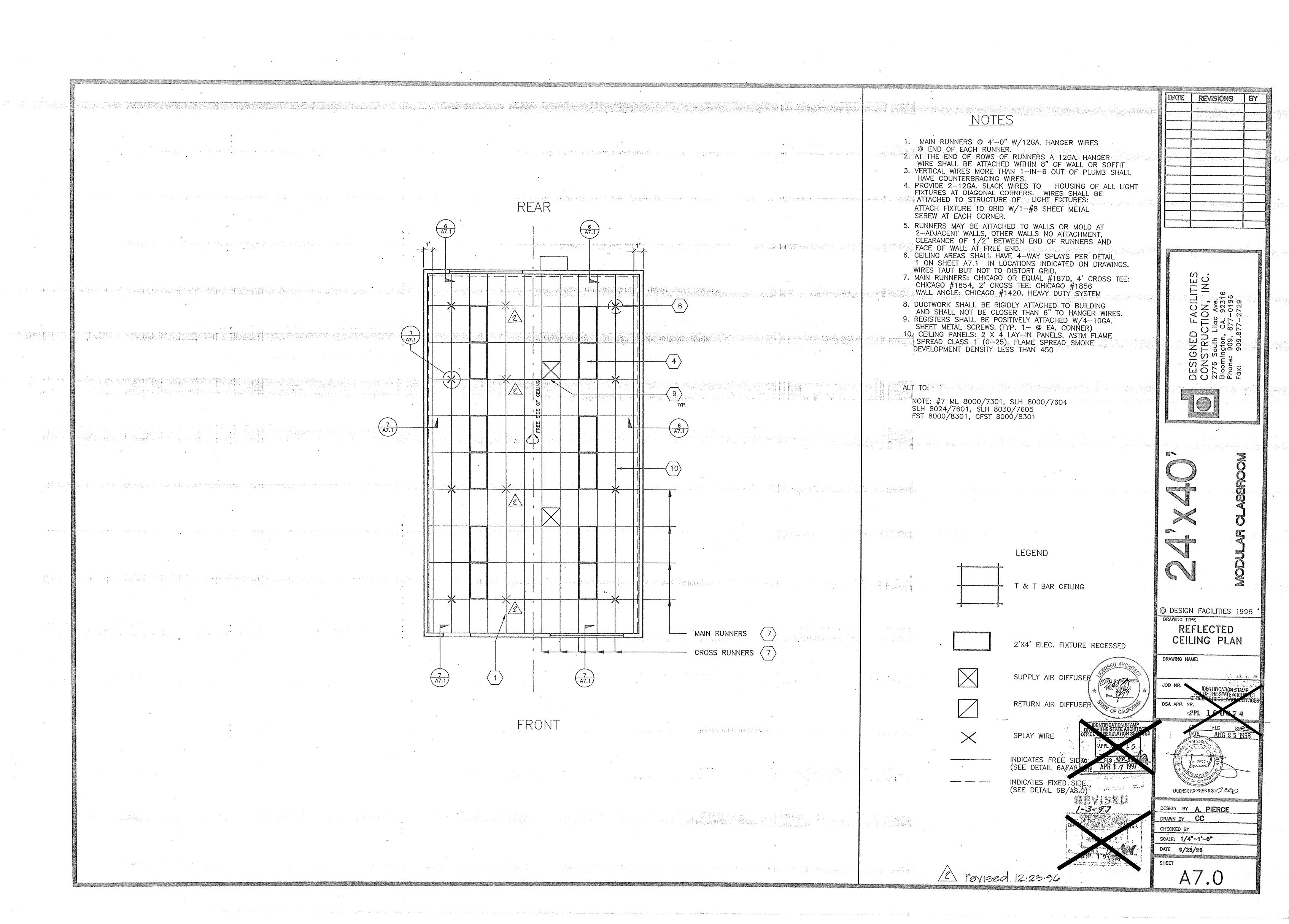
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DATE: 09/28/2020



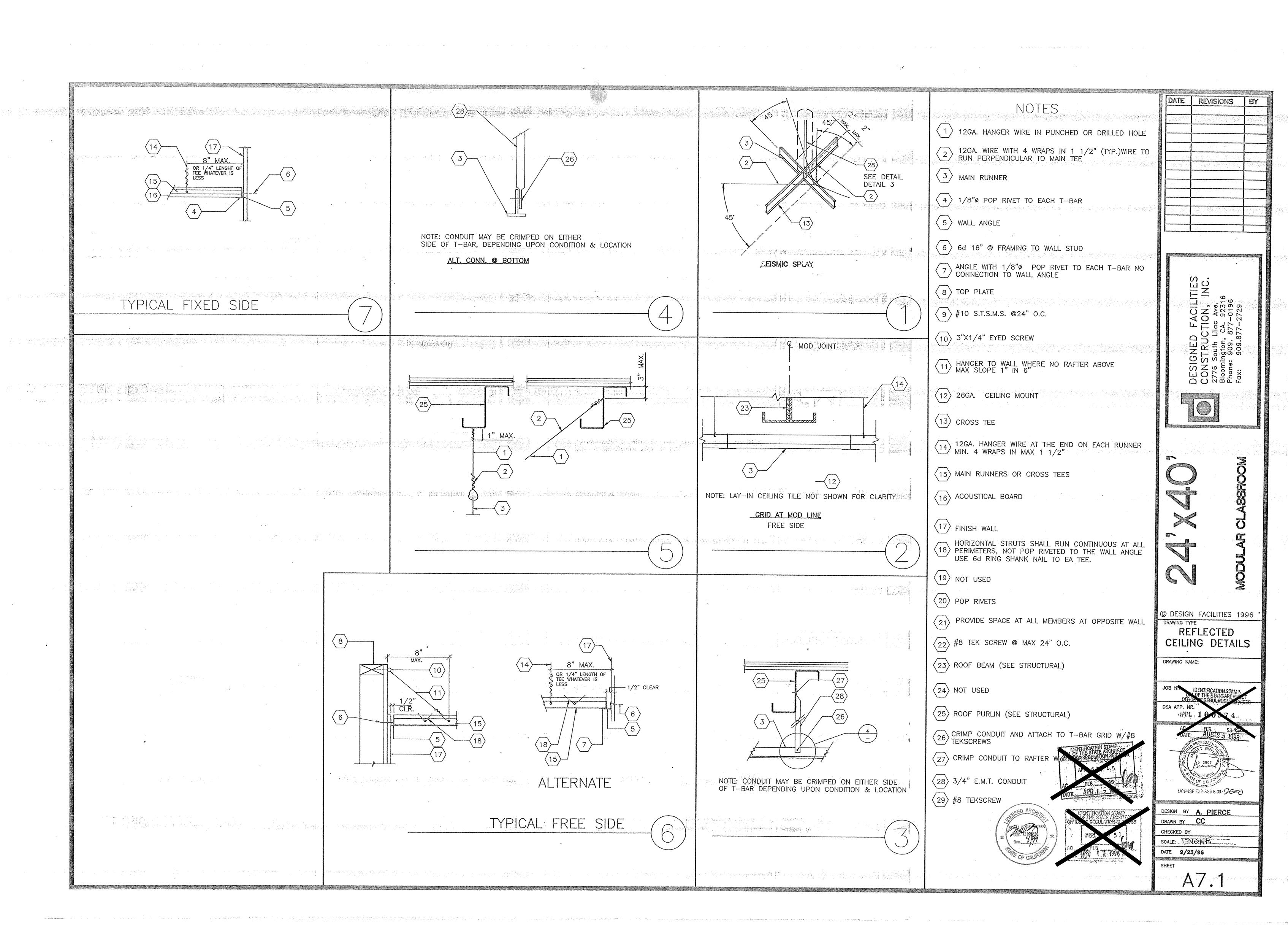
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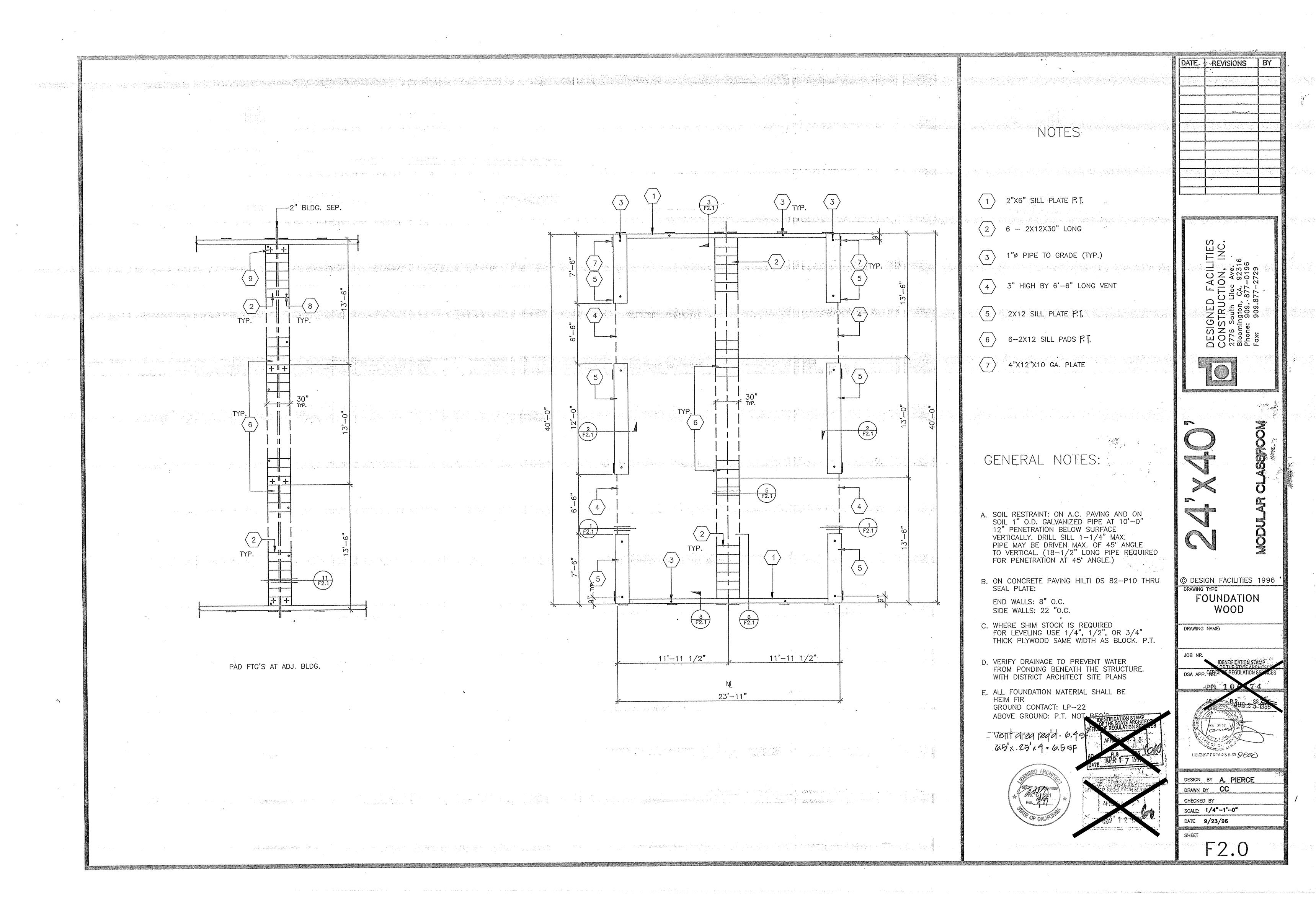
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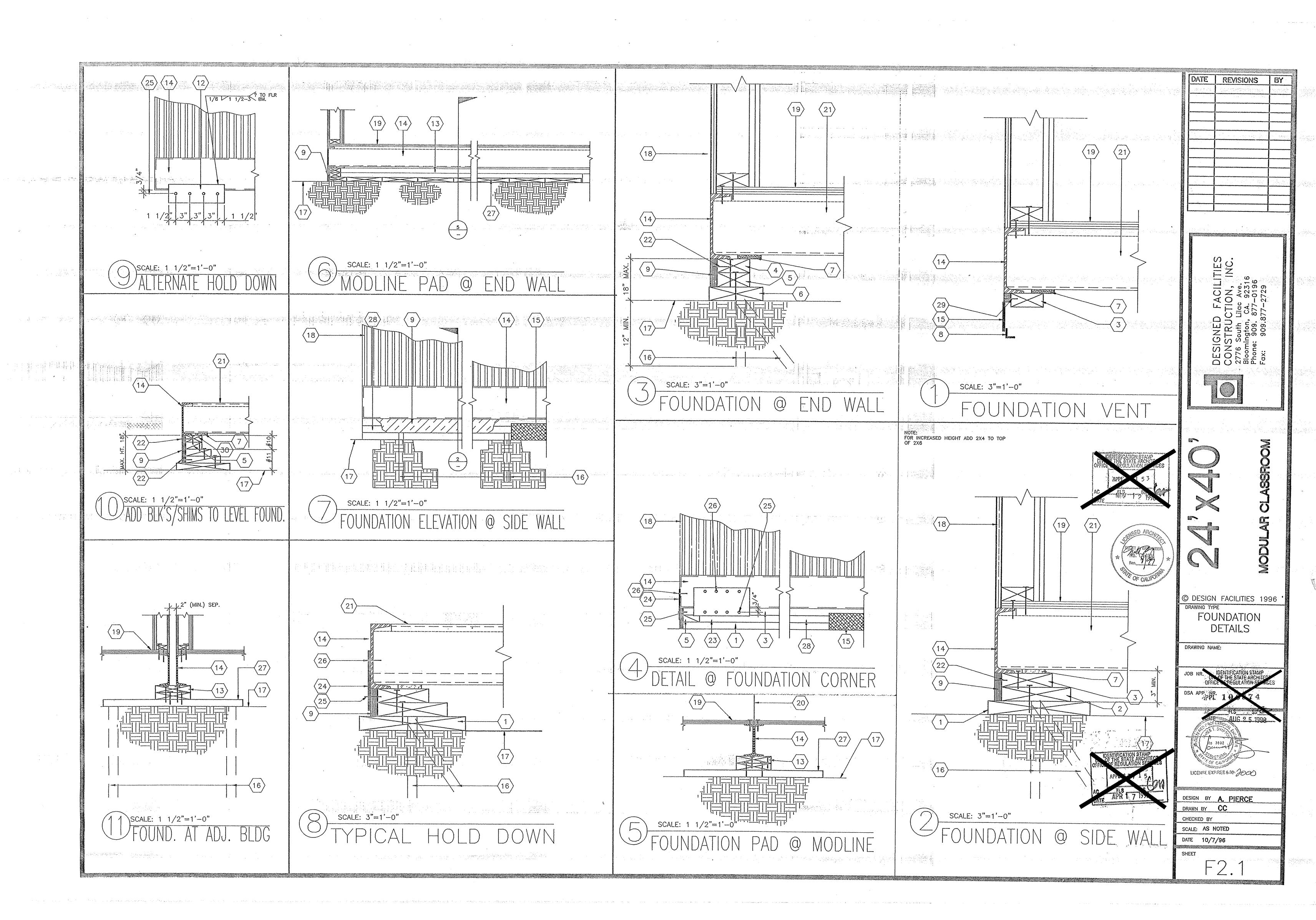
APP: 03-121031 INC:

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DATE: 09/28/2020





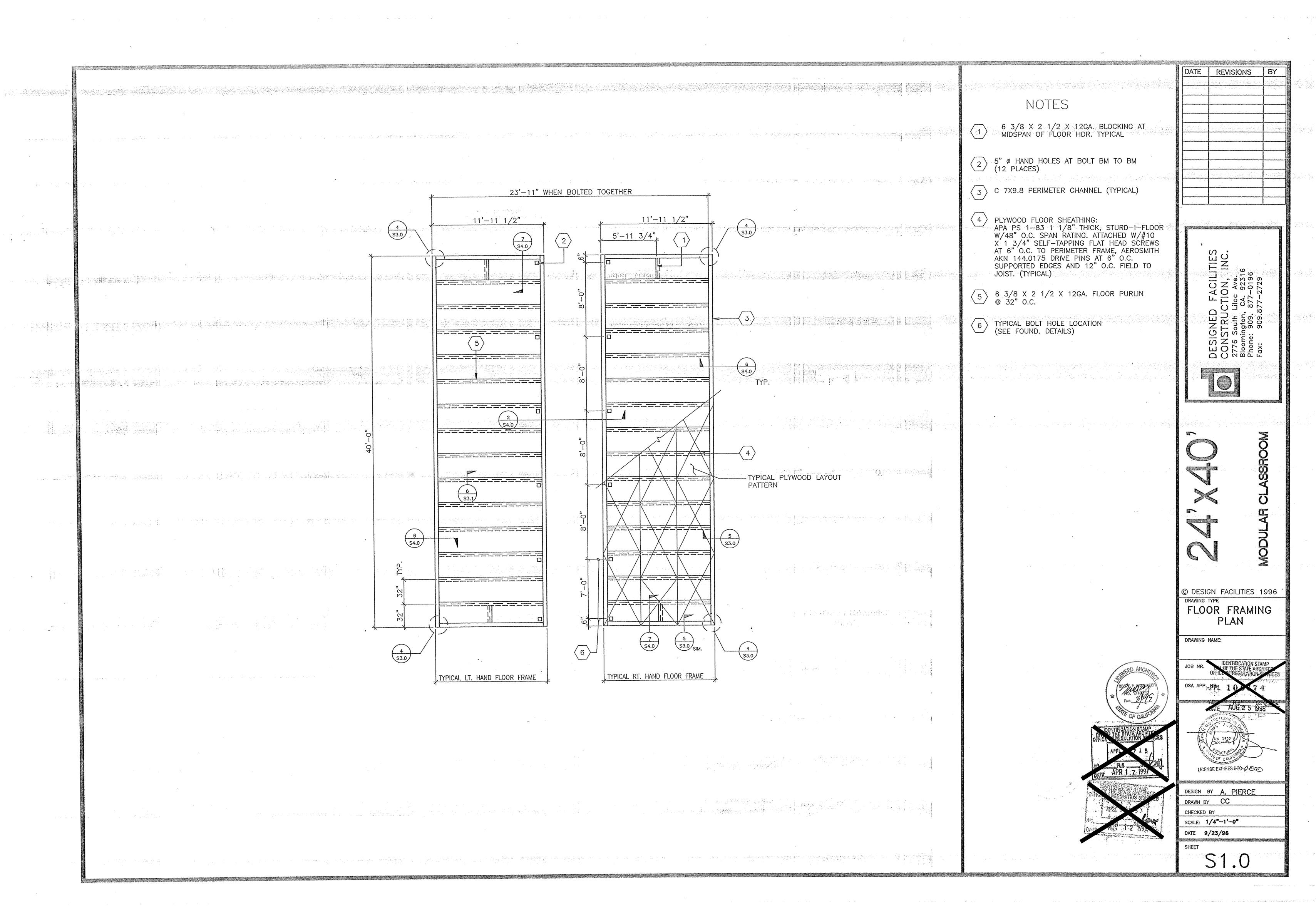
APP: 03-121031 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

			, · · · · · · · · · · · · · · · · · · ·	
			NOTES FOR F2.1	DATE REVISIONS B
			$\frac{NOTES}{1}$ 2X12 SILL PLATE SEE FOUND.	
			PLAN FOR LENGHT 2 2X8 TOP PLATE W/16d @MAX 5"O.C. TO SILL PLATE 3 2X6 CONT. TOP PLATE W/16d @MAX 12" O.C.	
			2X4 TOP PLATE CONT. 5 2X4 BLOCKING W/16d MAX. 12" 0.C. TO SILL PLATE	
			6 2X6 CONT.SILL PLATE 7 5/8"X2 1/2" SHIM (WHEN REQ.) 8 STIFFNER ANGLE	ACILITIES ON, INC. Ave. 92316 -0196 2729
			MIN. 3/8" PLYWOOD SHIRTING W/10d BOX MIN. 4" O.C. @ ENDWALLS & 6" O.C. @ SIDEWALLS E.N. & TYP. 12" O.C. FN. ADD BLK'ING OR SHIMS AS REQ. TO MAX. HT. SEE DETAIL #2	SIGNED F NSTRUCTI 6 South Lilac mington, CA. ne: 909.877
			MIN. FOUNDATION HEIGHT SEE DETAIL #2 12 10GA. PLATE 4"X12"	DE CO CO S777 Blood Pho
			2X8 BLK'NG FACE OR TOE NAIL 16d @ MAX 12" O.C. ADD BLKS. OR SHIMS AS REQ'D 14 FLOOR FRAME BEAM SEE. STRUCTURAL VENT MIN. 3"X6'-6" TYP. 4-PLACES= 6.5 SQ.FT.	
en de la compaña de la com La compaña de la compaña d	. Politica de los partires de la compansa de la com		16 SILL RESTRAINT 1"Ø PIPE SEE FOUND. FOR LOCATION 17 FINISH GRADE (18) EXTERIOR FINISH	
			18 EXTENSITE 19 PLYWOOD SUBFLOOR 20 MOD-LINE 21 FLOOR-JOIST	J S S
			22 EN SEE NOTE #9 23 6"X12"X10 GA. PLATE W/4 -#10 SMS TO FLR. & 4-1/4"ø X3" LAG TO FOUND. TOP PLATE	
			24 6"X12"X10 GA. PLATE 25 1/4"ø X3" LG. LAG SCREW TYP. 4-PLACES 26 #10 S.T.S. TYP. 4-PLACES 27 2X12X2'-6" SILL PLATE SEE FOUND. PLAN	DESIGN FACILITIES 1996 DRAWING TYPE NOTES
			27 2X12X2'-6" SILL PLATE SEE FOUND. PLAN FOR QUANITY REQ.'D 2X8 BLK'NG W/16d @ MAX. 6" O.C. MIN. 3 PER BLOCK (MAY VARY ACCORDING TO SITE) 10d GALV. BOX HAIL @ MAX. 6" O.C.	JOB NR. IDENTIFICATION STAMP OF THE STATE ARCHITECTURE OF REGULATION STATES DSA APP. NR.
			30) INSERT REQ'D 2X4 BLK'NG OR PLYWD. SHIM W/16d @ 12" O.C. FACE NAIL IDENTIFICATION STAMP. OF THE STATE ARCHITE	AC FLS SS AUG 2 5 1998
			OFFICE REGULATION SO TOES APPLICATION SO TOES APP	LICENSE EXPIRES 6-30- 9500
				DESIGN BY A. PIERCE DRAWN BY CC CHECKED BY SCALE: N/A
				TATE 10/7/96 SHEET

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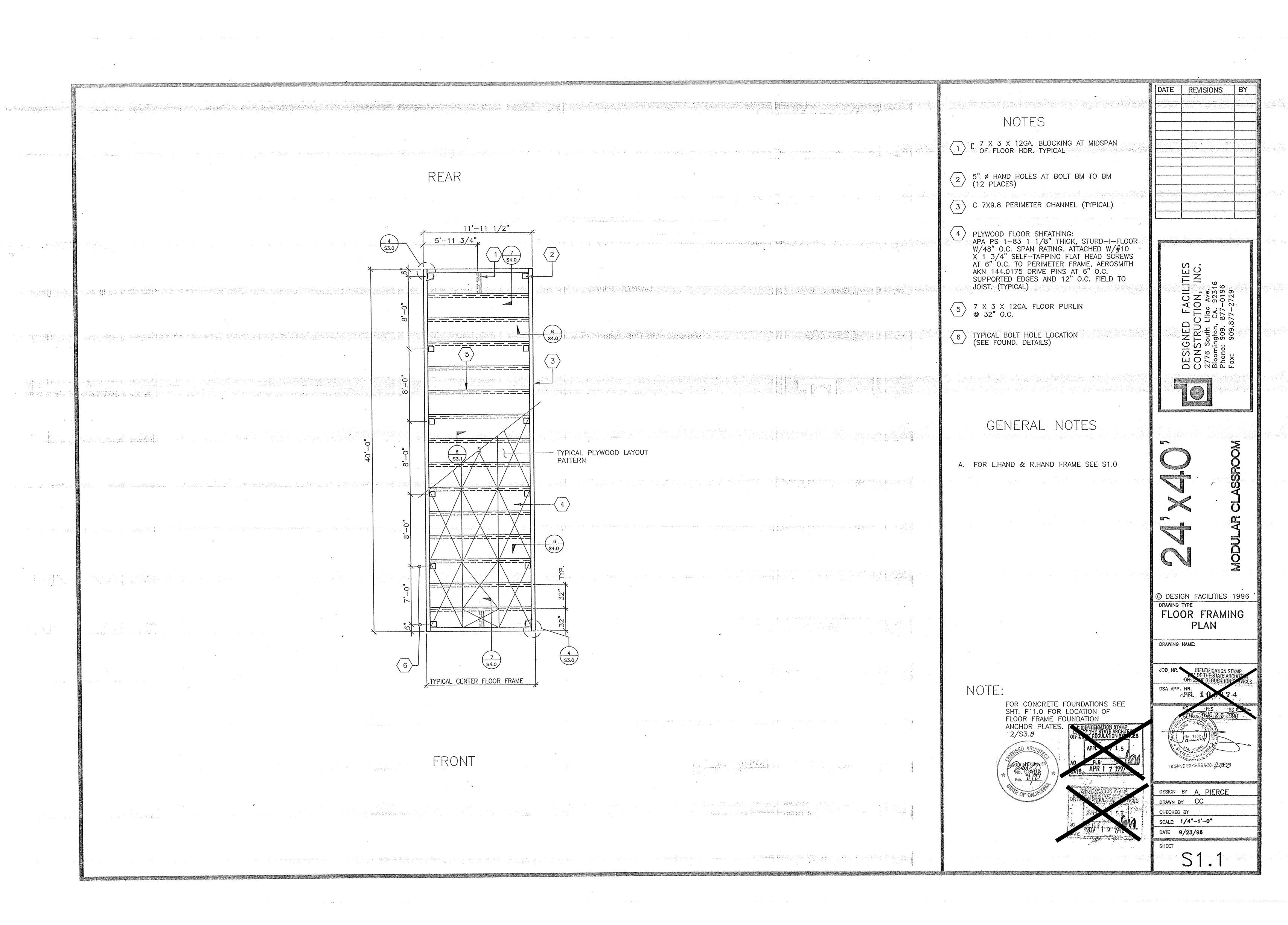
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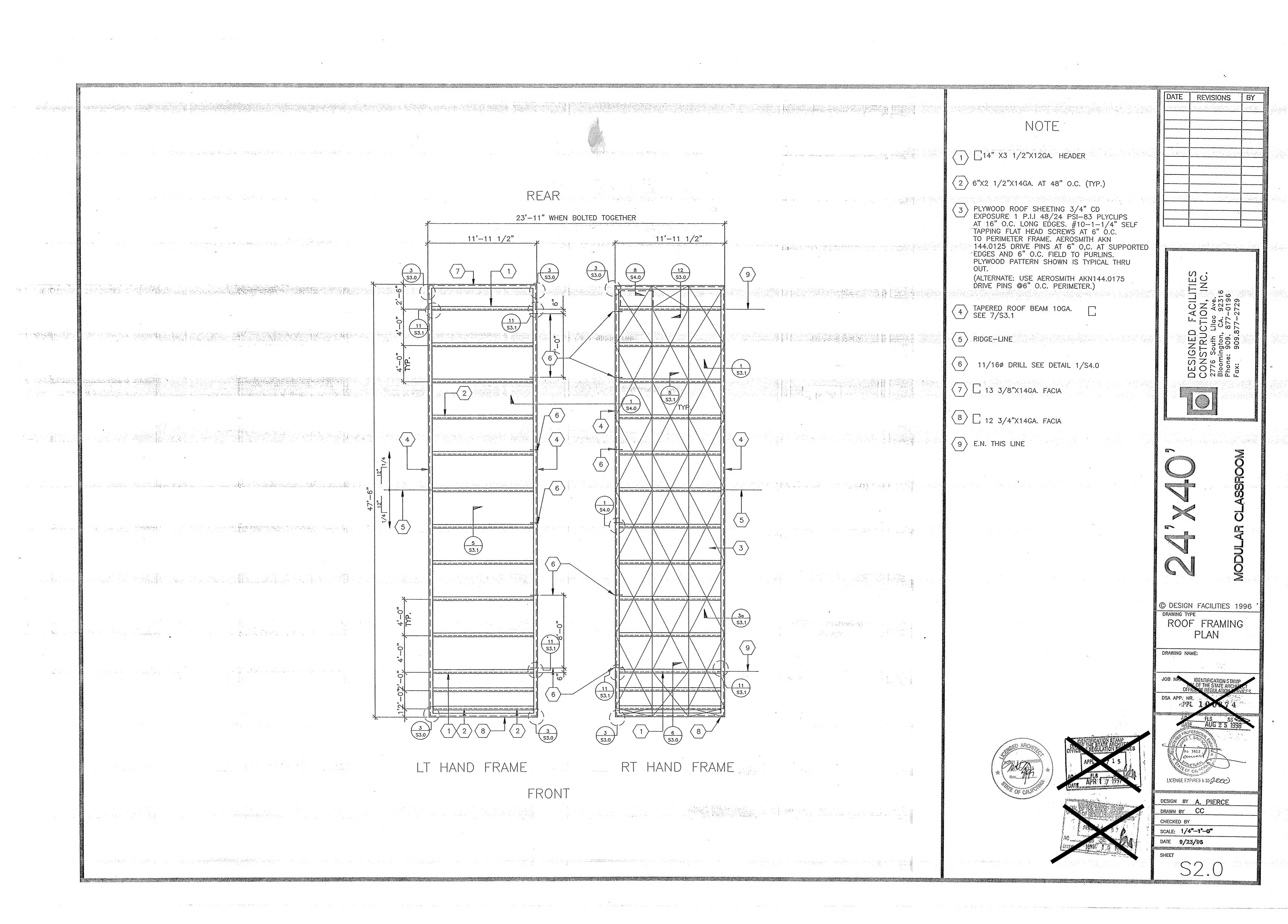
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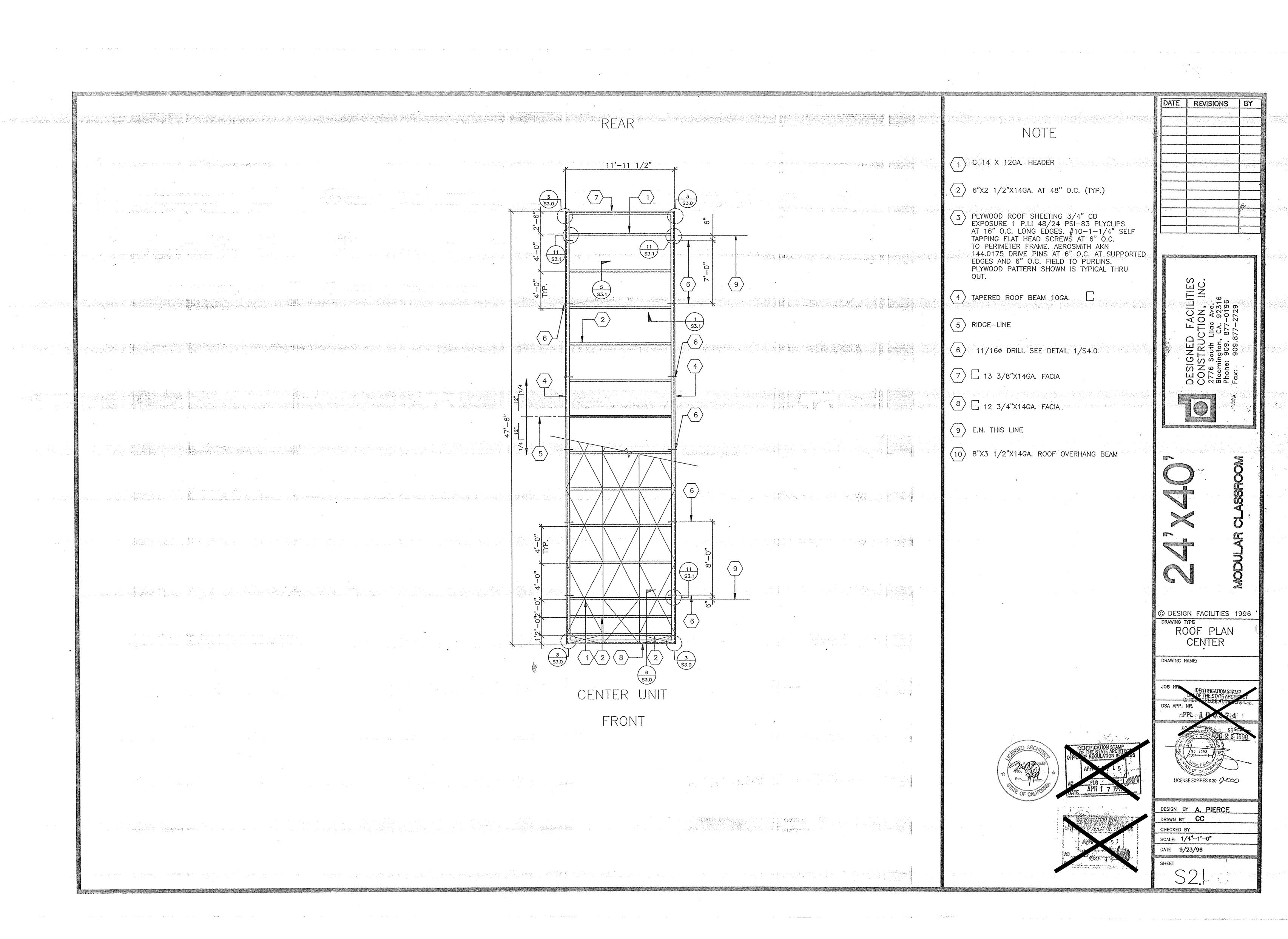
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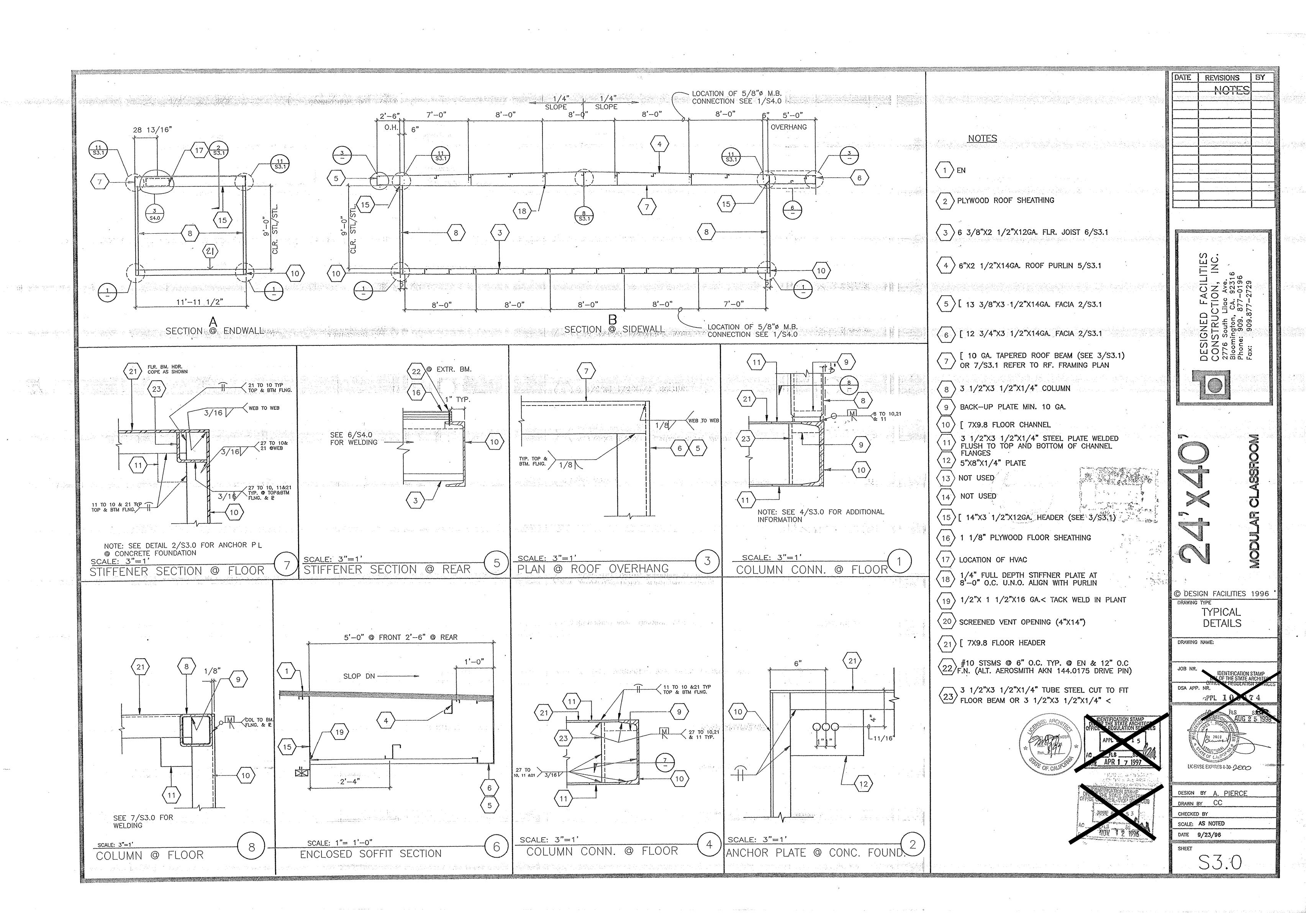
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APP: 03-121031 INC:

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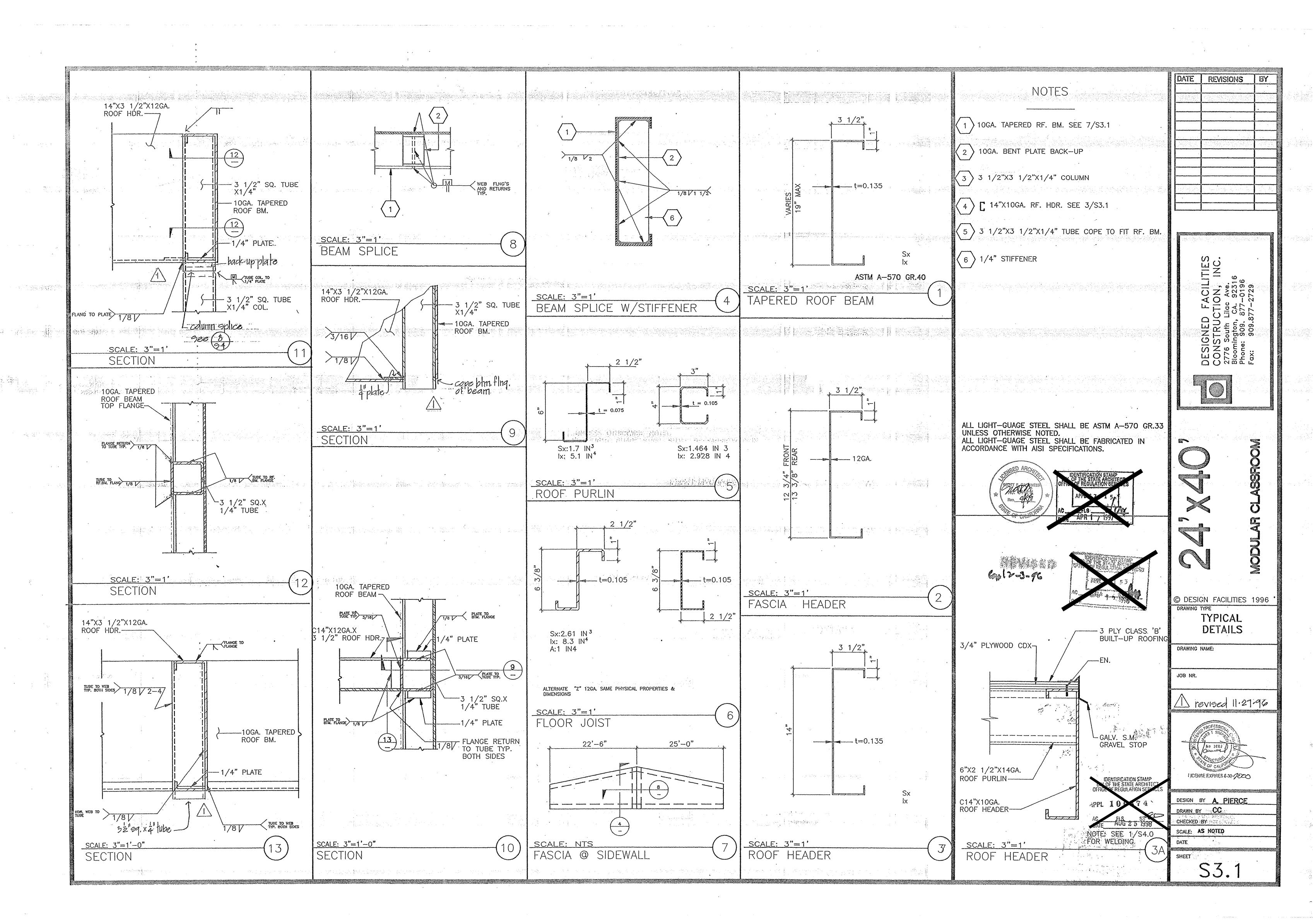
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DIV. OF THE STATE ARCHITECT

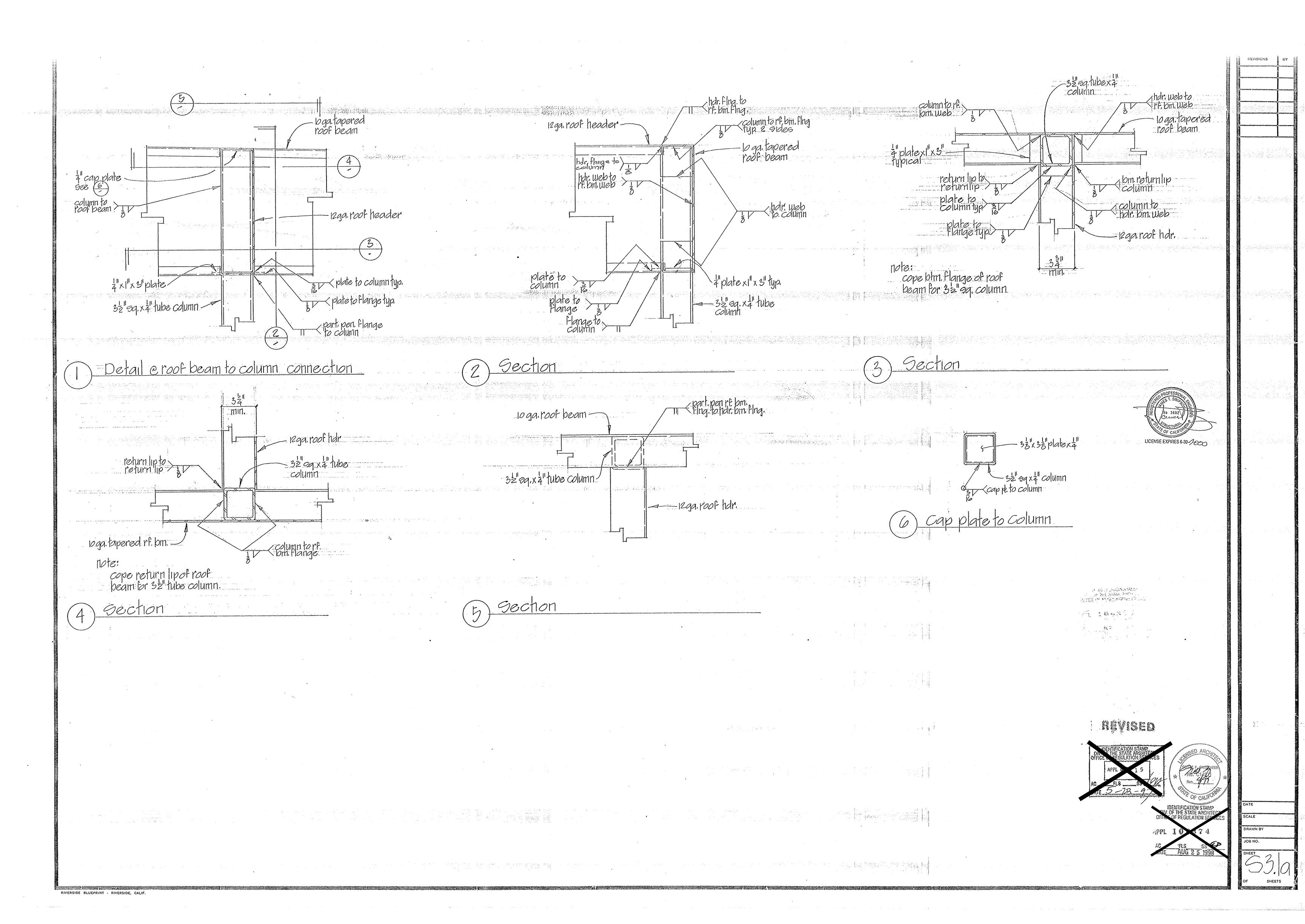
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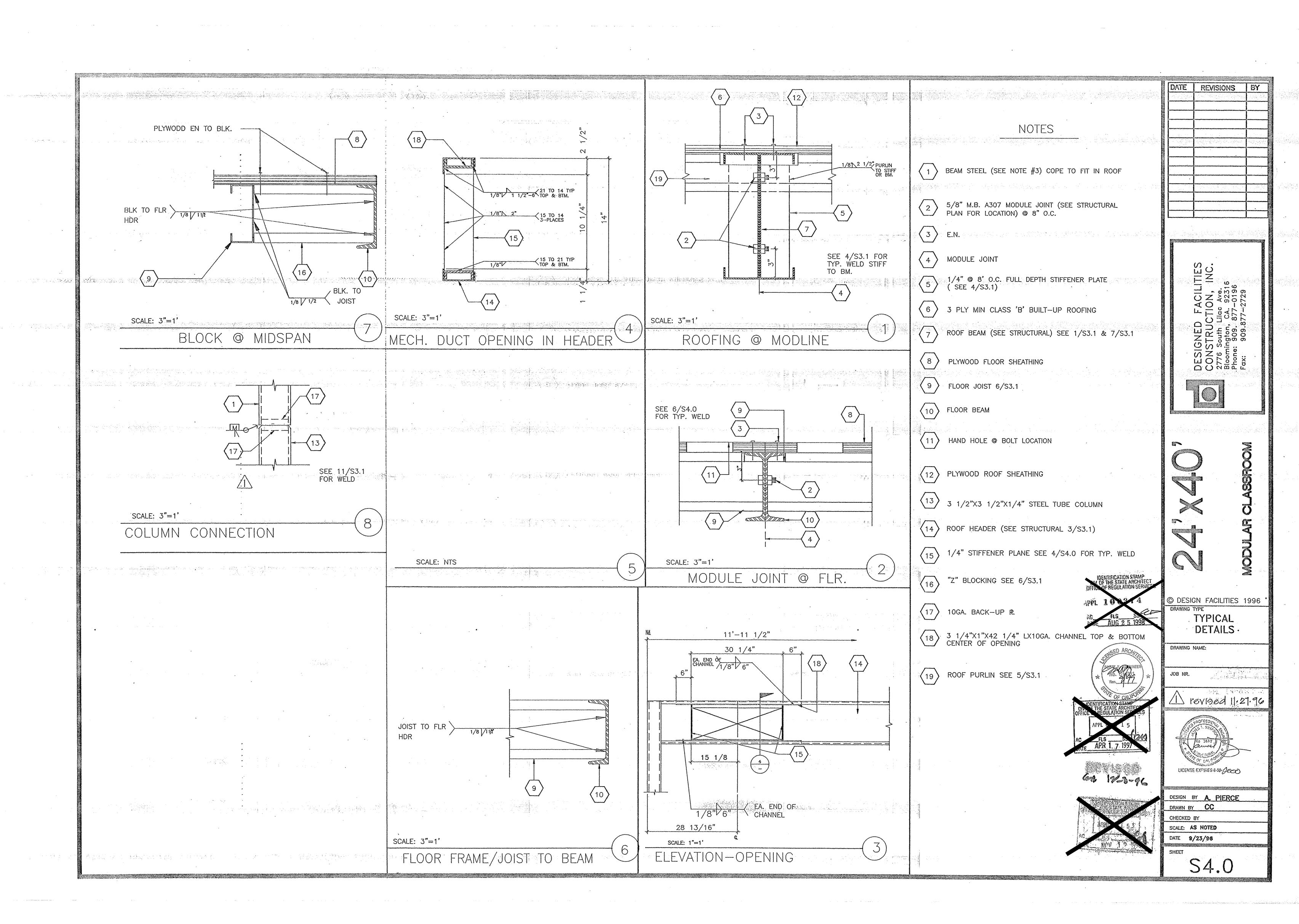




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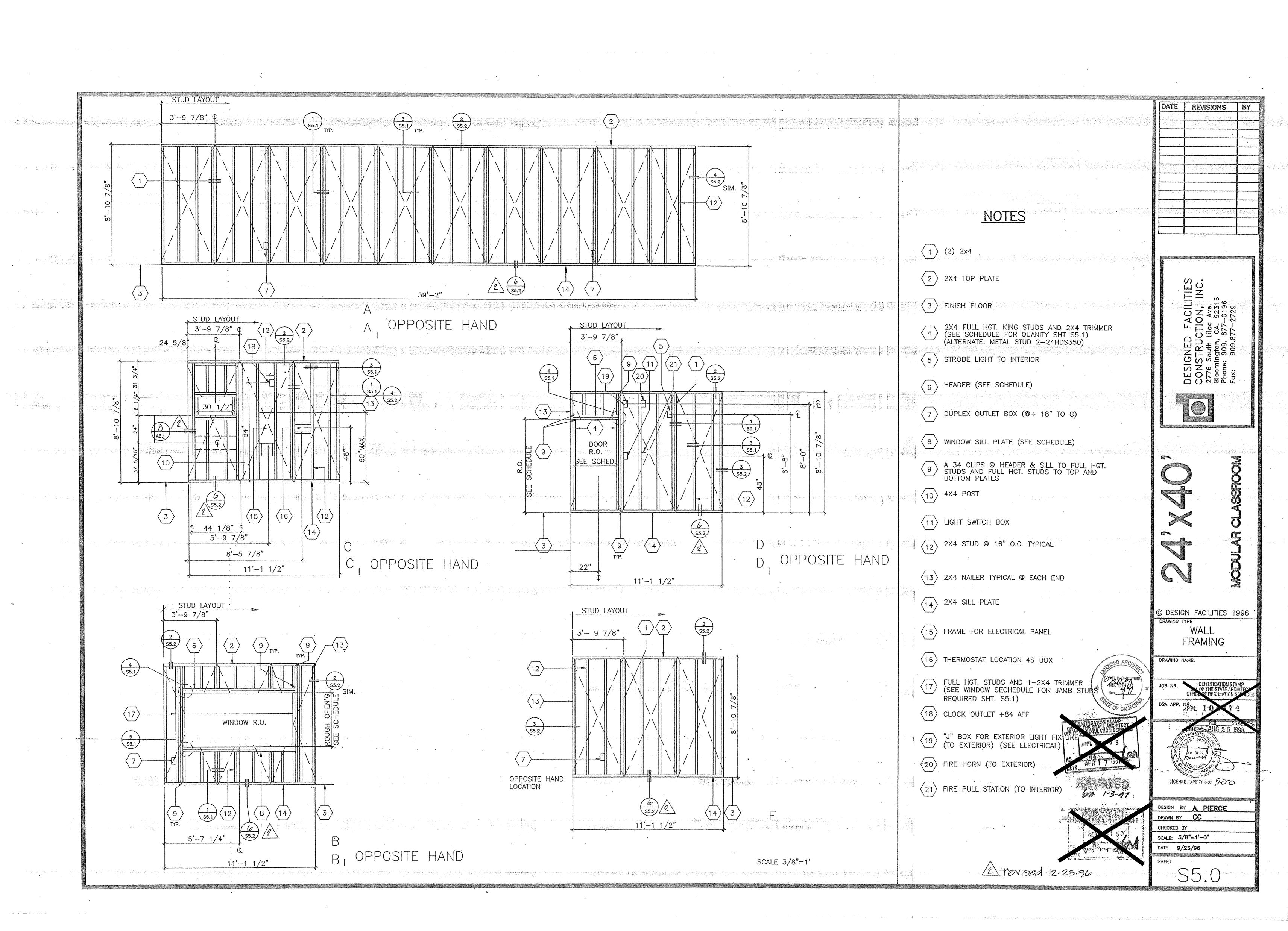


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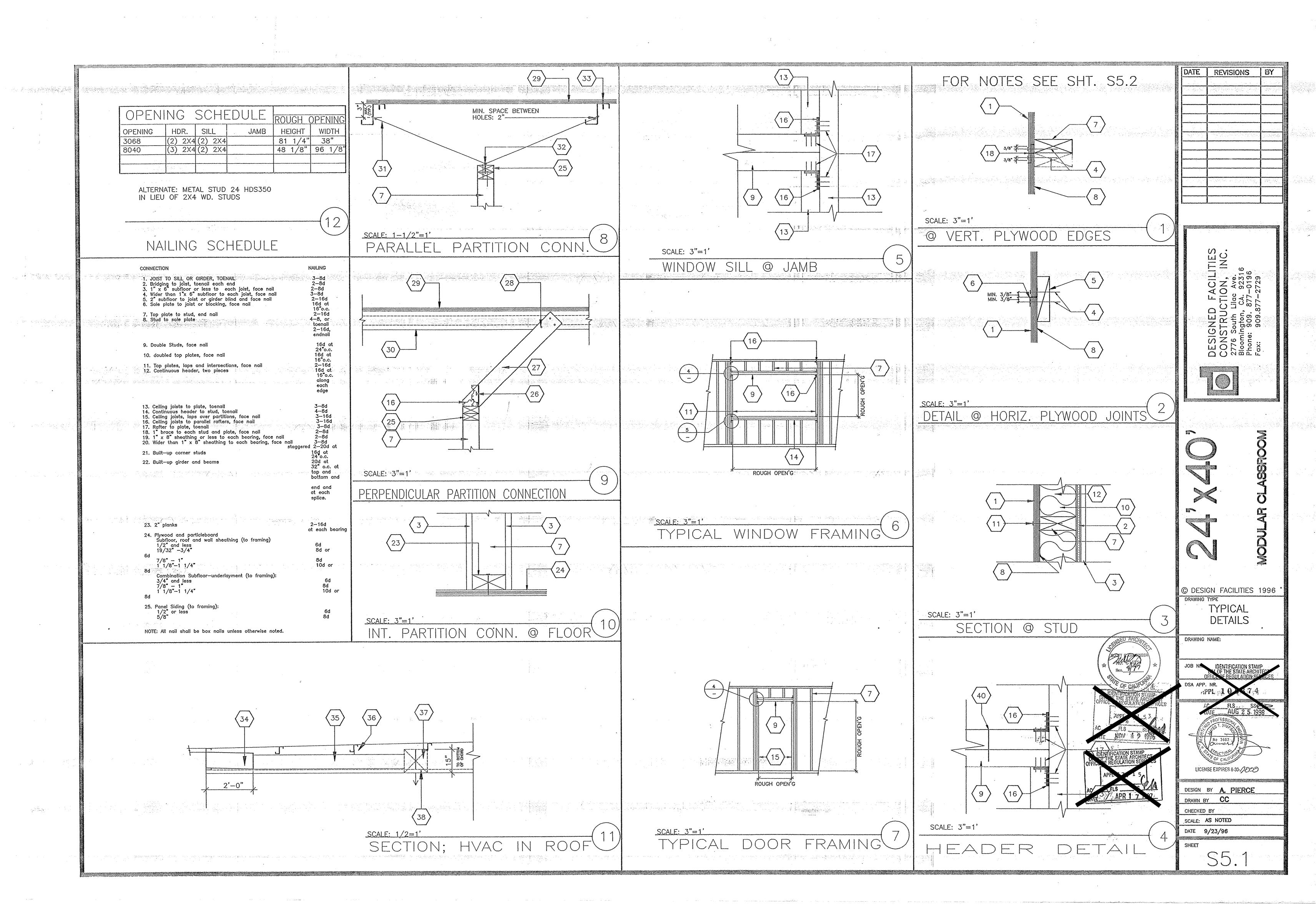


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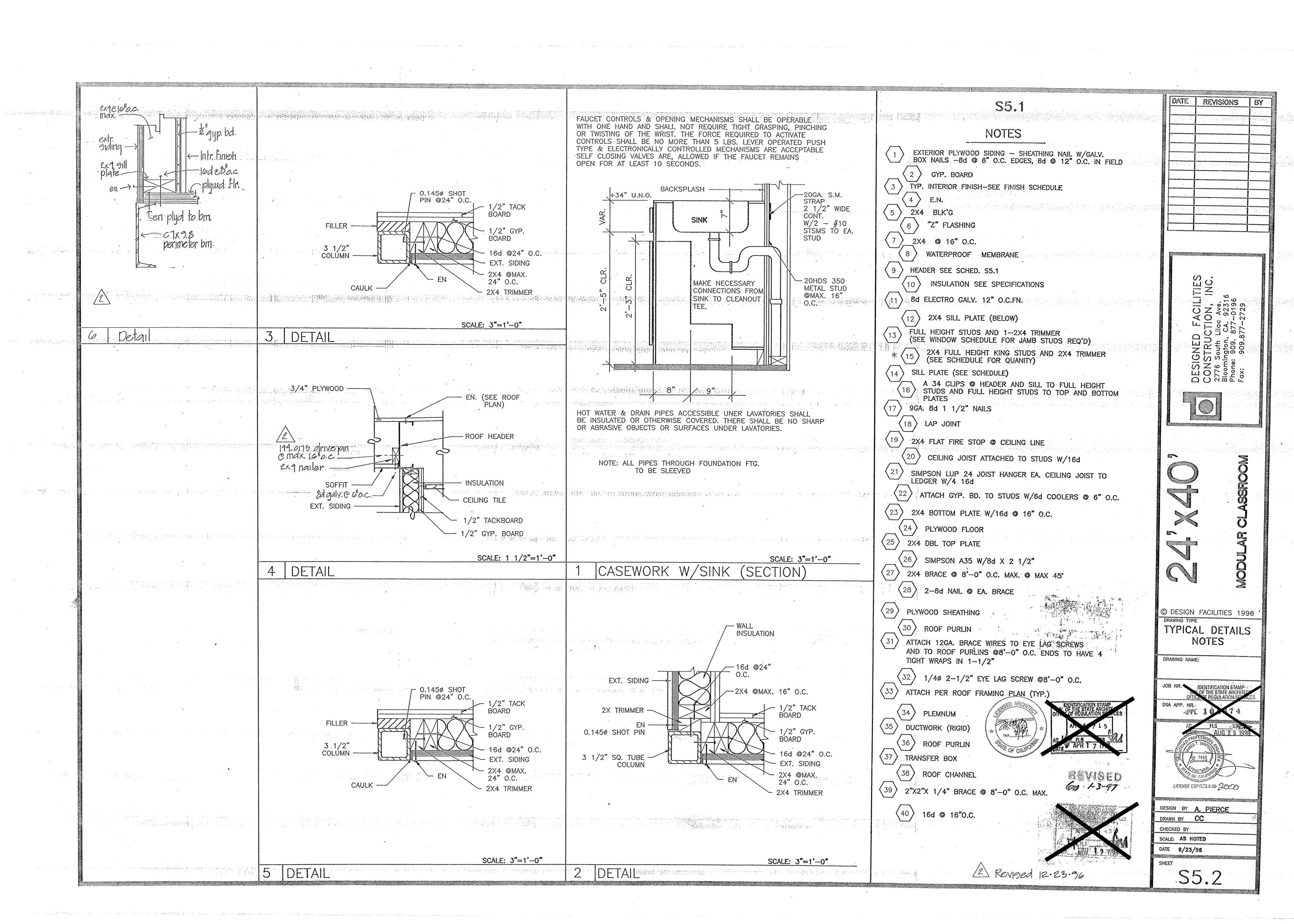
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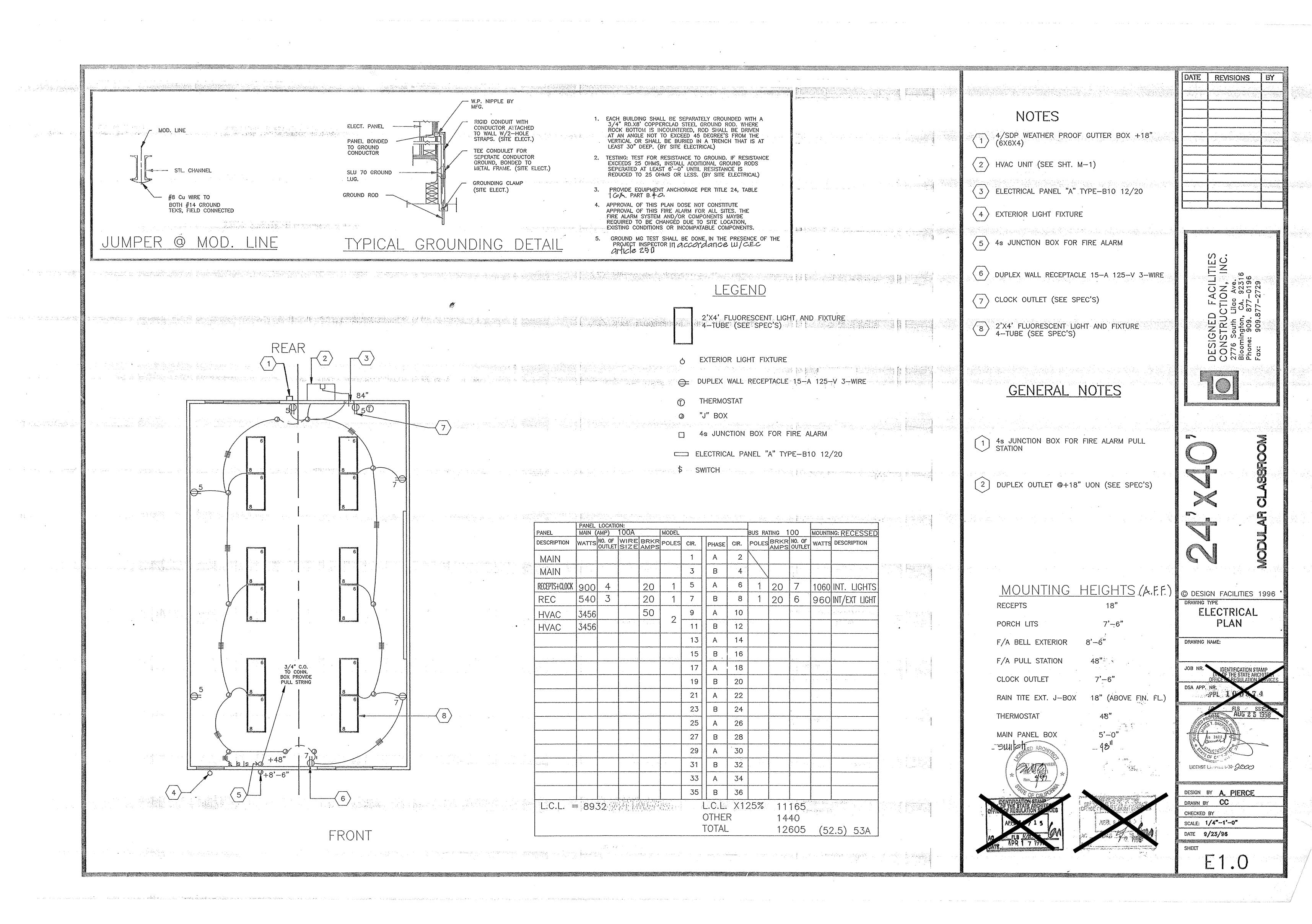
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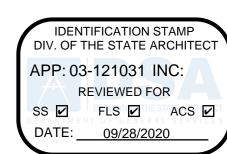
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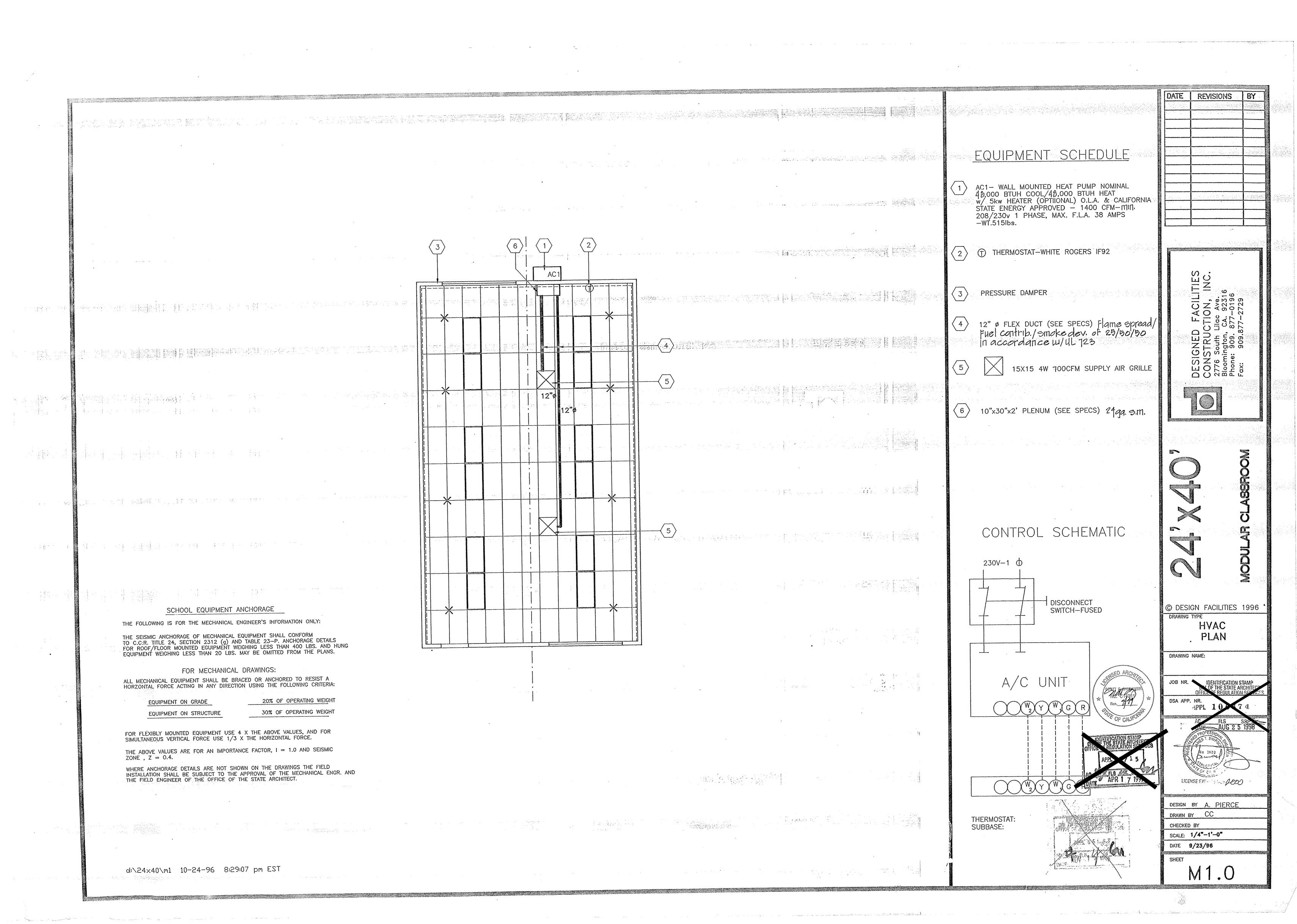


IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-121031 INC:

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DISION OF THE STATE A	RCHITECT			INCREMENT# DSA File No.: Application No.: Revised:			
NIMERI OF BEREAL SE	····· Special IIIspection		District	Revised:			
pections required for the led on this for lare those coratory of Reolod, or Spogram must be performed bottom of this formal entipection or structural to it facets of construction, in such as structural woodning, anchorage of non-se	nly a summary list of structural tests and some project. Generally, the structural tests and spectral will be performed by the Geotechnical Erecial Inspector. The actual complete test and as detailed on the DSA approved documents fies work NOT subject to DSA requirements fig. The project inspector is responsible for projecting but not limited to, special inspection ming, high-load wood diaphragms, cold-formula ral components, etc., per Title 24, Part 2 illable projects submitted for review under	cial inspections agineer of Record, aspection The appendix at or special oviding inspection s not listed on this armed steel 2, Chapter 17A.	INSTI tests requir clicke headi cleare	RUCTIONS: Click a plus sign (+) before any category or subcategory to reveal applicant and special inspections. A shaded box indicates a test or special inspection the may be sed, depending on the scope of the construction and other issues. A shaded box can be ad indicating your selection of that test. Note: A minus (-) on a category a subcategory and indicates that it can be collapsed. However, any selections you may have made will be sed. Click on the "COMPILE" button to show only the tests and inspections finally selected more information on use of this form, see DSA-103.INSTR.			
2013 CBC.							
	Note: References are to the 2	2016 edition of the Ca		uilding Code (CBC) unless otherwise noted.			
REGISTED TEST OR SPE	CIAL INSPECTION	THE.	al Ref	CODE REFERENCE AND NOTES			
SOILS			<u> </u>				
CONCRETE		Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13					
MASONRY	·	TMS 402-13/AC	I 530-13/A	SCE 5-13 Table 3.1.3 & TMS 2-13/ACI 530.1-13/ASCE 6-13 Table 5			
STEEL, ALU				3-10, AISC 360-10, AISC 3 -10, AISC 358-10, AISI S100-07/S2-10			
	17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR A RUCTURAL PURPOSES Material Verification:						
a. Verify identification Mill certificates requirements,	on of all materials and: indicate material properties that comply with types and grades comply with requirements.	Periodic Test	† LOR	2203A.1 (2201.7), Table 1705A.2.1 Item 3a-3c; AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site. 2201.1 (2203.1)			
e. Verify and documents of the construction documents of the const	ent steel fabrication per DSA approved	Perio c	SI	ot applicable to cold-formed steel light-frame construction, except for trusses (1705A.2.4).			
19. WELE				1705A.2.5, Table 1705A.2.1 Items 4 & 5; DSA IR 17-3, AWS D1.1 and AWS D1.8 for structural steel, AWS D1.2 for Aluminum, AWS D1.3 for cold-formed steel, AWS D1.4 for reinforcing steel.			
	of Materials, Equipment, Welders, etc:		X	(See Appendix for exemptions.)			
	material identification markings per AWS 4 do not the DSA approved documents and the WPS.	Periodi	S.	DSA IR 17-3.			
b. Verify weld filler compliance.	material manufacturer's certificate of	Per dic	SI	SA IR 17-3.			
c. Verify WPS, well	der qualifications and equipment.	eriodic	SI	DS 17-73.			
	SHOP WELDING:						
	elds, multi-pass fillet welds, single pass fillet ug and slot welds	Continuous	SI	Table 1705 2.1 Item 5a1-4. Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.			
b. Inspect single-pa	ass fillet welds ≤ 5/16", floor and roof deck w	Periodic	SI	1705A.2.2, Ta 1705A.2.4 Item 5a.5 & 5a.6. Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.			
c. Inspect welding	of stairs and railing systems.	Rosiedic	SI	1705A.2.1. Fer AIS: 60-10 (and AISC 341-10 as applicable). AWS D1.1 & D1.3. DSA IR 17-3.			
	inforcing steel weldability other than aTM A706	Periodic	SI	1705A.3.1; verify carbox, quivalent reported on mill certificates. AWS D1.4. DSA IR 17-3. 1705A.3.1, Table 1705A.3. em 2, and Table 1705A.2.1 Item 5b, 1803A.8. AWS D1.4. DSA IR 17-			
e. Inspect welding	preinforcing steel.	Continuous	SI	3.			
WOOD			·				
OTHER							
required verified rep	ort(s):						
KEY to Columns							
1 Type -	1 Type -			2 Performed By -			
Continuous – Indicate	hat a continuous special inspection is required		GE – Indicates that the special inspection is to be performed by a required geotechnical engineer or his or her authorized representative				
Periodic – Indica es ti	nat a periodic special inspection is required		LOR – Indicates that the test or inspection is to be performed by a testing coratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See section 4-335, 2 3 CCR Title 24, Part 1.				
Test – Indicates that a test is required			SI – Indicates that the special inspection is to be performed by a special inspects				
	COMPILE	PREL					
me of Architect or Engineer in gen	eral responsible charge		PStandardadadad 10 i Mare	IDENTIFICATION STAMP DIV OF THE STATE ARCHITECT APP. #			
ne of Structural Engineer (When :	structural design has been delegated)	usakhkusudusahankud ath		AC_N/A F/LS_N/A SS			
				DATE			
nature of Architect or Structural E	ngineer date						

TMP SERVICES

2929 KANSAS AVE. RIVERSIDE, CA 92507 (951) 213-3900FAX (951) 213-3997

PC 04-116740 ACCESSIBLE RAMPS/ LANDINGS/STAIRS

STATE OF CALIFORNIA -2015 IBC/2016 CBC

> PROPRIETARY DESIGN: THIS DRAWING AND THE MATERIAL CONTAINED PARTS THEREOF WITHOUT THE FULL KNOWLEDGE AND CONSENT OF TMP SERVICES, INC. ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATED WITH TMP SERVICES, INC. SHALL BE THE PROPERTY OF TMP

STRUCTURAL ENGINEERS, INC.

STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA AMERICAN CONCRETE (909) 613-0234

NOTES:

LOADS:

1. RAMP LIVE LOAD = 100 PSF2. NO SNOW LOADING

3. NO FLOOD LOADING

 $K_{7T} = 1.0$

4. WIND: WIND SPEED = 130 MPH RISK CATEGORY = II EXPOSURE = C

WIND DESIGN PER ASCE 7-10 CHAPTER 29

SEISMIC: RISK CATEGORY = II $I_{e} = 1.25$

 $S_S = 3.73$ $S_1 = 1.30$ SITE CLASS = D

 $S_{DS} = 2.487$ $C_S = 0.932$ (ASCE 7-10 EQUATION 15.4-5) R = 3.25 (ASCE 7-10 TABLE 15.4-1)

6. ALLOWABLE SOIL BEARING = 1000 PSF

7. THIS PC CANNOT BE USED IN WILDLAND URBAN INTERFACE (WUI) AREAS.

CODES: (TITLE 24 CODES)

2016 CALIFORNIA ADMINISTRATIVE CODE (CAC)....(PART 1, TITLE 24, CCR) 2016 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2 (PART 2, TITLE 24, CCR) (2015 EDITION INTERNATIONAL BUILDING CODE WITH 2016 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA FIRE CODE (CFC), (PART 9, TITLE 24, CCR) (2015 EDITION INTERNATIONAL FIRÉ CODE WITH 2013 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA GREEN CODE (CFC), (PART 9, TITLE 24, CCR)

2016 CALIFORNIA REFERENCED CODE, (PART 12, TITLE 24, CCR) NFPA 13 2016 NFPA 72 2016

2016 CODE SECTIONS FOR APPLICABLE STANDARDS 2016 CBC, CHAPTER 35 2016 CFC, CHAPTER 45

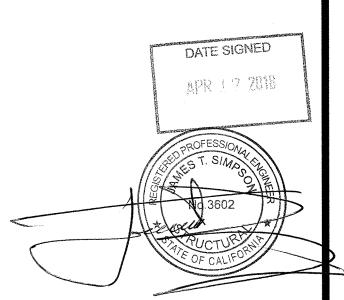


TABLE OF CONTENTS							
Sheet	No.	Description	Dated	Revised			
1	1 COVER SHEET		05 DEC. 2017				
2	2 ACCESSIBLE RAMP ELEVATIONS & DETAILS		05 DEC. 2017				
3	3 ACCESSIBLE RAMP DETAILS & NOTES		05 DEC. 2017				
4	4 DETAILS & NOTES		05 DEC. 2017				
5	5 ACCESSIBLE RAMP SWITCH BACK DETAILS		05 DEC. 2017				
6	6 STAIRS - OPTIONAL		05 DEC. 2017				
7	7 ACCESSIBLE RAMP OPTIONAL ALUMINUM DECK		05 DEC. 2017				
8		ACCESSIBLE RAMP ELEVATIONS & PLAN VIEWS	05 DEC. 2017				
ALTERNATE RAMPS/LANDINGS/STAIRS							
Sheet	No	Description	Dated	Revised			
1A		COVER SHEET	05 DEC. 2017				
2A		ACCESSIBLE RAMP ELEVATIONS & DETAILS	05 DEC. 2017				
3A		ACCE SIBLE RAMP DETAILS & NOTES	05 DEC. 217				
4A	4A DETAILS & INSTES		05 JEC. 2017				
5A	5A ACCESSIBLE RAMP SWITCH BACK DETAIL		05 DEC. 2017				
6A	6A STAIRS - OPTIONAL		05 DEC. 2017				
7A	7A ACCESSIBLE RAMP OPTIMAL ALUMINAL DECI		05 DEC. 2017				
8A	8A ACCESSIBLE RALL ELEVATIONS & PLAN VIEWS		95 DEC. 2017				

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*DENTIFICATION STAMP

DATE 12 APRIL 2018

RAMP & LANDING).

"CONSTRUCTION OF" AND "STOCKPILE OF" EXAMPLE DSA 103 FORM (DSA 103 FORM NOT REQUIRED FOR RELOCATION OF CERTIFIED

OF FUTURE PROJECT-SPECIFIC FORM DSA-103'S. A FORM DSA-103

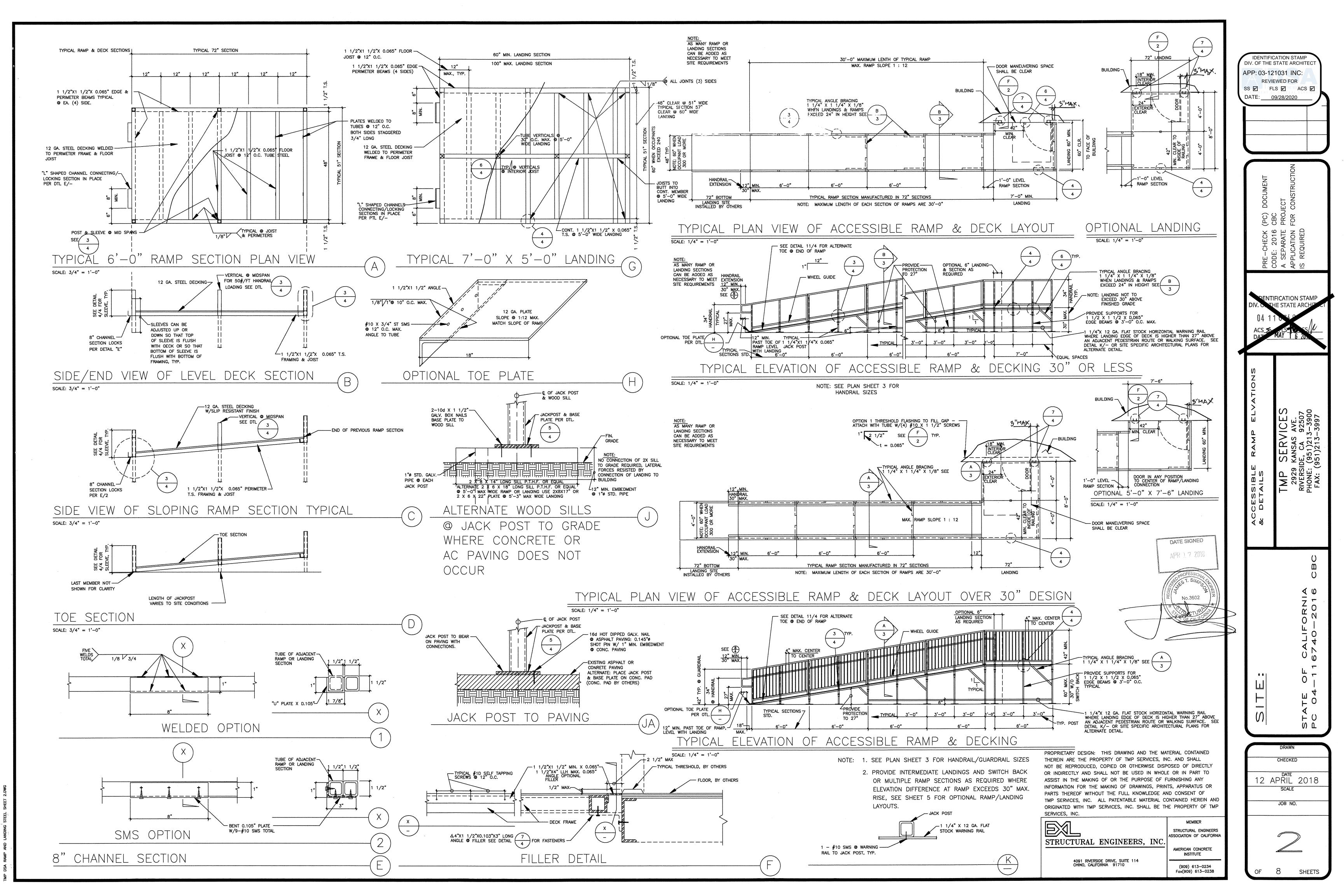
THE EXAMPLE FORM DSA-103 SHOWN ON THIS SHEET IS FOR

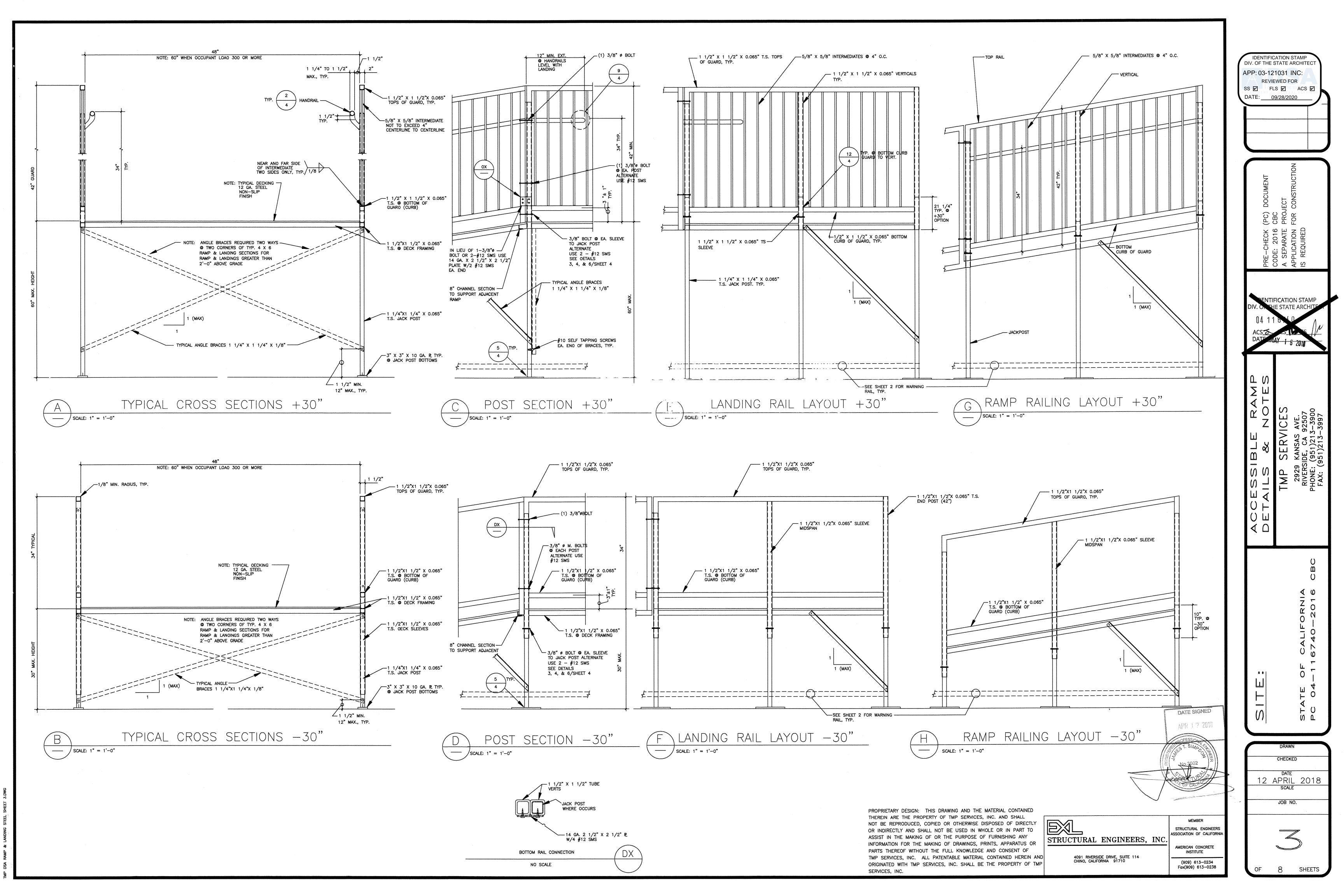
ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION

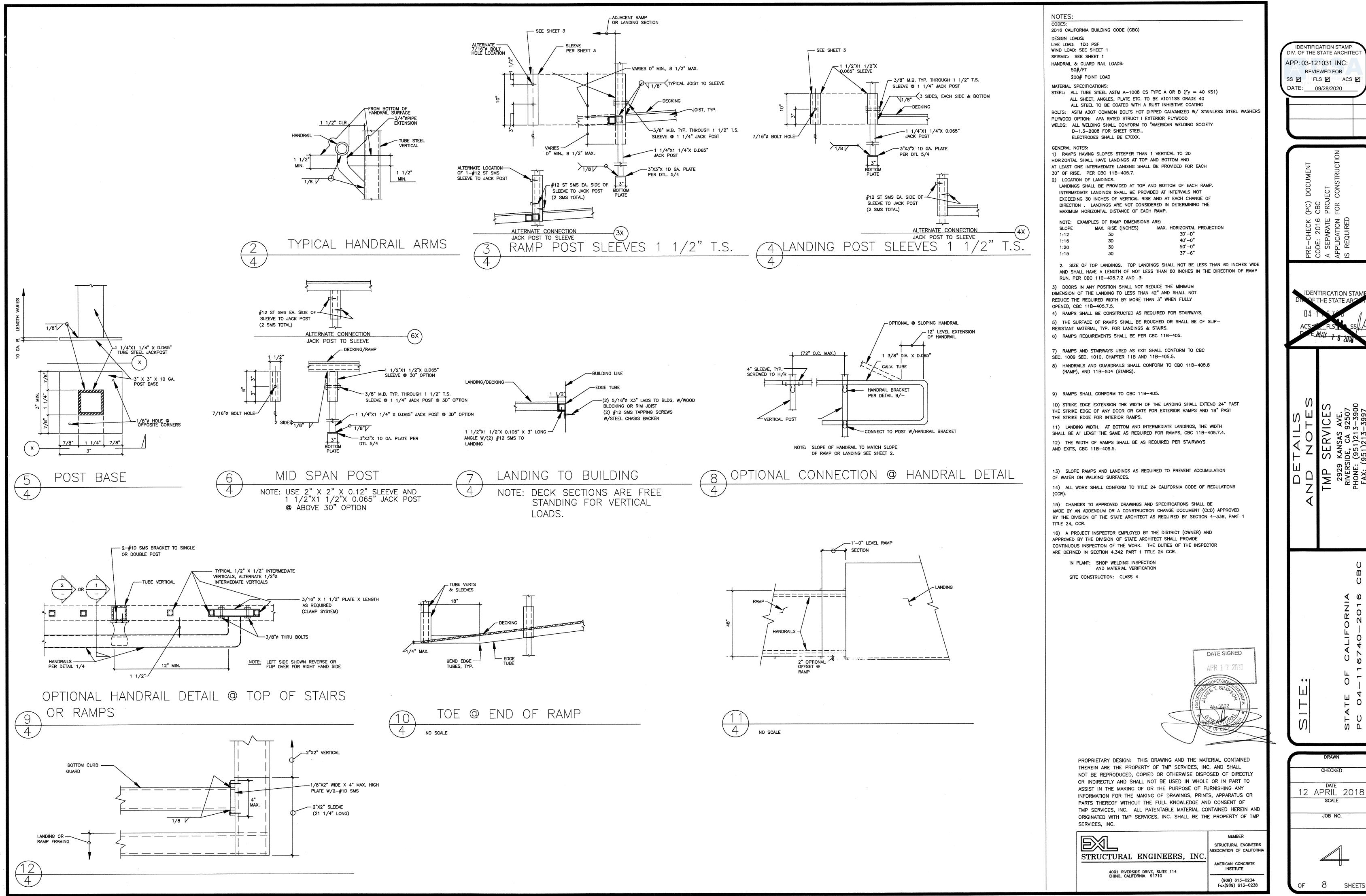
IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS

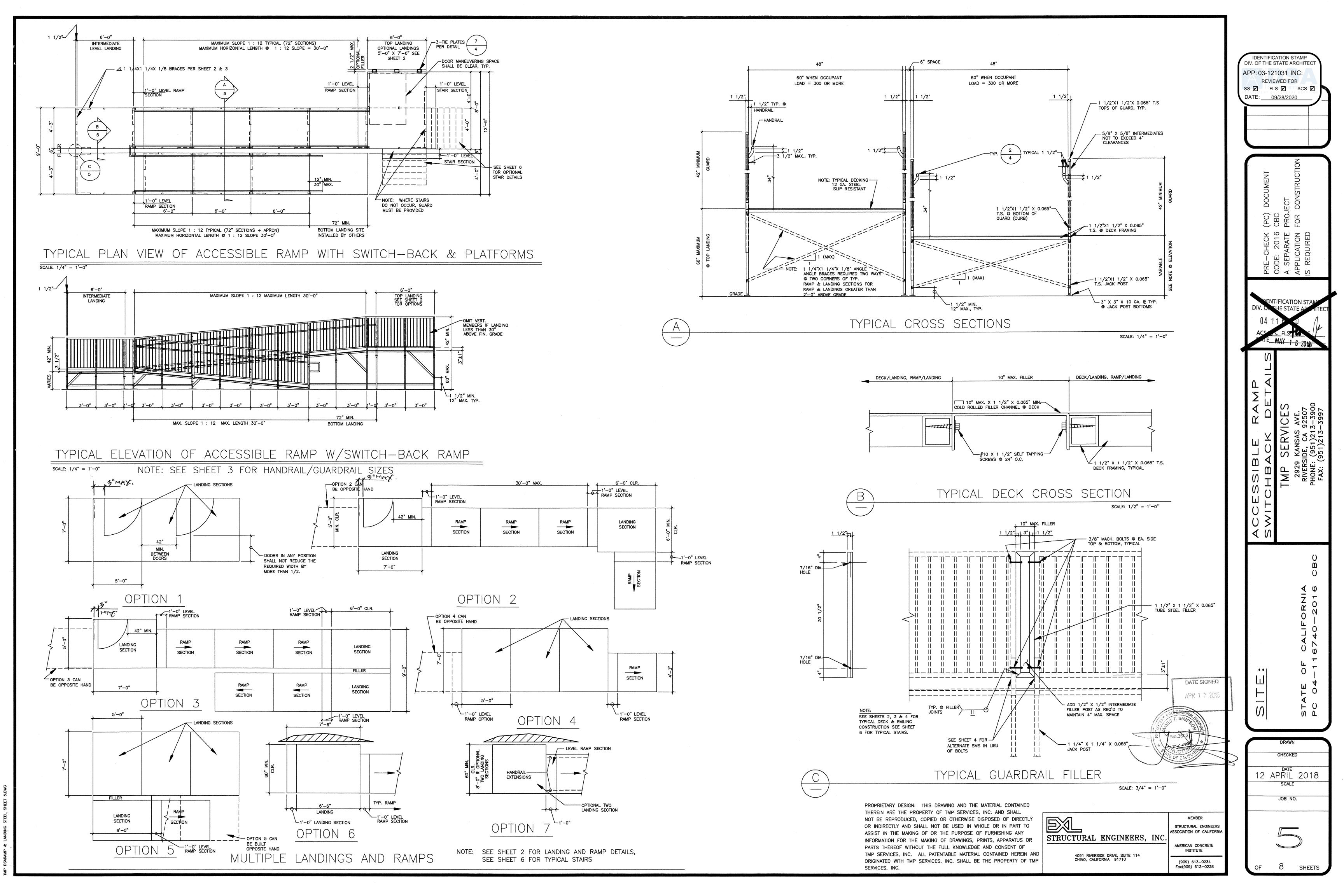
BEING INCORPORATED INTO AND THE EXAMPLE FORM DSA-103

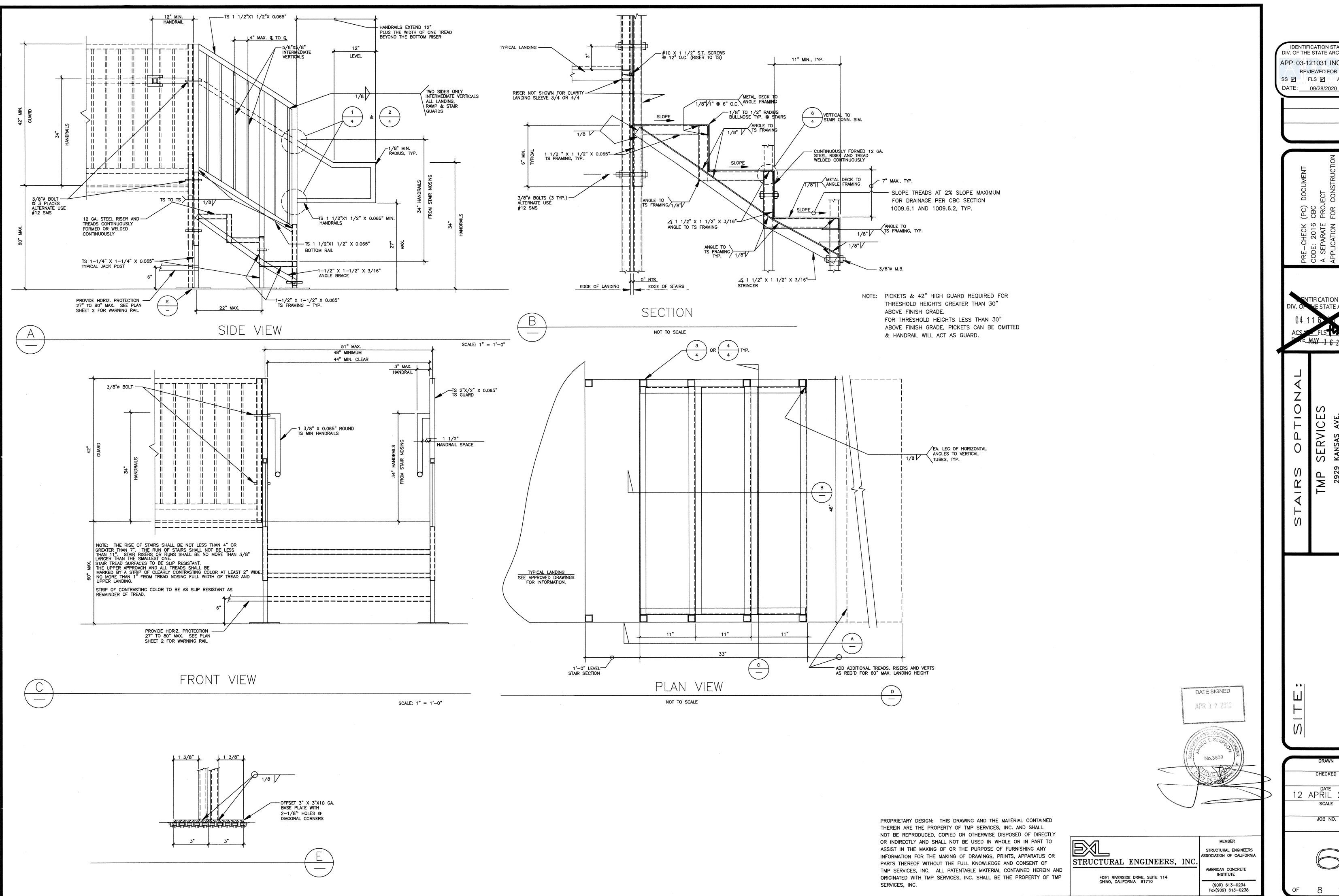
IS TO BE CROSSED OUT ON THIS DRAWING.





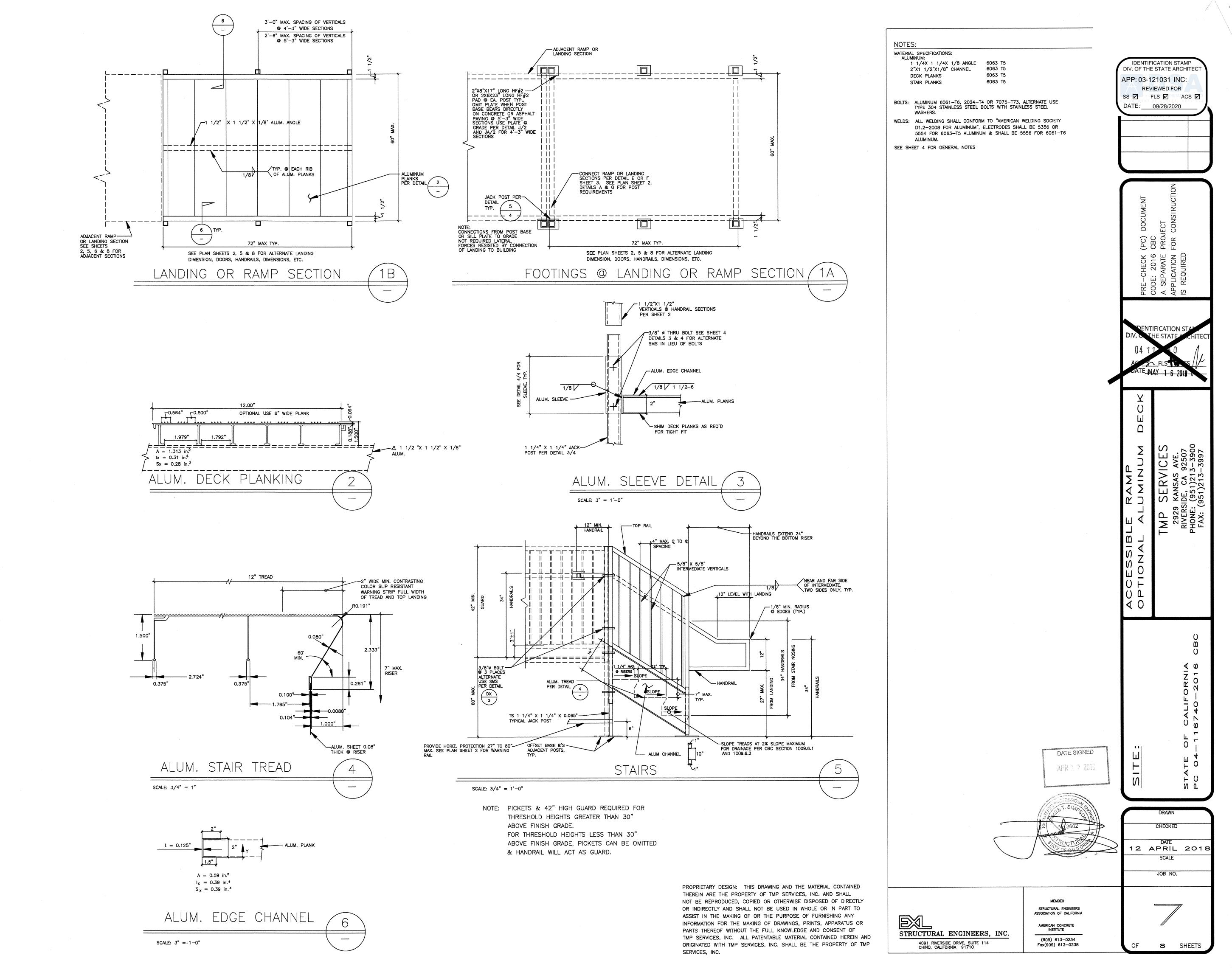


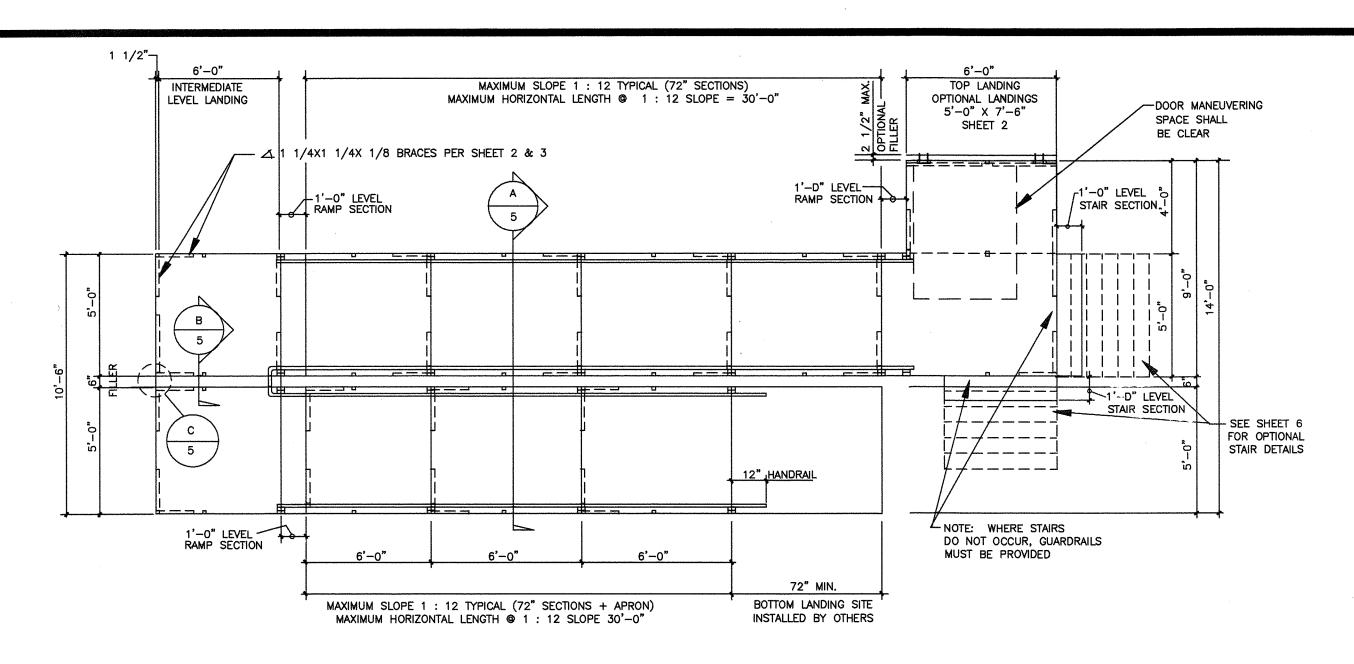




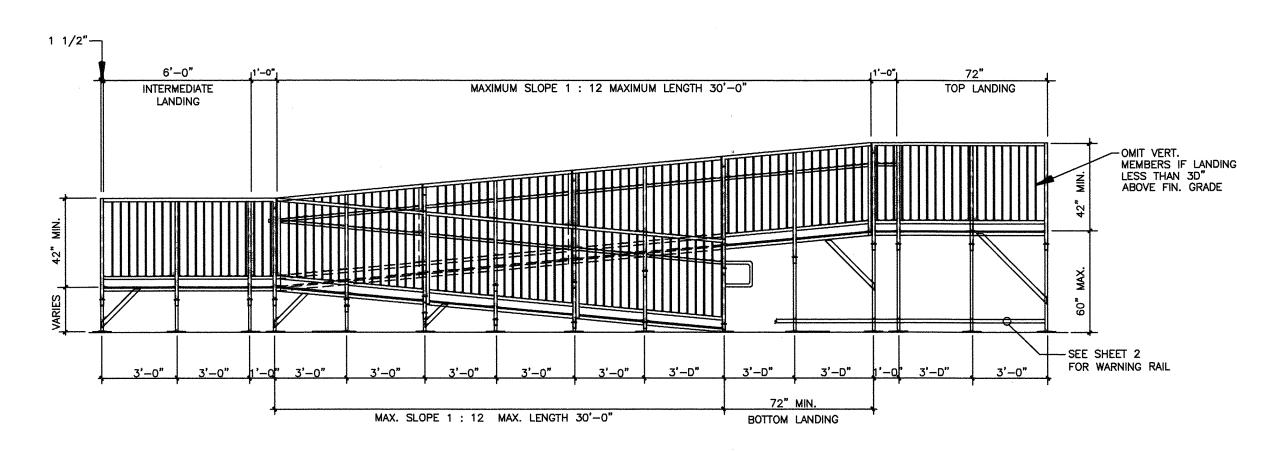
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12 APRIL 2018 JOB NO.



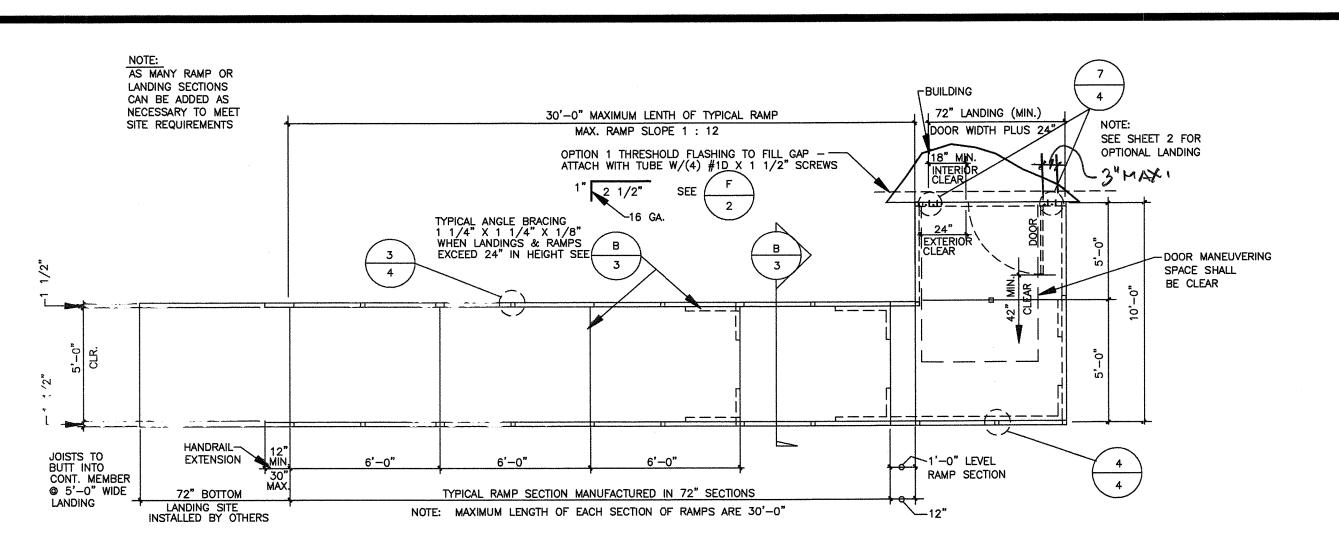


TYPICAL PLAN VIEW OF ACCESSIBLE RAMP WITH SWITCH-BACK & PLATFORMS SCALE: 1/4" = 1'-D"

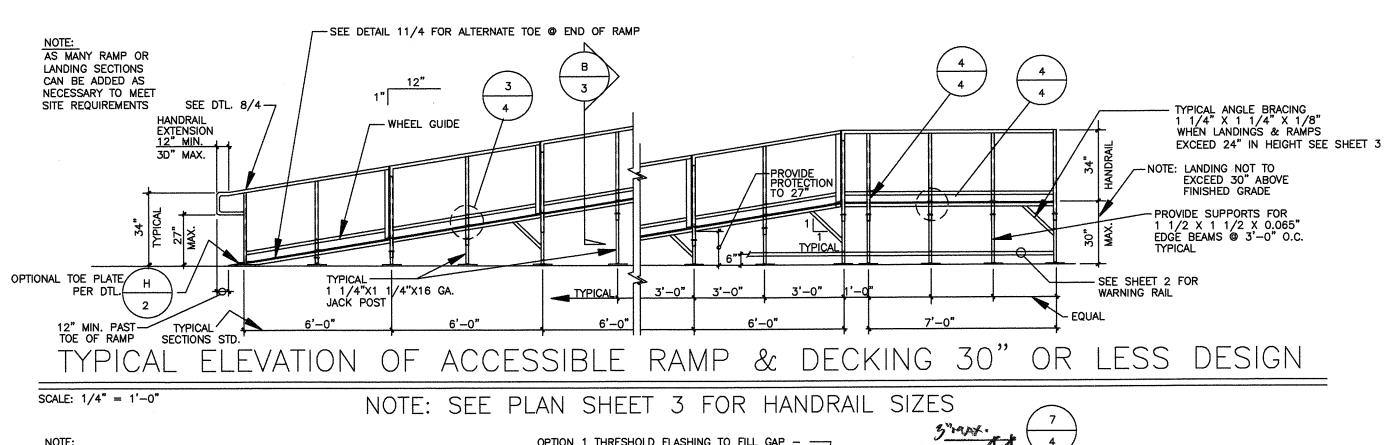


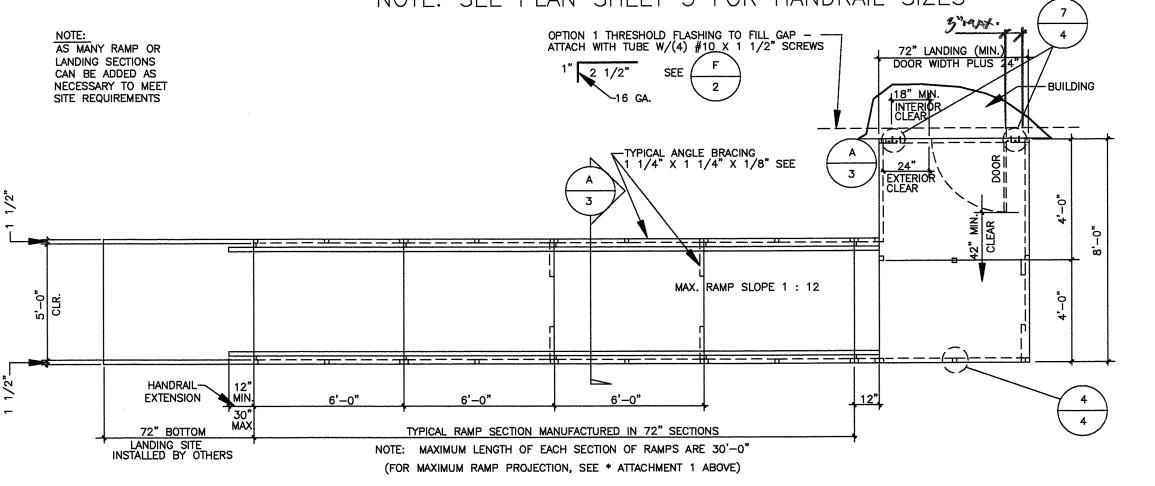
TYPICAL ELEVATION OF ACCESSIBLE RAMP W/SWITCH-BACK RAMP W/ 5'-0" WIDE RAMPS

SCALE: 1/4" = 1'-D"

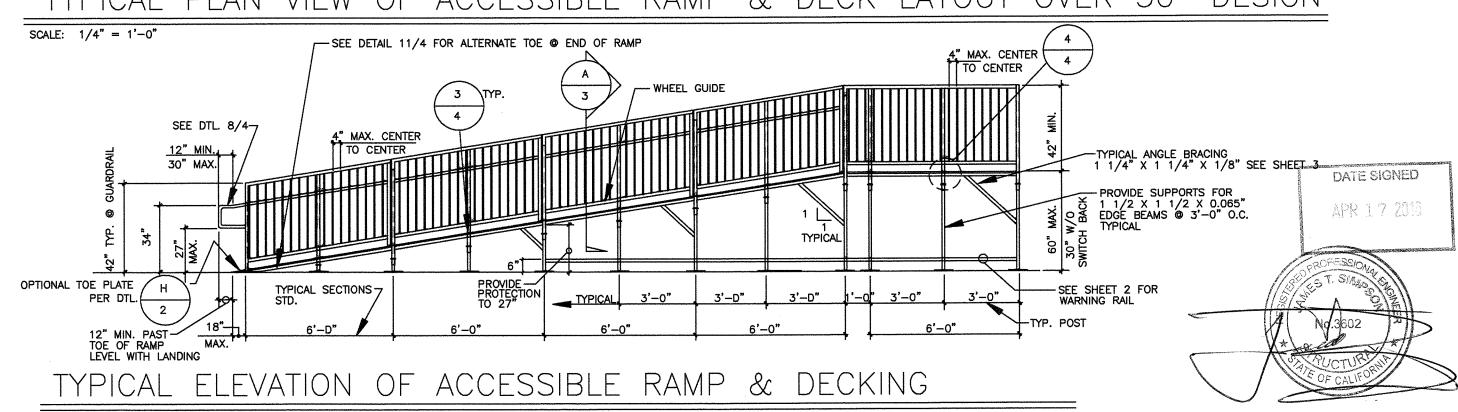


TYPICAL PLAN VIEW OF ACCESSIBLE RAMP & DECK LAYOUT SCALE: 1/4" = 1'-D"





TYPICAL PLAN VIEW OF ACCESSIBLE RAMP & DECK LAYOUT OVER 30" DESIGN



SCALE: 1/4" = 1'-0"

NOTE: SEE PLAN SHEET 3 FOR HANDRAIL/GUARDRAIL SIZES

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