

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

351



FROM: Economic Development Agency

SUBMITTAL DATE:
June 28, 2011

SUBJECT: Department of Veterans' Services Office – Plans and Specifications

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve the plans and specifications for the construction of the Department of Veterans' Services Office Project and authorize the Clerk of the Board to advertise for bids;
2. Upon completion of the bid process, authorize the Assistant County Executive Officer/EDA to submit the contract for award of the bid to the lowest responsive and responsible bidder to the Chairman of the Board, and authorize the Chairman to execute the agreement on behalf of the board; provided that, if any of the following occur, the award will be submitted to the Board for action: there is a bid protest, the lowest bid exceeds the estimated construction budget, the low bidder is disqualified, two or bids are the same and are the lowest, or a bidder requests relief from its bid due to an error; and

(Continued)

Robert Field

Robert Field
Assistant County Executive Officer/EDA

FINANCIAL DATA	Current F.Y. Total Cost:	\$ 0	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	No
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2011/12

COMPANION ITEM ON BOARD OF DIRECTORS AGENDA: No

SOURCE OF FUNDS: 73% Project Management Office Budget, 27% Deferred Maintenance	Positions To Be Deleted Per A-30	<input type="checkbox"/>
	Requires 4/5 Vote	<input type="checkbox"/>

C.E.O. RECOMMENDATION: APPROVE
 BY: *Jennifer L. Sargent*
 County Executive Office Signature: Jennifer L. Sargent

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Ashley, seconded by Supervisor Stone and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Buster, Tavaglione, Stone, Benoit and Ashley
 Nays: None
 Absent: None
 Date: July 12, 2011
 xc: EDA, CIP, COB

Kecia Harper-Ihem
 Clerk of the Board
 By: *Kecia Harper-Ihem*
 Deputy

Prev. Agn. Ref.: 3.19 of 3/29/11 | District: 2 | Agenda Number: **3.23**

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

REVIEWED BY CIP: *Christopher Hans*
 FORM APPROVED COUNTY COUNSEL: *6/28/11*
 BY: *Marshall Victor*
 MARSHALL VICTOR
 DATE: 6/28/11
 Departmental Concurrence

Policy
 Policy
 Consent
 Consent
 Dept's Recomm.:
 Per Exec. Ofc.:

RECOMMENDED MOTION: (Continued)

3. Delegate project management authority for this project to the Assistant County Executive Officer/EDA in accordance to applicable Board policies.

BACKGROUND:

On October 6, 2009, the Board of Supervisors approved a pre-qualified list of architectural and engineering firms to be retained on an as-needed basis. The Economic Development Agency (EDA) has selected Holt Architects from the pre-qualified list to provide architectural and engineering design services for the Department of Veterans' Services Office project.

The bid documents are now complete and EDA requests approval to solicit bids for construction of this project. In order to keep the project moving forward and meet project schedule commitments, staff recommends the Board of Supervisors authorize the Assistant County Executive Officer/EDA to determine award of the project in accordance with Board Policy B-11, and authorize the Chairman of the Board to execute the agreement on behalf of the Board of Supervisors, provided that the lowest bid falls within the allotted project budget amount for construction.

EDA staff recommends that the Board of Supervisors approve the plans and specifications and authorize the Clerk of the Board to advertise the Notice Inviting Bids for the project.

All costs associated with this project will be funded by the Project Management Office and Deferred Maintenance.

SPECIFICATIONS AND CONTRACT DOCUMENTS
FOR THE

COUNTY OF RIVERSIDE

DEPARTMENT OF VETERANS' OFFICE PROJECT
FM0872000149



PREPARED BY
Holt Architects and the
COUNTY OF RIVERSIDE
Economic Development Agency
June 23, 2011

JUL 12 2011 3.23jds

FORM APPROVED COUNTY COUNSEL

BY: MB Victor 6/28/11
MARSHAL L. VICTOR DATE

- 08200 - Wood Doors and Frames
- 08700 - Pre-Finished Steel Door Frames
- 08800 - Glazing

DIVISION 9 -- FINISHES

- 09200 - Lath and Plaster
- 09250 - Gypsum Board Systems
- 09300 - Tilework
- 09510 - Acoustical Ceiling Systems
- 09650 - Resilient Flooring
- 09680 - Carpet
- 09900 - Painting

DIVISION 10 -- SPECIALTIES

- 10120 - Tackboards and Chalkboards
- 10350 - Flagpoles
- 10400 - Identifying Devices
- 10800 - Toilet and Bath Accessories

DIVISION 11 -- EQUIPMENT

- 11027 - Knox Boxes

DIVISION 12 -- FURNISHINGS

- 12500 - Window Treatment

DIVISION 13 -- SPECIAL CONSTRUCTION

- 13850- Security Systems

DIVISION 14 -- CONVEYING SYSTEMS

Not Used

DIVISION 15 -- MECHANICAL

- 15400 - Plumbing
- 15600 - Heating, Ventilating and Air Conditioning

DIVISION 16 -- ELECTRICAL

- 16000 - Electrical Work

*** END OF SECTION ***

SECTION 00005
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DIVISION 0 -- CONTRACT REQUIREMENTS

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02070 - Selective Demolition and Reconstruction
02220 - Excavating, Backfilling, and Compacting
02510- Asphalt Concrete Paving
02550 - Site Concrete Work

DIVISION 3 -- CONCRETE

Not Used

DIVISION 4 -- MASONRY

04100 - Mortar and Grout
04200 - Reinforced Unit Masonry System

DIVISION 5 -- METALS

Not Used

DIVISION 6 -- WOOD AND PLASTIC

06100 - Rough Carpentry
06200 - Finish Carpentry
06410 - Custom Casework
06600 - Plastic Surfacing Materials

DIVISION 7 -- THERMAL AND MOISTURE CONTROL

07120 - Waterproofing & Damproofing
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08100 - Metal Doors and Frames

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NOTICE INVITING BIDS

COUNTY OF RIVERSIDE, herein called Owner, invites sealed proposals for the construction of:

Department of Veterans' Office Project

This Project is to remodel an existing 4500 square foot County owned building to suit the needs of the Department of Veterans, including a new lobby, offices, restrooms, conference/training room and other improvements per plans and specifications. The Project is located at 4342 Orange Street, Riverside, CA 92501. Construction costs are estimated at \$200,000.00.

Proposals shall be delivered to the Clerk of the Board, on the 1st floor of the Riverside County Administration Center located at 4080 Lemon Street, Riverside, CA 92501, **no later than 2:30 pm on August 8, 2011** and will be promptly opened in public at said address.

Each Proposal shall be in accordance with the Plans, Specifications, and other Contract Documents prepared by Holt Architects. Plans and Specifications may be obtained from IB Reprographics, 3363 Durahart Street, Riverside, CA 92507, 951-682-1850, for a nonrefundable fee. An additional nonrefundable fee will be charged for each set of Plans and Specifications furnished that are requested to be mailed to Contractors.

Pursuant to the Labor Code, the Governing Board of the Owner has obtained from the Director of the Department of Industrial Relations, State of California, his determination of the general prevailing rates of per diem wages applicable to the work, and for holiday and overtime work, including employer payments for health and welfare, pension, vacation, and similar purposes, as set forth on the schedule, copies of which are on file at the Clerk of the Board of Supervisors, 4080 Lemon St., 1st floor, Riverside, CA 92501-3655, and which will be made available to any interested person upon request.

A Bid Bond, Performance Bond and Payment Bond shall be required for this Project.

The Contract General Conditions for this project will contain provisions allowing the successful contractor to substitute securities for monies withheld by the County to ensure performance (Public Contract Code 22300).

The Contractor will be required, per Public Contracts Code, Section 3300 and for this contract, to have a State of California contractor's license classification **B - General Building Contractor**.

A Mandatory pre-bid job walk will be held on Tuesday, July 26, 2011, starting no later than 9:00 AM., meeting at 4342 Orange Street, Riverside, CA 92501. No bids will be accepted from bidders who have not attended, or arrived late to the pre-bid job walk.

Request For Information deadline is August 2, 2011 at 10:00 AM.

For additional information, contact Bruce Norris at the County of Riverside, located at 3403 10th St., Riverside, CA 92501, whose telephone number is (951) 955-0353.

INSTRUCTIONS TO BIDDERS

A. **COMMUNICATION:** All communication **will be in writing**, no phone calls or other verbal communication will be allowed.

Bidders may submit questions or request clarifications of any aspect of the proposal process or proposed construction on the form provided titled "Request for Information" (RFI). RFIs may be faxed, mailed or delivered to the person designated as the contact. All RFIs and the Owner's answers to RFIs will be compiled, emailed or faxed and mailed to all registered bidders as soon as possible. **To be considered, all RFIs shall be submitted in writing by 10:00 AM, August 2, 2011.** The person submitting the request will be responsible for its prompt delivery.

All requests shall be submitted as single RFIs for one particular question or subject. Multiple requests per form may or may not be considered at the discretion of the Owner or Owner's representative.

B. **DRAWINGS AND SPECIFICATIONS:** All information, herein enclosed, become a part of the Bid Documents. Plans and Specification may be purchased from IB Reprographics, 3363 Durahart Street, Riverside, CA 92507, 951-682-1850, Attn: Shannon Smothermon. All fees are due at the time of request and must be paid by check or money order made payable to "IB Reprographics". There will be a non-refundable charge per set. Bidders requesting that sets be mailed or shipped to them will be charged the full cost of shipping.

C. **FORM OF THE PROPOSAL:** The proposal must be made on the attached Contractors Proposal form, which must be filled out completely, dated and signed by the bidder or duly authorized agent in accordance with the directions on the Proposal form.

Each proposal shall include a complete list of the subcontractors proposed for every portion of the work, in accordance with Public Contract Code Sections 4100 - 4114, inclusive.

D. **SUBMISSION OF PROPOSAL:** Signed copies of each Proposal shall be sealed in an opaque envelope. The envelope shall bear the bidders name and shall be marked:

*PROPOSAL FOR THE CONSTRUCTION OF
Department of Veterans' Office

Project Address:
4342 Orange Street, Riverside CA

Proposals shall be submitted at the place designated in the Notice Inviting Bids at, or before, the time specified in said Notice. Before that time a proposal may be withdrawn, but only in person by the bidder or someone authorized by him in writing, and not by telephone or telegram.

E. **INTERPRETATION OF THE DOCUMENTS:** Discrepancies in and omissions from the plans, specifications or other contract documents, or questions as to their meaning shall, at once, be brought to the attention of the Owner. Any interpretation of the documents will be made only by addenda duly issued and a copy of such addenda will be mailed or delivered to each person or firm receiving a set of such documents. The Owner will not be responsible for any other explanations or interpretations. Should anything in the scope of the work or any of the sections of the specifications be of such nature as to be apt to cause disputes between the various trades involved, such information shall be promptly called to the attention of the Owner.

F. **ADDENDA TO THE DOCUMENTS:** The Owner reserves the right to issue such addenda to the documents as it may desire at any time prior to the time fixed for receiving proposals. A copy of all such addenda will be promptly mailed or delivered to each bidder. The number and date of each addendum shall be listed on the Contractors Proposal in the space provided.

G. **OWNERS RESERVATION OF RIGHTS:** The Owner reserves the right to reject any or all proposals and to waive any informalities in a bid or in the bidding. No bidder may withdraw his bid for a period of sixty (60) days after the time set or the opening thereof.

H. **BIDDERS CHECK OR BOND:** Each proposal must be accompanied by a certified or cashier's check, or by a bid bond on the form supplied by the Owner, drawn in favor of the Owner in an amount not less than ten percent (10%) of the total proposal. This check or bond shall be given as a guarantee that the bidder, if awarded the contract, will execute and deliver the contract documents and the required Payment & Performance bonds in accordance with his proposal accepted by the Owner.

In default of execution of the contract upon award and/or delivery of said Payment and Performance Bonds, such proposal bond or check shall be held subject to payment to the Owner of the difference in money between the amount of the bidders proposal and the amount for which the Owner may legally contract with another party to perform the said work together with the costs to the Owner of redrafting, redrawing and publishing documents and papers necessary to obtain new bids on the said work. The check or bond shall, in addition, be held subject to all other damages suffered by the Owner, as set forth in the contract documents. Said check or bond will be returned upon the close of the period mentioned in Paragraph G above, and to the successful bidder upon execution of the contract documents.

NO BONDS WILL BE ACCEPTED UNLESS SUBMITTED ON FORM SUPPLIED BY OWNER.

- I. **AWARD OF CONTRACT:** The contract shall be awarded upon a resolution or minute order to that effect duly adopted by the governing board of the Owner. Execution of the contract documents shall constitute a written memorial thereof.
- J. **ADDITIONAL INFORMATION:** The Owner reserves the right to require of a bidder information regarding financial responsibility or such other information as the Owner determines is necessary to ascertain whether a bid is in fact the lowest responsible bid submitted. All references to an Architect shall be deemed to refer to the Owner where no Architect has been employed by the Owner.
- K. **PROMPT ACTION BY CONTRACTOR:** After the award of the Contract by the Owner, and within four (4) days after the Agreement Forms are presented to the Contractor for signing, he shall return to the Owner the signed Agreements, along with all necessary Bonds and Certificates of Insurance.
- L. **CAUTION TO BIDDERS:** Prospective bidders are cautioned not to merely examine the plans and specifications in making their bid, since requirements are imposed upon the contractor by various other portions of the Contract Documents.
- M. **PERFORMANCE AND PAYMENTS BONDS:** Bidders attention is directed to the requirement that both the Performance and Payment Bonds are one hundred percent (100%) of the contract price.
- N. **BIDDERS QUALIFICATIONS:** To be considered, a potential bidder must have a State of California contractor's license classification B – General Building Contractor, as required under provisions of Public Contracts Code Section 3300, and the California Business and Professions Code, for work covered in its proposal when a bid is submitted. This includes a joint venture formed to submit a bid.
- O. **PRE-BID CONFERENCE:** There will be a mandatory pre-bid conference for this project that will be held at the site. No bids will be accepted from bidders who have not attended the pre-bid conference.
- P. **TIME OF COMPLETION:** Time of completion of project is forty (40) calendar days from the date specified in the NOTICE TO PROCEED issued by the Owner.
- Q. **BIDS:** Under the bidding items listed on the Contractor's Proposal, bidders shall state prices for each basis for bid given hereinafter.

Base Bid shall be the entire work complete in accordance with the contract documents, but not including work indicated or specified to be provided under any of the other bid items.

The basis for award will be the qualified bidder with the lowest total of the Base Bid and all alternates. Alternates may be awarded in any order after determination of the lowest responsible and responsive bidder.

CONTRACTOR'S PROPOSAL

TO THE GOVERNING BOARD OF THE COUNTY OF RIVERSIDE:

Date: _____

Bidder: _____

The undersigned, having carefully examined the proposed site and the Plans and Specifications, the Notice Inviting Bids, the Instructions to Bidders, the Agreement Form, the Bond Forms, the General Conditions and the Supplementary General Conditions for the Construction of the Department of Veterans' Office Project, hereby proposes and agrees to furnish all tools, equipment, services, apparatus, facilities, transportation, labor and materials necessary to complete the work in strict conformity with the Plans and Specifications, including all work specified in Addenda numbered and dated:

Addendum No. _____ Date _____

Addendum No. _____ Date _____

Addendum No. _____ Date _____

For the total Base Bid _____ dollars (\$ _____), including all applicable taxes, permits, and licenses.

Alternate 1: Windows \$ _____ ADD

Alternate 2: _____ \$ _____ ADD/DEDUCT

For the **Grand Total of Base Bid and all Alternates** _____ dollars (\$ _____), including all applicable taxes, permits, and licenses.

Bids must be submitted on all items. Failure to bid on all items may result in the bid being rejected as non-responsive. **The basis for award will be the qualified bidder with the lowest total of the Base Bid and all alternates.** Alternates may be awarded in any order after determination of the lowest responsible and responsive bidder.

AWARD OF CONTRACT

The undersigned fully understands that a Contract is formed upon the acceptance of this Proposal by the Owner and the undersigned further agrees that upon request he will promptly execute and deliver to Owner a written memorial of the Contract together with the required Payment and Performance Bonds and proof of insurance.

BID GUARANTEE

The enclosed certified or cashier's check or bidder's bond on approved form, made payable to the Owner in the amount of ten percent of the total bid submitted herewith, is hereby given as a guarantee that the bidder will execute and deliver the above mentioned written memorial and required bonds and insurance if awarded the contract, and in the event that the undersigned fails or refuses to execute and deliver said documents, such check or bond is to be charged with the costs of the damages experienced by the Owner as a result of such failure or refusal, including but not limited to publication costs, the difference in money between the amount of the bid of the said principal and the amount for which obligee may legally contract with another party to perform the said work if such amount be in excess of the former, building lease or rental costs, transportation costs and additional salary costs that result from the delay due to the principal's default on the awarded contract. In no event, however, shall the Surety's liability exceed the penal sum hereof.

Name of Bidder: _____

Type of Organization: _____

Signed By: _____

Title of Signer: _____

Address of Bidder: _____

Telephone No.: _____

Contractor's License No.: _____

Classification: _____ Expiration Date: _____

Affix Seal
If
Corporation

LICENSURE STATEMENTS ARE MADE UNDER PENALTY OF PERJURY

If bidder is a corporation, and signer is not President or Secretary, attach a certified copy of By-Laws or resolution authorizing execution. If bidder is a corporation, affix corporate seal. If signer is an agent, attach Power of Attorney. If bidder is not an individual, list names of other persons authorized to bind the organization.

**NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND
SUBMITTED WITH BID**

State of California) ss.
County of Riverside)

_____, being first duly sworn, deposes and says:

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

Signature

Subscribed and sworn to before me this _____ day of _____, 2011.

Signature of officer administering oath

Bid Bond

KNOWN TO ALL MEN BY THESE PRESENTS, that we, the undersigned _____, as Principal; and _____, as Surety, are hereby held and firmly bound unto the County of Riverside, hereinafter called the "Owner", in the sum of _____ Dollars (\$ _____) for the payment of such sum, well and truly to be made, do hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

WHEREAS, the said Principal is herewith submitting its Proposal for the construction of the Department of Veterans' Office Project.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that if the aforesaid Principal shall be awarded the Contract upon said Proposal and shall, within the required number of days after the notice of such award, execute a written memorial of the awarded Contract and submit the required Labor and Material Payment and faithful Performance Bond and proof of insurance, then this obligation shall be null and void; and in the event that the Principal fails and/or refuses to execute and deliver said documents this Bond will be charged with the costs of the damages experienced by the Owner as a result of such refusal, including but not limited to, publication cost, the difference in money between the amount of the bid of the said Principal and the amount for which the obligee may legally contract with another party to perform the said work if such amount be in excess of the former; building lease or rental costs, transportation cost, and additional salary costs that result from the delay due to the Principal's default on the awarded Contract. In no event however, shall the Surety's liability exceed the penal sum hereof.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their separate seals this _____ day of _____, 2011, the name and corporate seal of each corporate party being hereto affixed and those present duly signed by its undersigned representative, pursuant to authority of its governing body.

(Firm Name - Principal)

(Business Address)

By _____
(Original Signature)

(Title)

(Corporation Name - Surety)

(Business Address)

By _____
(Original Signature)

Affix Seal
If
Corporation

Affix
Corporate
Seal

The rate of premium on this bond is _____ per thousand. Total amount of premium charged, \$ _____.

(The above must be filled in by corporate surety.)

AGREEMENT FORM

THIS AGREEMENT, entered into this _____ day of _____, 2011, by and between _____, hereinafter called the "Contractor", and the County of Riverside hereinafter called the "Owner".

WITNESSETH: That the parties hereto have mutually covenanted and agreed as follows:

CONTRACT: The Complete Contract includes all of the Contract Documents, to wit: The Notice Inviting Bids, the Instructions to Bidders, the Contractor's Proposal, Wage Schedule, Payment and Performance Bonds, the Plans and Specifications plus any Addenda thereto, the General Conditions, the Supplementary General Conditions, if applicable and this Agreement. All Contract Documents are intended to cooperate and be complimentary so that any work called for in one and not mentioned in the other, or vice versa, is to be executed the same as if mentioned in all Contract Documents.

STATEMENT OF WORK: The Contractor hereby agrees to furnish all tools, equipment, services, apparatus, facilities, transportation, labor and materials for the Office of Veterans services Tenant Improvement Project. In strict accordance with the Plans and Specifications dated June 2011 prepared by Holt Architecture, Inc. & County of Riverside hereinafter called the "Architect", including Addenda thereto as listed in the Contractor's Proposal, all of which are made a part hereof.

TIME FOR COMPLETION: The work shall be commenced on a date to be specified in a written order of the Architect and shall be completed within Forty (40) calendar days from and after said date. It is expressly agreed that except for extensions of time duly granted in the manner and for the reasons specified in the General Conditions, time shall be of the essence.

COMPENSATION TO BE PAID TO CONTRACTOR: The Owner agrees to pay and the Contractor agrees to accept in full consideration for the performance of the Contract, subject to additions and deductions as provided in the General Conditions, the sum of _____ dollars (\$ _____) being the total of the base bid, alternates ____, ____, ____, plus the following addenda: ____, ____, _____. The sum is to be paid according to the schedule as provided in the General Conditions.

Pursuant to Labor Code, Section 1861, the Contractor gives the following certification: I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.

IN WITNESS WHEREOF, the parties hereto on the day and year first above written have executed this agreement in four (4) counterparts.

Type of Contractor's organization: _____

If other than individual or corporation, list names of all members who have authority to bind firm.

Firm Name: _____

Address: _____

Contractor's License No.: _____

IF OTHER THAN CORPORATION EXECUTE HERE

Signature: _____

Title: _____

IF CORPORATION, FILL OUT FOLLOWING AND EXECUTE

Name of President of Corporation: _____

Name of Secretary of Corporation: _____

Corporation is organized under the laws of State of _____

Signature: _____

Title: _____

Owner: COUNTY OF RIVERSIDE

Signature: _____

Title: Chairman - Board of Supervisors **BOB BUSTER**

Attest: Clerk - Board of Supervisors **KECIA HARPER-IHEM**

By: _____

Title: _____

DEPUTY

Affix Seal
If
Corporation

PAYMENT BOND

(Public Work - Civil Code Section 3247 et seq.)

The makers of this Bond are S.H.E. Engineering & Construction Group as Principal and Original Contractor and _____, a corporation, authorized to issue Surety Bonds in California, as Surety, and this Bond is issued in conjunction with that certain public works contract dated _____, 2011 between Principal and County of Riverside, a public entity, as owner, For _____ dollars (\$ _____) the total amount payable. THE AMOUNT OF THIS BOND IS 100% OF SAID SUM. Said contract is for public work of: **Office of Veterans services Tenant Improvement Project.**

The beneficiaries of this Bond are as is stated in 3248 of the Civil Code and the requirements and conditions of this Bond are as is set forth in Sections 3248, 3249, 3250 and 3252 of said Code. Without notice, Surety consents to extension of time for performance, change in requirements, amount of compensation, or prepayment under said Contract.

Signed and Sealed this _____ Day of _____ 2011.

(Firm Name - Principal)

(Business Address)

By: _____
(Signature - Attach Notary's Acknowledgment)

(Title)

(Corporation Name - Surety)

(Business Address)

By: _____
(Signature - Attached Notary's Acknowledgment)

ATTORNEY-IN-FACT
(Title-Attach Power of Attorney)

Affix Seal
if
Corporation

Affix
Corporate
Seal

PERFORMANCE BOND

The makers of this Bond, _____, as Principal, and _____ as Surety, are held and firmly bound unto County of Riverside, hereinafter called the Owner, in the sum of _____ Dollars (\$ _____), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such that whereas the Principal entered into a certain contract, hereto attached, with the Owner, dated _____, 2011 for the Office of Veterans services Tenant Improvement Project.

Now therefore, if the Principal shall well and truly perform and fulfill all the undertakings covenants, terms, conditions and agreements of said Contract during the original term of said Contract and any extension thereof that may be granted by the Owner, with or without notice to the Surety, and during the file of any guarantee required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said Contract that may thereafter be made, then this obligation to be void, otherwise to remain in full force and virtue. Without notice, Surety consents to extension of time for performance, change in requirements, change in compensation or prepayment under said Contract.

Signed and Sealed this _____ Day of _____, 2011.

(Firm Name - Principal)

(Business Address)

Affix Seal
if
Corporation

By: _____
(Signature - Attach Notary's Acknowledgment)

(Title)

(Corporation Name - Surety)

(Business Address)

Affix
Corporate
Seal

By: _____
(Signature - Attach Notary's Acknowledgment)

ATTORNEY-IN-FACT
(Title-Attach Power of Attorney)

**CONTRACTOR'S CERTIFICATE
REGARDING WORKERS' COMPENSATION**

Labor Code Section 3700

Every employer, except the State and all political subdivisions or institutions thereof, 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, which 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 employees

I am aware of the provisions of Section 3700 of the Labor Code which requires 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 this Contract.

Principal

Principal

Title

(In accordance with Article 5 [commencing at Section 1860], Chapter, Part 7, Division 2 of the Labor Code, the above Certificate must be signed and filed with the Owner prior to performing any work under this Contract.)

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GENERAL CONDITIONS OF THE CONTRACT

ARTICLE 1

GENERAL PROVISIONS

1.1 DEFINITIONS

THE CONTRACT DOCUMENTS - The Contract Documents consist of the Contract, the Performance Bond and Payment Bond and any other bond required by the Contract, the drawings, the specifications, addenda issued prior to execution of the Contract, and all modifications thereto.

THE CONTRACT - The Contract Documents form the Contract. The Contract represents the entire and integrated agreement between the parties hereto, and supersedes all prior negotiation, representations, or agreements, either written or oral, including the bidding documents.

ACT OF GOD - An Act of God is an earthquake of magnitude 4.5 or greater on the Richter scale, flood, tornado, or other cataclysmic phenomenon of nature, or rain, snowstorm, windstorm, high water, or other natural phenomenon in excess of the normal as established by National Oceanic and Atmospheric Administration weather data.

ACCEPTANCE - Acceptance is when the County determines all of the Contract requirements have been completed. Execution of the Notice of Completion will signify acceptance. A copy of the Notice of Completion will be sent to the Contractor after execution by the County. Upon receipt of the Notice of Completion, the Contractor will be relieved of the duty of protecting the work, and the County will initiate final settlement and payment.

ARCHITECT - The use of the term Architect shall mean the individual, partnership, corporation, association or joint venture contracted by the County for the design of this Work, as designated on the title sheet of these specifications and Contract Documents.

BENEFICIAL OCCUPANCY - The right of the County to occupy all or any portion of the project prior to final Acceptance of the Work. Such occupancy does not constitute acceptance or completion by the Contractor of the Work or any portion thereof, nor will it relieve the Contractor of the responsibility for correcting defective work or materials found at any time before Acceptance of the Work.

COUNTY - The term County when used herein shall mean the Board of Supervisors of the County of Riverside, a political subdivision of the State of California.

CHANGE ORDER - A Change Order is the document issued by the County authorizing any change or adjustment to the Contract Documents in accordance with Article 19 of this Contract.

CONTRACT DRAWINGS - "Contract drawings" or "drawings" means and includes (a) all drawings which have been prepared on behalf of the County and are included in the Contract Documents and all clarification drawings issued by notice to the bidders thereto; (b) all drawings submitted pursuant to the terms of the Contract by the Contractor to the County during the progress of the Work, which are accepted by the County.

CONTRACTOR'S AGENT - The representative of the Contractor, approved by the County, who shall be present at the Work and be authorized to receive and act upon instructions from the County and to execute and direct the Work on behalf of the Contractor.

CONTRACTOR - When used herein, Contractor means the prime or principal Contractor licensed to perform work in the State of California, including all joint ventures. References to subcontractor or others are only for convenience and all such references shall be considered to refer to the Contractor. The prime or principal Contractor shall be responsible for all subcontractors, and all subcontractors shall require their subcontractors to comply with the relevant provisions of the prime or principal contract.

CRITICAL PATH METHOD(CPM) - "Critical Path Method" is a schedule technique.

DAY - The use of "day" herein means calendar day and shall include every day including Saturdays, Sundays, and legal holidays.

DIRECTOR - The use of "Director" shall mean the Assistant County Executive Officer/EDA/FM of the County or his designated representative.

INSTALL - When used herein, "install" shall mean the complete installation, in place, of any item, equipment or material.

MATERIAL - Material shall be construed to include machinery, equipment, manufactured articles, or construction such as form work, fasteners, etc., and any other classes of material to be furnished in connection with the Contract. All materials shall be new.

NOTICE OF COMPLETION - The Notice of Completion ("NOC") shall be issued at that point in the Contract when the Contractor has completed all Work required in the Contract Documents. The time for issuance shall be determined by the County through a final inspection. The NOC shall be issued by the Board of Supervisors.

NOTICE TO PROCEED - The Notice to Proceed is the written notification from the County giving the Contractor notice to commence with the Work. The Notice to Proceed will specify the start date for the Work and the completion date.

REQUEST FOR INFORMATION - (RFI) The form and procedure established for communication between the Contractor and the County to clarify or interpret the Contract Documents.

REQUEST FOR QUOTATION - (RFQ) A document consisting of supplemental details, instruction, or information issued by the Architect, through the County, for the purpose of obtaining price quotations for possible changes in the Work.

SHALL - When used herein, "shall" means anything, which is mandatory to be performed by the Contractor.

SPECIFICATIONS - The term "Specifications" means that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work.

SUBCONTRACTOR - The term "Subcontractor" means a person or firm that has a contract with Contractor or with another subcontractor to perform a portion of the Work. Unless otherwise specifically provided, the term Subcontractor includes Subcontractors of any tier, suppliers, manufacturers, and distributors. The term Subcontractor is referred to throughout the Contract Documents as if singular in number.

WORK - The term "Work" comprises the services and materials required by the Contract Documents, as may be amended, and includes all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.

1.2 AUTHORITIES AND LIMITATIONS

- 1.2.1** The Board of Supervisors alone have the power to bind the County and to exercise the rights, responsibilities, authorities, and functions vested therein by the Contract Documents, except that they shall have the right to designate authorized representatives to act for them.
- 1.2.2** Neither the Contract, nor any part thereof, nor moneys due or to become due there under may be assigned by the Contractor without the prior written approval of the County, with the exception of the assignments to County which may be required under the terms of this Contract.

1.3 LEGAL REQUIREMENTS

- 1.3.1** Contractor shall keep informed of, and comply with, all federal, state and county laws, ordinances, rules, and regulations applicable to the Work or to those engaged or employed in the Work of this Contract, especially (but not limited to) those laws relating to hours of employment, prevailing wages, payment of wages, sanitary and safety conditions for workers, workers' compensation insurance, type and kind of materials that can be used, non-discrimination in employment and affirmative action programs. Failure to identify a specific provision in these Contract Documents shall not excuse the Contractor from complying with such applicable statutory requirements.
- 1.3.2** If conflict arises between provisions of the Contract Documents and any such laws, rules, or regulations, the Contractor shall notify the County at once in writing. If, before receiving clarification, Contractor performs any portion of the Work affected by such apparent conflict, such performance shall be at Contractor's own risk. Contractor shall not be entitled to any additional compensation or time by reason of the conflict or its later correction.
- 1.3.3** All work and materials shall be in full accordance with the latest applicable (or otherwise noted) codes, rules, and regulations including, but not limited to, the following:
- .Uniform Building Code
 - .Uniform Plumbing Code
 - .Uniform Mechanical Code
 - .Uniform Fire Code
 - .State Fire Marshal
 - .State Industrial Accident Commission's Safety Orders
 - .Rules of Local Utilities
- 1.3.4** Nothing in the specifications is to be construed to permit work not conforming to the above, and expense incurred complying with the above shall be borne by the Contractor. Whenever the specifications and working details require higher standards than those required by the ordinances, codes and statutes, the specifications and working details shall take priority over the ordinances, codes and statutes.
- 1.3.5** In submitting a bid on this public works projects, or any subcontractor agreeing to supply goods, services, or materials, and entering a contract pursuant thereto, the contractor and/or subcontractor do offer and agree to assign the County 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. Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or

materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final acknowledgement by the parties.

1.4 STANDARD REFERENCES

1.4.1 All documents and publications (such as, but not limited to, manuals, handbooks, codes, standards, and specifications) which are cited in this Contract for the purpose of establishing technical (non-administrative) requirements applicable to equipment, materials, or workmanship under this Contract, shall be deemed to be incorporated herein as though fully set forth.

1.4.2 Whenever reference is made to any particular document or publication, the Contractor shall comply with the requirements set out in the edition specified in this Contract, or if not specified, the latest edition or revision thereof, in effect on the date of the solicitation of bid on this project, except as modified by, as otherwise provided in, or as limited to type, class, or grade, in the specifications of this Contract.

1.5 PERMITS, LICENSES, FEES & TAXES

1.5.1 COUNTY RESPONSIBILITIES

- a. The County will apply for all plan checks and will apply for and obtain the Building Permit(s), the Grading Permit and Construction Permits required by the County of Riverside, paying all fees in connection therewith.
- b. The County will furnish, at no expense to the Contractor, all on-site inspection of the Work and will arrange and pay for off-site inspection only as noted in the Contract Documents.

1.5.2 CONTRACTOR'S RESPONSIBILITIES

- a. The Contractor shall obtain and pay for all other permits and licenses required for the Work, including excavation permit and for plumbing, mechanical and electrical work and for operations in or over public streets or right of way under jurisdiction of public agencies other than the County.
- b. Exclusive of off-site inspection specified herein to be the County's responsibility, the Contractor shall arrange and pay for all off-site inspection of the Work, including certification, required by the specifications, drawings, or by governing authorities.
- c. Before Acceptance of the project by the County, the Contractor shall submit all licenses, permits, and certificates of inspection to the County.

1.6 SEPARATE CONTRACTS

1.6.1 The County reserves the right to perform work related to this project with its own forces, and to award separate contracts in connection with other portions of the project or other work on the site. The Contractor shall cooperate with others in the prosecution of all work and shall not interfere with material, appliances or workmen of the County or any other contractor engaged by the County at the site of the Work. In case of disagreement regarding such use, the matter shall be referred to the County whose decision relative to said use shall govern.

1.6.2 The Contractor shall afford the County and separate contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly connect and

coordinate Contractor's Work with theirs.

- 1.6.3** If any part of the Contractor's Work depends for proper execution or results upon the work of the County or any separate contractor, the Contractor shall inspect and promptly report to the County any discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the County's or the separate contractor's work as fit and proper to receive the Work, except as to defects which may develop in the other separate contractor's work after the execution of the Contractor's Work.
- 1.6.4** Should the Contractor cause damage to the work or property of any separate contractor on the Project, the Contractor shall, upon due notice, settle with such other contractor by agreement, if both will so settle. If such separate contractor sues the County because of any damage alleged to have been so sustained, the Contractor agrees to indemnify and defend the County in such proceedings with the County retaining the right to select and hire independent counsel for the County paid by the Contractor.
- 1.6.5** Any cost caused by defective or ill-timed work shall be borne by the party responsible therefore.

1.7 COUNTY'S AUTHORIZED REPRESENTATIVE, INSPECTOR(S), & ARCHITECT

1.7.1 AUTHORIZED REPRESENTATIVE

The County shall designate a representative during the Work, who shall have the right to be present at the job site during construction and shall supervise any additional representatives appointed by the County.

1.7.2 INSPECTOR(S)

The Inspector(s) shall have the right to observe the installation of all materials and equipment to be incorporated into the Work and the placing of such material and equipment to determine in general if the Work is proceeding in accordance with the Contract Documents. The Inspector(s) is not authorized to make changes in the Contract Documents. On the basis of his observations, he shall keep the County informed as to the progress of the Work. The Inspector shall not be responsible for means, methods, techniques, sequences, or procedures of construction nor for safety precautions and programs in connection with the Work. Nor will the inspector be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

1.7.3 ARCHITECT

- a. The County has retained an Architect for this project. The Architect will advise and consult with the County, and the County will issue instructions to the Contractor. The Architect will be requested to interpret the requirements of the Contract. When requested by the County, the Architect will, within a reasonable time, render such interpretations as he may deem necessary for the proper execution of the Work.
- b. The Architect will make periodic visits to the job site to familiarize himself generally with the progress and quality of the Work and to determine in general whether the work is proceeding in accordance with the Contract Documents. Based on such observations he will recommend approval of applications for progress payments made by Contractor. The Architect shall not be responsible for means, methods, techniques, sequences, or procedures of construction nor for safety precautions and programs in connection with the Work. Nor will the Architect be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

ARTICLE 2 BONDS AND INSURANCE

2.1 BIDS OF \$25,000 OR LESS

2.1.1 If the total amount bid on the Work is \$25,000 or less, the payment bond and performance bond are not required, provided that one payment of all compensation shall be made following Acceptance of all work.

2.2 BONDS

2.2.1 GENERAL REQUIREMENTS

 a. Before commencing any Work under this Contract, the Contractor shall file four of each bond with the County. These bonds shall be in the amounts and for the purposes specified below. They shall be surety bonds issued by:

- (1) Either a California Admitted Surety OR a current Treasury Listed Surety (Federal Register).

 And

- (2) Either a current A.M. Best A VIII rated Surety OR an admitted surety insurer which complies with the provisions of the Code of Civil Procedure, § 995.660.

 b. Should any surety or sureties upon said bonds or any of them become insufficient, Contractor shall renew said bond or bonds with good and sufficient sureties within ten (10) calendar days after receiving notice from the County that the surety or sureties are insufficient. Cost of bonds shall be included in the bid price.

2.2.2 PERFORMANCE BOND

The successful bidder shall deliver to the County an executed Performance Bond on the attached form in an amount equal to 100% of the accepted bid as security for the faithful performance of the Contract.

2.2.3 PAYMENT BOND

The successful bidder shall deliver to the County an executed Payment Bond on the attached form in an amount equal to 100% of the accepted bid as security for the payment of all persons performing labor and furnishing materials in connection with the Work.

2.3 INSURANCE

2.3.1 GENERAL REQUIREMENTS

Before commencing this Work under the Contract, and without limiting or diminishing CONTRACTOR'S obligation to indemnify and hold the COUNTY harmless, the Contractor shall procure and maintain, or cause to be maintained at its sole cost and expense, the following insurance coverages during the term of this Contract.

2.3.2 WORKERS' COMPENSATION INSURANCE

Contractor shall secure Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State of California. Policy shall include Employers' Liability (Coverage B) including Occupational Disease with limits not less than \$1,000,000 per person per accident. Policy shall be endorsed, if applicable, to

provide a Borrowed Servant/Alternate Employer Endorsement, and contain a Waiver of Subrogation in favor of the County of *Riverside*. Pursuant to Section 3700 of the Labor Code of the State of California, Contractor shall file with the County before commencing the Work the following signed certification:

"I am aware of the provisions of Section 3700 of the Labor Code, which requires 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 shall comply with such provisions before commencing the performance of the Work of this Contract."

2.3.3 COMMERCIAL GENERAL LIABILITY:

Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products/completed operations if applicable, personal and advertising injury – which may arise from or out of CONTRACTOR'S operations, use, and management of the premises, or the performance of its obligations hereunder. Policy shall name the County of Riverside—it's Director's, Officers, special Districts, Board of Supervisors, employees, agents or representatives as Additional Insured, and contain a Waiver of Subrogation in favor of the County of Riverside. Policy limits shall not be less than \$1,000,000 per occurrence combined single limits. If such insurance contains a general aggregate limit, it shall apply separately to this agreement or be no less than two (2) times the occurrence limit. Policy shall also contain coverage for \$5,000 Medical Payments coverage per accident, per person, and Fire Legal Liability in an amount not less than \$50,000.

2.3.4 VEHICLE LIABILITY:

If CONTRACTOR'S vehicles or licensed mobile equipment are used on County property, or used in any manner on behalf of the County, CONTRACTOR shall maintain auto liability insurance for all owned, non-owned and hired automobiles in an amount not less than \$1,000,000 per occurrence combined single limit, \$2,000,000 in the aggregate. Policy shall name the County of Riverside, its Director's Officers, Special Districts, Board of Supervisors, employees, agents, or representatives as Additional Insured, and provide a Waiver of Subrogation in favor of the County of Riverside.

2.3.5 PROPERTY (PHYSICAL DAMAGE):

All-Risk property insurance coverage for the full replacement value of all CONTRACTOR'S equipment, improvements/alterations, temporary structures, and systems (Care, Custody, and Control of CONTRACTOR) used on COUNTY property, or used in any way connected with the accomplishment of the Work performed in this contract.

2.3.6 COURSE OF CONSTRUCTION INSURANCE

NOT APPLICABLE THIS CONTRACT

2.3.7 GENERAL INSURANCE PROVISION – ALL LINES:

- a. Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of California unless waived, in writing, by the County Risk Manager. Carrier(s) shall have an A.M. BEST rating of not less than an A:VIII. Insurance deductibles or self-insured retentions must be declared by the carrier(s), and such deductibles and retentions shall have the prior written consent from the County Risk Manager. At the election of the Risk Manager, carriers shall provide written notification, and shall either 1) reduce or eliminate such deductibles or self-insured retentions, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses. If no written notice is received from the County Risk Manager within ten (10) days of the acceptance of agreement, then such deductibles or self-insured retentions shall be deemed acceptable.

- b. Cause its insurance carrier(s) to furnish the County of Riverside with either 1) a properly executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein, or 2) if requested to do so in writing by the County Risk Manager, provide original Certified copies of policies including all Endorsements and all attachments thereto, showing such insurance is in full force and effect. The County of Riverside, its Director's and Officers, Special Districts, Board of Supervisors, elected officials, employees, agents or representatives are named as Additional Insureds. Further, said Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that shall provide no less than thirty (30) days written notice be given to the County of Riverside prior to any material modification or cancellation of such insurance. In the event of a material modification or cancellation of coverage, this Agreement shall terminate forthwith, unless the County of Riverside receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverages set forth herein and the insurance required herein is in full force and effect. **CONTRACTOR shall not take possession, or use the Premises, or commence operations under this Agreement until the County of Riverside has been furnished original Certificate(s) of Insurance and certified original copies of Endorsements or policies of insurance including all Endorsements and any and all other attachments as required in this Section. The original Endorsements for each policy and the Certificate of Insurance shall be signed by an individual authorized by the insurance carrier to do so on its behalf.**

- c. It is understood and agreed to by the parties hereto and the insurance company(s), that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary, and the COUNTY'S insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.

The County of Riverside's Reserved Rights-Insurance. The County of Riverside reserves the right to adjust the monetary limits of insurance coverage's during the term of this agreement or any extension thereof-if in the County Risk Manager's reasonable judgment, the amount or type of insurance carried by the CONTRACTOR becomes inadequate.

- d. CONTRACTOR shall pass down the insurance obligations contained herein to all tiers of sub-consultants working under this Agreement.

2.4 INDEMNITY AND HOLD HARMLESS

- 2.4.1 CONTRACTOR agrees to and shall indemnify and hold the COUNTY-its officers, employees and agents free and harmless from any and all claims, actions, damages and liabilities of whatsoever kind and nature arising

from death, personal injury, property damage or other cause asserted or, based upon any negligent act or omission of CONTRACTOR, its employees, agents, invitees, or any subcontractor of CONTRACTOR relating to or in any way connected with the accomplishment of the work or performance of services under this Agreement, regardless of the existence or degree of fault or negligence on the part of the COUNTY or any officer or employee of said COUNTY, other than the sole active negligence or willful misconduct of COUNTY-its Directors and Officers, Special Districts, Board of Supervisors, elected officials, employees, agents or representatives. As part hereto of the foregoing indemnity CONTRACTOR agrees to protect and defend at its own expense, including attorneys' fees the COUNTY-its Directors and Officers, Special Districts, Board of Supervisors, elected officials, employees, agents or representatives from any and all legal action based upon any acts or omissions, as stated hereinabove, by any person or persons.

- 2.4.2 If any such claim, action, or proceeding is brought against County or County's officers, agents, employees, or independent contractors, Contractor, upon notice from County, shall defend the same at Contractor's expense by counsel satisfactory to County.
- 2.4.3 County shall promptly notify Contractor of any claim, action, or proceeding against County or County's officers, agents employees, independent contractors, and consultants relating to the performance, or omission to perform, any term or condition of this Contract. County shall cooperate fully in the defense of such claim, action, or proceeding.
- 2.4.4 County shall not be liable or responsible for any accident, loss or damage occurring to the Work prior to the completion and Acceptance of same, unless otherwise specifically agreed to at the time of occupancy by the County.

ARTICLE 3 SITE CONDITIONS

3.1 DIFFERING SITE CONDITIONS

- 3.1.1 The Contractor shall have reviewed and ascertained pertinent local conditions such as location, accessibility, and general character of the site and satisfy himself as to the conditions under which the Work is to be performed. No claim for allowances shall be made because of Contractor's error or negligence in acquainting himself with the conditions at the site.
- 3.1.2 The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by County. The Contractor shall promptly report in writing to County any errors, inconsistencies, or omissions in the Contract Documents or inconsistencies with applicable code requirements observed by Contractor.
- 3.1.3 If Contractor performs any construction activity which it knows or should know involves an error, inconsistency, or omission without notifying and obtaining the written consent of County, Contractor shall be responsible for the resultant losses, including, without limitation, the costs of correcting defective work.
- 3.1.4 The County will furnish surveys necessary to properly locate the property and establish the boundaries thereof with general reference points as well as to enable the Contractor to proceed with the Work.
- 3.1.5 The Contractor shall provide competent engineering services to lay out the Work and all parts thereof and to establish all grades and elevations in accordance with the Contract requirements. He shall verify the figures shown on the survey and approach drawings before undertaking any construction work and shall be responsible for the accuracy of the finished work.

- 3.1.6 The Contractor shall protect and preserve established bench marks and monuments and shall make no changes in locations without the written approval of the County. Any bench marks or monuments that are lost or destroyed shall be replaced by the Contractor subsequent to notification and approval from County.

3.2 **SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK**

- 3.2.1 The Contractor acknowledges by submission of his/her bid that he has satisfied himself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including any exploratory work deemed necessary by the Contractor. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating the difficulty and cost of successfully performing the Work, or for proceeding to successfully perform the Work without additional expense to the County.

3.3 **DIMENSIONS AND MEASUREMENTS**

- 3.3.1 All dimensions shown for existing conditions and all dimensions required for work that is to connect with work now in place, shall be verified and calculated by the Contractor by actual measurement of the existing work. Any discrepancies between the Contract Documents and the existing conditions shall be referred to the authorized representative of the County before any work affected thereby has been performed. Failure to notify the County before starting work will be considered acceptance by the Contractor. Where doubts as to dimensions exist, County shall determine the correct dimensions.

ARTICLE 4 SPECIFICATIONS AND DRAWINGS

4.1 **GENERAL PROVISIONS**

4.1.1 **SUBDIVISIONS**

For convenience, the specifications are arranged into several sections, but such separation shall not be considered as the limits of the work required of any separate trade. The terms and conditions of such limitations are wholly between the Contractor and his subcontractors. Requirements contained in any section are required as if contained in all sections and are the responsibility of the Contractor. The Contractor, prior to awarding subcontracts, will assure the Work required as a whole has been coordinated among the subcontracts.

4.1.2 **RECORD DOCUMENTS**

- a. The Contractor shall keep on the Work site a copy of the awarded construction documents (drawings and specifications) and shall at all times give the County and Architect access thereto.
- b. The Contractor will be given one set of drawings and specifications which shall be kept at the site of the Work at all times and updated weekly. Payment may be withheld if drawings are not kept current. Exact locations of all pipes and conduits and all changes in construction and details shall be indicated and dimensions provided upon these drawings, and all changes in materials and equipment installed shall be indicated in these specifications. Upon completion and prior to Acceptance of the Work, a final reproducible (transparencies) set of project record documents and specifications shall be submitted to the County by the Contractor. County will furnish a set of reproducibles.
- c. The working details will indicate dimensions, position, and kind of construction, and the specifications, qualities, and methods. Any Work indicated on the working details and not mentioned in the specifications, or vice versa, shall be furnished as though fully set forth in both. Work not

particularly detailed, marked, or specified shall be the same as similar work that is detailed, marked, or specified.

- d. In case of discrepancy in the documents, the matter shall be promptly submitted to the County, who shall make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The County shall furnish from time to time such detailed information as considered necessary to clarify the Work.
- e. Where the word "similar" occurs on the drawings, it shall have a general meaning and not be interpreted as meaning identical, and all details shall be worked out in relation to their location and their connection with other parts of the work.
- f. Standard details or specification drawings are applicable when listed, bound with specifications, noted on the drawings or referenced elsewhere in the specifications. Where the notes on the drawings indicate modifications, such modifications shall govern.
- g. All drawings, specifications and copies thereof furnished to the Contractor are the property of the County and shall not be used on other work without its consent. Upon completion of this project, all copies of the drawings and specifications shall be returned to the County.

4.2 SUMMARY OF THE ORDER OF THE PROCEDURE

4.2.1 In case of conflicts between the Contract Documents, the order of precedence shall be as follows:

- 1) Modifications or changes last in time are first in precedence.
- 2) Addenda.
- 3) County-Contractor agreement.
- 4) General Conditions except for specific modifications thereto stated in the Supplementary Conditions.
- 5) Supplementary Conditions.
- 6) Division One Specifications.
- 7) Division Two through Sixteen Specifications.
- 8) Drawings - as between figured dimensions given on drawings and the scaled measurements, the figured dimension shall govern; as between large-scale drawings and small-scale drawings, the larger scale shall govern.
- 9) Structural drawings
- 10) Architectural drawings.
- 11) As between detailed drawings and typical details bound within the specifications, the detailed drawings govern.
- 12) In the event provisions of codes, safety orders, contract documents, referenced manufacturer's specifications or industry standards are in conflict, the more restrictive and higher quality shall govern.
- 13) Schedules shown on the drawings take precedence over conflicting information given on other drawings.
- 14) Mechanical drawings.
- 15) Electrical drawings.

4.3 CLARIFICATIONS/REQUEST FOR INFORMATION AND ADDITIONAL INSTRUCTIONS

4.3.1 NOTIFICATION BY CONTRACTOR

- a. Should Contractor discover what he perceives to be conflicts, omissions, or errors in the Contract Documents, or have any question concerning interpretation or clarification of the Contract Documents, or if it appears that the work to be done or any matters relative thereto are not sufficiently detailed or explained in the Contract Documents, then, before proceeding with the work affected, Contractor shall notify County's authorized representative in writing, and request interpretation, clarification, or additional detailed information concerning the work. The Contractor shall ask for the clarification (Request for Information) immediately upon discovery but no less than 14 calendar days prior to the start date of the activities related to the clarification, based on the latest updated version of the accepted Progress Schedule. County, whose decision shall be final and conclusive, shall resolve such questions and issue instructions to Contractor. Should Contractor proceed with work affected before receipt of instructions from County, Contractor shall remove and replace or adjust work which is not in accordance with the instructions from County and shall be responsible for resultant damage, defect or added cost. In event of failure to agree as to scope of Contract requirements, Contractor shall follow the procedure set forth in the DISPUTES article.
- b. The Contractor shall not be entitled to any compensation for delays, disruptions, inefficiencies or additional administrative effort caused by the Contractor's untimely review of the Contract Documents for potential conflicts, omissions, discrepancies or ambiguities.
- c. County may charge back to the Contractor, time and expense associated with RFI's, as may be reasonably determined by the County to be unnecessary.

4.3.2 ADDITIONAL DETAILED INSTRUCTIONS

- a. The County may furnish additional detailed written instructions on any Request for Information to further explain the Work. If in the opinion of Contractor, the additional detailed instructions constitute work in excess of the scope of the Contract, he must submit written notice thereof immediately to the County, but no later than seven (7) calendar days following receipt of such instruction(s), and in any event prior to commencement of work thereon. The Contractor shall not be entitled to additional compensation due to any additional instructions unless the Contractor shall have given the appropriate written notice. County will then consider such notice and, if in its judgment it is justified, the County instructions will be revised or extra work shall be authorized by Change Order. In the event of a dispute hereunder, attention is directed to the DISPUTES article.

ARTICLE 5 SHOP DRAWINGS AND SUBMITTALS

5.1 SHOP DRAWINGS, PRODUCT DATA, COORDINATION DRAWINGS AND SCHEDULES

- 5.1.1 Shop drawings are drawings submitted to the County by the Contractor showing detail of the proposed fabrication and assembly of structural elements and the installation (i.e., form, fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, fabrication, erection and setting drawings, manufacturers' scale drawings, wiring and control diagrams, cuts or entire catalogs, pamphlets, and performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the Work required by the Contract. The County may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this Contract.

- 5.1.2 The Contractor shall coordinate all shop drawings and review them for accuracy, completeness, and compliance with Contract requirements, and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the County without evidence of the Contractor's approval shall be returned for resubmission. The Architect will indicate review for compliance of the shop drawings, and if not in compliance as submitted, shall indicate the reasons therefore. Any work done before such review shall be at the Contractor's risk. Review by the Architect shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this Contract, except with respect to variations described and approved in accordance with paragraph 5.1.3.
- 5.1.3 If shop drawings show any variations from the Contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Architect approves any such variation, no change in time or price will be allowed for Contractor changes. Should the Architect make changes on the shop drawings which affect time and/or cost, the Contractor will immediately notify the County with a Request for Information. If the Contractor fails to issue the Request for Information within seven (7) calendar days from receipt of the returned shop drawing, the Contractor shall have waived his right to any potential Change Order.
- 5.1.4 The Contractor shall submit shop drawings, coordination drawings, and schedules for review as required by the Contract Documents. The Contractor will provide a submittal schedule listing all shop drawings and submittals, the submission dates by the Contractor, and return dates from the Architect. This schedule will be provided fourteen (14) calendar days after the Notice to Proceed.
- 5.1.5 Shop drawings and schedules, other than catalogs, pamphlets, and similar printed material, shall be submitted with one reproducible plus one copy.
- 5.1.6 Each shop drawing or coordination drawing shall have a blank area 4 by 4 inches located adjacent to the title block. The title block shall display the following:
- 1) Number and title of drawing
 - 2) Date of drawing or revision
 - 3) Name of project building or facility
 - 4) Name of Contractor and (if appropriate) name of subcontractor submitting drawings
 - 5) Clear identity of contents and location on the work
 - 6) Project title and project number
 - 7) Submittal number
- 5.1.7 Unless otherwise provided in this Contract or otherwise directed by County, shop drawings, coordination drawings, and schedules shall be submitted to the Architect with a letter, sufficiently in advance of construction requirements to permit no less than twenty (21) calendar days for checking and appropriate action.

5.2 SAMPLES

- 5.2.1 After the award of the Contract, the Contractor shall deliver samples required by the specifications to the County for approval. The Contractor shall prepay any shipping charges. Any materials or equipment for which samples are required shall not be used in the Work until reviewed by County.
- 5.2.2 Each sample shall have a label indicating:
- 1) Name of project building or facility, project title, and project number.
 - 2) Name of Contractor and, if appropriate, name of subcontractor.
 - 3) Identification of material or equipment with specification requirement.

- 4) Place of origin.
- 5) Name of manufacturer and brand (if any).
- 6) Identify by specification section.

- 5.2.3 Samples of finished materials shall have additional markings that will identify them in reference to the finish schedules.
- 5.2.4 The Contractor shall mail a letter in triplicate under separate cover submitting each shipment of samples and containing the information required in paragraph 5.2.2. He shall enclose a copy of this letter with the shipment and send a copy to the County representative on the project. Approval of a sample shall be only for the characteristics or use named in such review and shall not be construed to change or modify any Contract requirement. Substitutions will not be permitted unless they are approved under paragraph 5.3.
- 5.2.5 Approved samples not destroyed in testing will be sent to the County. Approved samples of hardware in good condition will be marked for identification and may be used in the Work. Materials and equipment incorporated in the Work shall match the approved samples. Other samples not destroyed in testing or not approved will be returned to the Contractor at his expense if so requested at time of submission.
- 5.2.6 Failure of any material to pass the specified tests will be sufficient cause for refusal to consider any further samples of the same brand or make of that material or equipment under this Contract.
- 5.2.7 Samples of various materials or equipment delivered on the site or in place, may be taken by the County for testing. Samples failing to meet Contract requirements will automatically void previous approvals of the items tested. The Contractor shall replace such materials or equipment found not to have met Contract requirements, or there shall be a proper adjustment of the Contract price as determined by the County.
- 5.2.8 Unless otherwise specified, when tests are required, only one test of each sample proposed for use will be made at the expense of the County. Samples which do not meet specification requirements will be rejected. Requests for testing of additional samples by Contractor may be made by the County at the expense of the Contractor.

5.3 SUBSTITUTIONS

- 5.3.1 Wherever the name, or brand, or manufacturer of an article is specified in the Contract Documents, it is used as a measure of quality and utility or a standard. Except in those instances where the product is designated to match others presently in use, specifications calling for a designated material, product, thing or service by specific brand or trade name shall be deemed to be followed by the words "or equal" so that bidders may propose any equal material, product, thing or service in their bid. If the Contractor desires to use any other brand or manufacturer of equal quality and utility to that specified, he shall list definite particulars of that which he considers equivalent to the specified item in his bid. The Contractor shall have thirty-five (35) days after the award of the Contract for submission of data substantiating substitution of "equal" items. The County will then determine whether or not the proposed name brand or article is equal in quality and utility to that specified in the Contract Documents, and its written decision shall be final.
- 5.3.2 No proposal will be considered unless accompanied by complete information and descriptive data necessary to determine the equality of the offered materials, articles, or equipment. Samples shall be provided when requested by the County.
- 5.3.3 The burden of proof as to the comparative quality or suitability of the offered materials, articles, or equipment shall be upon the Contractor. The County shall be the sole judge as to such matters. In the event that the County rejects the use of such alternative materials, articles, or equipment, then one of the particular products

designated by brand name in the specifications shall be furnished.

- 5.3.4 The County will examine Contractor's submittals with reasonable promptness. Return of the submittals to the Contractor shall not relieve the Contractor from responsibility for deviations and alternatives from the Contract Documents nor shall it relieve him from responsibility for errors in the submittals. A failure by the Contractor to identify, in his letter of transmittal, material deviations from the Contract Documents shall void the submittal and any action taken thereon by the County. When specifically requested by the County, the Contractor shall resubmit such shop drawing(s), descriptive data, and samples as may be required.
- 5.3.5 If any mechanical, electrical, structural, or design revisions are required for the proper installation and fit of alternative materials, articles, or equipment, or because of deviations from the Contract Documents, such changes shall not be made without the consent of the County's authorized representative, and shall be made without additional cost to the County, such costs, including the fees of the Architect, to be borne by the Contractor.

ARTICLE 6 SCHEDULES

6.1 CONSTRUCTION SCHEDULE

- 6.1.1 The Contractor shall prepare and submit to the County a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the salient features of the work (including acquiring materials and equipment). The schedule shall be in the form of a CPM (critical path method) schedule, of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. The scheduled completion date shall be the same as the contractual completion date, for the initial schedule and subsequent updates. Any proposed early completion date shall show the difference between that date and the contract completion date as Float, which shall belong to both the County and Contractor.
- 6.1.2 If, in the opinion of the County, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, without additional cost to the County. The Contractor shall submit any supplementary schedule or schedules in CPM form as the County deems necessary to demonstrate how the approved rate of progress will be regained.
- 6.1.3 All schedule updates must accurately reflect the as-built schedule. There shall be no change to the Critical Path without the County's written consent.

ARTICLE 7 TIME, LIQUIDATED DAMAGES AND EXTENSIONS

7.1 TIME OF WORK

The Contractor shall commence work on this project immediately upon receipt of the written Notice to Proceed and shall perform the work diligently to completion within the number of calendar days specified in the Contract. Neither site access nor physical work shall be commenced before the Contract is fully executed, and bonds, insurance and the schedule are submitted as required by the Contract Documents. No work shall be done on Saturday, Sunday and holidays and no work shall be performed outside of normal working hours without the prior written consent of the County, unless required by these Specifications. See: Working Hours.

7.2 LIQUIDATED DAMAGES

If the Work is not completed within the time required, damage will be sustained by the County. It is and will be impracticable and extremely difficult to ascertain and determine actual damage which County will sustain by

reason of such delay; and it is therefore agreed that Contractor will pay to County the sum of \$1000- per day for each and every day's delay in finishing the Work beyond the time prescribed. If the Contractor fails to pay such liquidated damages, the County may deduct the amount thereof from any money due or that may become due the Contractor under the Contract.

7.3 UNAVOIDABLE DELAYS

7.3.1 TIME EXTENSION

- a. The Contractor will be granted an extension of time for completion of the Work beyond that named in the Contract Documents, for delays which may result through causes beyond the control of the Contractor and which he could not have avoided by the exercise of care, prudence, foresight and diligence. The appropriate extension of time shall constitute full compensation. Costs associated with extended overhead will not be considered.
- b. If the Contractor is allowed extensions of time in which to complete the Work equal to the sum of all unavoidable delays, plus any adjustments of contract time due to contract change orders, during such extension of time liquidated damages shall not be charged to the Contractor.
- c. Unavoidable delays within the meaning of this section shall be those caused by Acts of God or of the public enemy, fire, epidemics, or strike. There will be no liquidated damages for delays as described within this paragraph.
- d. Delays in the performance of parts of the work which may in themselves be unavoidable, but do not necessarily prevent or delay the performance of critical activity(s) while the activity(s) is on the Critical Path, will not be considered as unavoidable delays within the meaning of the contract and shall not be the basis of a claim for delay.

7.3.2 WEATHER

Inclement weather shall not be a prima facie reason for granting a time extension. The Contractor shall make every effort to continue work under prevailing conditions. However, if the inclement weather prevents the Contractor from beginning at the usual starting time, or prevents the Contractor from proceeding with seventy-five percent (75%) of the normal labor and equipment force towards completion of the day's current Critical Path activities (shown on the most current, and accepted schedule update) for a period of at least five (5) hours, and the crew is dismissed as a result thereof, the County will designate such time as unavoidable delay and grant a one (1) calendar day, non-compensable, time extension.

7.3.3 NOTICE OF DELAYS

- a. Whenever the Contractor foresees any delay in the performance of a Critical Path work activity, and in any event immediately upon the occurrence of any delay which he regards as an unavoidable delay, the Contractor shall notify the County in writing of such delay and its cause, in order that the County may take immediate steps to prevent, if possible, the occurrence or continuance of the delay, and may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the work are to be delayed thereby.
- b. After the completion of any part or the whole of the Work, the County, in calculating the

amount due the Contractor, will assume that any and all delays which have occurred have been avoidable delays, except such delays as shall have been called to the attention of the County at the time of their occurrence and found by the County to have been unavoidable as substantiated by a change order. The Contractor shall make no claims that any delay not called to the attention of the County at the time of its occurrence has been an unavoidable delay.

7.4 REQUEST FOR TIME EXTENSION

7.4.1 In the event the Contractor requests an extension of contract time for unavoidable delay, justification shall be submitted no later than seven (7) calendar days after the initial occurrence of any such delay. When requesting time for proposed change orders, the request(s) must be submitted with the proposed change order with full justification. If the Contractor fails to submit justification he shall waive his right to a time extension at a later date. Justification must be based on the currently accepted contract schedule as updated at the time of occurrence of delay or execution of work related to any change(s) in the scope of work. The justification must include a schedule, including, but not limited to, the following information:

- a. The duration to perform the activity relating to the change(s) in the work and the resources (manpower, equipment, material, etc.) required to perform these activities within the stated duration.
- b. Logical activity ties to the contract schedule for the proposed changes and/or delay showing the activity/activities in the schedule whose start or completion dates are affected by the change and/or delay.

7.4.2 The County, after receipt of such justification and supporting evidence, shall make its finding of fact. The County's decision shall be final and conclusive and the County will advise the Contractor in writing of such decision. If the County finds that the Contractor is entitled to any extension of Contract time, the County's determination as to the total number of days of extension shall be based upon the latest updated version of the approved contract schedule.

7.4.3 In the event the Contractor disagrees with the County's decision, the Contractor shall be required to submit a claim pursuant to the DISPUTE article.

ARTICLE 8 PERFORMANCE

8.1 SUPERVISION & CONSTRUCTION PROCEDURES

8.1.1 The Contractor shall supervise and direct the work. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences, procedures, project safety, and shall coordinate all portions of the Work under the Contract, including the relations of the various trades to the progress of the Work, in accordance with the provisions of the Contract Documents.

8.1.2 The Contractor shall be responsible to the County for the acts and omissions of the Contractor's employees, subcontractors, and their agents and employees, and any other persons performing any of the work under a contract with the Contractor.

8.1.3 The Contractor is an independent contractor and nothing in the Contract Documents shall be interpreted to make the Contractor an agent of the County.

8.2 SUPERVISION

- 8.2.1** Within seven (7) days after the Notice to Proceed, the Contractor shall provide to the County an organization chart outlining key job personnel. The Contractor will also provide a Letter of Authority or Corporate Resolution for the individual(s) authorized to sign documents on its behalf, i.e., payment requests, change orders, inspection reports, etc.
- 8.2.2** The Contractor shall employ, during the progress of the Work, a competent Project Superintendent and any necessary assistants, as approved by the County. The Project Superintendent shall not be changed except with the consent of the Authorized Representative of County, unless the Superintendent proves to be unsatisfactory to the Contractor or ceases to be in his employ. The County shall be notified immediately of any new Superintendent appointed to the Work and the Contractor shall submit qualifications for approval. The Superintendent shall represent the Contractor and all directions given to him shall be as binding as if given to the Contractor.
- 8.2.3** The County shall be supplied at all times with the name and telephone number of a person in charge of or responsible for the Work, who can be reached for emergency work twenty-four (24) hours a day, seven (7) days a week.

8.3 CONDUCT OF WORK

- 8.3.1** In connecting one kind of work with another, marring or damaging same will not be permitted and, in the event such occurs, shall be corrected by the Contractor at its cost prior to acceptance by the County. Should improper work of any trade be covered by another which results in damage or defects, the whole work affected shall be made good by the Contractor without expense to County.

8.4 PROTECTION OF WORK & PROPERTY

- 8.4.1** The Contractor shall continuously maintain adequate protection of the Work from damage and shall protect the County's property from injury or loss in connection with this Contract. He shall make good any such damage, injury, or loss, except what may be directly due to errors in the Contract Documents or caused by agents or employees of the County. He shall adequately protect adjacent property as provided by law and the Contract Documents.
- 8.4.2** The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the Work site which are not to be removed and which do not unreasonably interfere with the work required under this Contract.
- 8.4.3** The Contractor shall protect from damage all existing improvements and utilities at or near the Work site and on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this Contract or failure to exercise reasonable care in performing the Work. If the Contractor fails to repair the damage promptly, the County may have the necessary work performed and charge the cost to the Contractor.

8.5 CONTRACTOR'S RESPONSIBILITY FOR WORK

- 8.5.1** Until Acceptance of the Work by the County, Contractor shall have the charge and care thereof and shall bear risk of injury or damage to any part of the Work by action of the elements. If a separate Contractor sues the Owner, on account of any loss so sustained, the County shall notify the Contractor, who shall indemnify and hold harmless the County against any expenses, or judgment arising therefrom.

8.5.2 Contractor, at its cost, shall rebuild, repair, restore and make good all damages from the elements to any portion of the Work occasioned by such causes before its Acceptance.

8.5.3 No advertising of any description will be permitted in or about the Work, except by order of the County.

8.5.4 Contractor shall not create or permit the continued existence of any nuisance in or about the Work.

8.6 UTILITIES

8.6.1 Unless otherwise provided for under separate sections herein, Contractor will arrange all water, gas, and electricity required for construction purposes until acceptance of the Work. Contractor shall pay for such services unless otherwise specifically noted.

8.6.2 Utilities shall not be interrupted except with the approval of the County. A two (2) work day written notice is required prior to any and all interruptions. Interruptions shall be scheduled so as to minimize duration and disruption to existing operations.

- 8.6.3
- a. The Contractor shall send notices, make all necessary arrangements, and perform all other services required in the care and maintenance of all public utilities.
 - b. Enclosing or boxing in, for protection of any public utility equipment, shall be done by the Contractor. Upon completion of the Work, the Contractor shall remove all enclosures, and leave in a finished condition.
 - c. All connections to public utilities shall be made and maintained in a manner so as not to interfere with the continuing use of same by the County during the entire progress of the Work.

8.7 WORKING HOURS

8.7.1 All work shall be performed on a calendar day basis during the customary working hours of the trades involved unless otherwise specified in this Contract. Work performed by the Contractor of his own volition outside such established working hours shall be at no additional expense to the County and without County approval.

8.7.2 It is expressly stipulated that no laborer, workman, or mechanic employed at any time by the Contractor or by any subcontractor(s) under this Contract upon the Work or any part thereof, shall be required or permitted to work thereon more than eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except, as provided by Section 1815 of the California Labor Code. It is further expressly stipulated that for each and every violation of Sections 1811-1815, inclusive, of the California Labor Code, all the provisions of which are deemed to be incorporated herein, said contractor shall forfeit, as a penalty to County, twenty-five dollars (\$25.00) for each laborer, workman, or mechanic employed in the execution of this Contract by contractor for each calendar day during which said laborer, workman, or mechanic is required or permitted to work more than eight hours in any one calendar day and forty hours in any one calendar week in violation of the provisions of said Sections of the Labor Code.

8.7.3 The Contractor, and each subcontractor, shall keep an accurate record showing the names of and actual hours worked each calendar day and each calendar week by all laborers, workmen, and mechanics employed by them in connection with the Work contemplated by this Contract, which record shall be open at all reasonable hours to the inspection of the County or its officers or agents and to the Division of Labor Standards Enforcement of the Department of Industrial Relations.

8.7.4 No construction work shall be done on Saturdays, Sundays or County holidays and no work shall be performed outside of normal working hours without the prior written consent of the County. In any event, all work shall be subject to approval of the County. Prior to start of such work, the Contractor shall arrange with the County for the continuous or periodic inspection of the Work and testing of materials, when necessary. If requests are made by the Contractor for permission to work overtime, nights, Saturdays, Sundays or County holidays, and such requests are granted, the Contractor shall bear all extra expense to the County for inspection and other incidental expenses caused by such overtime work. If contractors are requested, in the interest of the County, to work overtime by the County, or if overtime work is specifically required by these specifications, all extra expense of inspection will be paid by the County.

8.8 MATERIAL & EQUIPMENT

8.8.1 Materials, equipment, and articles incorporated into the Work shall be new and of equal quality to the types and grades specified. When not particularly specified, the Contractor shall submit for approval satisfactory evidence as to the kind and quality of material. See SUBSTITUTION provision 5.3 concerning "or equal" requirements and procedure for submitting alternative material, articles, or equipment.

8.8.2 All materials shall be delivered so as to insure a speedy and uninterrupted progress of the Work. All materials shall be stored so as to cause no obstruction and so as to prevent overloading of any portion of the structure on the Work site, and the Contractor shall be entirely responsible for damage or loss by weather, theft, vandalism, or other cause.

8.8.3 Materials shall be stored to assure the preservation of their quality and fitness for the Work. Stored materials shall be reasonably accessible for inspection. When considered necessary by the County, stored materials shall be placed on wooden platforms or on other hard, clean surfaces and not directly on the ground, and shall be placed under cover when so directed.

8.9 LAYOUT OF WORK

8.9.1 The Contractor shall lay out its work from established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, material, and labor required to lay out any part of the Work. The Contractor shall be responsible for executing the Work to the lines and grades that may be established or indicated in the Contract Documents. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the County until authorized to remove them. If such marks are destroyed by the Contractor before their removal is authorized, the County may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

8.10 USE OF PREMISES

8.10.1 The Contractor shall maintain the entire premises under his control in an orderly condition. He shall store his apparatus, materials, supplies and equipment in such a manner as will not interfere with the progress of his work or the work of other contractors.

8.11 OPERATIONS & STORAGE

8.11.1 The Contractor shall confine all operations (including storage of materials) on County premises to areas authorized or approved by the County.

8.11.2 Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the County and shall be built with labor and materials furnished by the Contractor without expense to the County. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at his expense upon completion of the work.

8.11.3 The Contractor shall, under regulations prescribed by the authority having jurisdiction, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the authority having jurisdiction. When materials are transported in performance of the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or County regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair, or pay for the repair, of any damaged curbs, sidewalks, or roads.

8.12 HEAT/POWER/LIGHT

8.12.1 Unless otherwise specified or already provided by the County, the Contractor shall:

- a. Provide heat, as necessary to protect all work, materials, and equipment against injury from dampness and cold;
- b. Provide heat as necessary in the area where work is to be done to provide the minimum temperature recommended by the supplier or manufacturer of the material;
- c. Provide electric power and light as required for performance of the Work.

8.13 CLEANING UP

8.13.1 The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the Work, the Contractor shall remove from the work and premises any weeds, rubbish, tools, scaffolding, equipment, and materials that are not the property of the County. Upon completing the Work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the County.

ARTICLE 9 SAFETY & HEALTH

9.1 ACCIDENT PREVENTION

9.1.1 In performing this Contract, the Contractor shall provide for protecting the lives and health of employees and other persons; preventing damage to property, materials, supplies, and equipment; and avoiding work interruptions. For these purposes, the Contractor shall:

- a. Provide a copy of its safety program;
- b. Provide appropriate safety barricades, signs, and signal lights;
- c. Comply with standards issued by the U.S. Government, State, County and City, and other governing agencies having jurisdiction;
- d. Ensure that any additional measures the County determines to be reasonably necessary for this purpose are taken.

9.1.2 The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this Contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. The Contractor shall report this data in the manner prescribed by the County.

9.1.3 Before beginning excavation for a trench 5 feet or more in depth, Contractor shall provide evidence of having obtained a permit from the authority having jurisdiction.

9.1.4 Nothing herein shall be deemed to allow use of shoring, sloping, or protective systems less effective than those required by the Construction Safety Orders of the California Division of Industrial Safety.

9.2 SANITARY FACILITIES

9.2.1 Contractor shall supply and maintain at its expense such toilets and other sanitary facilities including those which are accessible by the disabled as per ADA and Title 24 requirements necessary for use by visitors and workers employed at the job site. Such facilities shall be approved by the County.

9.3 RESPONSIBILITY FOR COMPLIANCE WITH CAL-OSHA

9.3.1 All work, materials, work safety procedures and equipment shall be in full accordance with the latest Cal-OSHA rules and regulations.

9.3.2 Contractor warrants that he and each of his subcontractors shall, in performance of this Contract, comply with each and every compliance order issued pursuant to Cal-OSHA. The Contractor assumes full and total responsibility for compliance with Cal-OSHA standards by his subcontractors as well as himself. The cost of complying with any order and/or payment of any penalty assessed pursuant to Cal-OSHA shall be borne by the Contractor. Nothing contained therein shall be deemed to prevent the Contractor and his subcontractors from otherwise allocating between themselves responsibility for compliance with Cal-OSHA requirements; provided, however, that the Contractor shall not thereby, in any manner whatsoever, be relieved of his responsibility to the County as herein set forth.

9.4 TOXIC AND HAZARDOUS MATERIALS AND WASTE

9.4.1 ASBESTOS

Operations which may cause release of asbestos fibers into the atmosphere shall meet the requirements of Title 8 CCR General Industrial Safety Orders, Section 5208 and California law. Some operations which may cause such concentrations include sanding, grinding, abrasive blasting, sawing, drilling, shoveling, or otherwise handling materials containing asbestos so that dust will be raised.

9.4.2 TOXIC MATERIALS

Operations which release toxic materials into the atmosphere shall meet the requirements of Title 8 CCR, General Industrial Safety Orders. Some operations which may release such materials include use of adhesives, sealants, paint, and other coatings.

9.4.3 LEAD-BASED PAINT

Lead-based paint is prohibited. Lead-based paint is defined as:

- a. Any paint containing more than five-tenths of one percentum lead by weight (calculated as lead metal in the total non-volatile content of the paint) or the equivalent measure of lead in

the dried film of paint applied or both; or

- b. For paint manufactured after June 22, 1977, any paint containing more than six one-hundredths of one percentum lead by weight (calculated as lead metal) in the total content of the paint or the equivalent measure of lead in the dried film or paint already applied.

9.4.4 HAULING AND DISPOSAL

All hauling and disposal shall meet requirements of Title 22 CCR, Division 4. Chapter 30, "Minimum Standards for Management of Hazardous and Extremely Hazardous Wastes."

9.4.5 ASBESTOS PROHIBITED

No products or materials containing asbestos shall be incorporated into the Work without the prior written approval of the County.

ARTICLE 10 COUNTY-FURNISHED PROPERTY

10.1 COUNTY-FURNISHED PROPERTY

- 10.1.1 The County may furnish to the Contractor property as identified in the specification(s) to be incorporated or installed into the Work or used in performing the Contract. The listed property will be furnished f.o.b. railroad cars at the place specified in the Contract or f.o.b. truck at the project site. The Contractor is required to accept delivery. When the property is delivered, the Contractor shall verify its quantity and condition and acknowledge receipt in writing to the County within twenty-four (24) hours of delivery, also specifying any damage to or shortage of the property as received. All such property shall be installed or incorporated into the Work at the expense of the Contractor, unless otherwise indicated in this Contract.
- 10.1.2 Each item of property to be furnished under this clause shall be identified by the Contractor in a schedule by quantity, item, and description. Schedule form will be provided by the County.
- 10.1.3 The Contractor shall be held responsible for all material delivered to him and deductions will be made from any moneys due him to make good any shortages and deficiencies, from any cause whatsoever, which may occur after such delivery.
- 10.1.4 The Contractor shall set up accounting records and establish an inspection procedure as approved by the County.

ARTICLE 11 BENEFICIAL OCCUPANCY

11.1 BENEFICIAL OCCUPANCY

- 11.1.1 The County shall have the right to take possession of or use any completed or partially completed portion of the Work. The County's possession or use shall not be deemed an acceptance of any Work under the Contract. The Contractor will continue to pay for any portion of the utilities which he is using.
- 11.1.2 While the County has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to that portion of the Work resulting from the County's possession or use. If Contractor believes the partial possession or use by the County will delay the progress of the Work or will cause additional expense to the Contractor, Contractor shall immediately submit a written request for an equitable adjustment in the

Contract price or the time of completion. County will then consider such request and, if in its judgment it is justified, the County will modify the contract in writing accordingly. In the event the Contractor disagrees with the County's decision, the Contractor shall be required to submit a claim pursuant to the DISPUTE article.

ARTICLE 12 INSPECTION AND TESTING

12.1 INSPECTION AND TESTING

- 12.1.1** The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work called for by this Contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the County. The County shall at all times have access to the Work, and the Contractor shall provide proper facilities for such access and for inspection.
- 12.1.2** County inspections and tests are for the sole benefit of the County and do not:
- a. Relieve the Contractor of responsibility for providing adequate quality control measures;
 - b. Relieve the Contractor of responsibility for damage to or loss of the material before Acceptance;
 - c. Constitute or imply Acceptance; or
 - d. Affect the continuing rights of the County after Acceptance regarding latent defects, gross mistakes, fraud or the County's rights under any warranty or guarantee.
- 12.1.3** The presence or absence of a County inspector does not relieve the Contractor from any Contract requirement, nor is the inspector authorized to change any term or condition of the specifications without the County's written authorization.
- 12.1.4** The Contractor shall promptly furnish, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the County. The County may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. Special, full size, and performance tests shall be performed as described in the Contract.
- 12.1.5** The Contractor shall, without charge, replace or correct work found by the County not to conform to contract requirements, unless in the public interest the County consents to accept the work with an appropriate adjustment in Contract price. The Contractor shall promptly segregate and remove rejected material from the premises.
- 12.1.6** If, before Acceptance of the Work, the County decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet Contract requirements, the County shall issue a Change Order for such removal and reinstallation.
- 12.1.7** The Contractor shall at all times maintain proper facilities and provide safe access for inspection by the County to all parts of the work, and to the shops wherein the work is in preparation. Where the specifications require work to be specially tested or approved, it shall not be tested or covered up without timely notice to the County of its readiness for inspection and without the approval or consent of County. Should any such work be

covered up without such notice, approval, or consent, it must, if required by County, be uncovered for examination at the Contractor's expense.

- 12.1.8** The Contractor shall notify the County at least one (1) work day in advance of the time scheduled for the inspection. Should the Contractor fail to notify the County and proceed with work requiring inspection, all such work is rejected, and no further work shall be done on that portion of the project until the rejected work is accepted by the County. Should the Contractor request acceptance of such rejected work the County shall, at the Contractor's expense, secure the services of private material testing laboratories, consulting engineers or licensed land surveyors, who shall certify that said work does in fact conform to the requirements of the Contract Documents. The work previously rejected shall be accepted by the County after receipt of such certification if the County approves of such certification.
- 12.1.9** If the Contractor does not promptly replace or correct rejected work, the County may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.
- 12.1.10** Construction review of the Contractor's performance by the County is not intended to include the review of the adequacy of the Contractor's safety measures, in, on, or near the construction site.
- 12.1.11** The County will pay for initial testing services specified to be performed by the County. When initial tests indicate non-compliance with the Contract Documents, subsequent retesting occasioned by the non-compliance shall be performed by the same testing agency, and costs thereof will be deducted by the County from the Contract sum.

12.2 INSPECTION BY OTHER JURISDICTIONS

Whenever any part of the Work to be performed is under the jurisdiction or control of another public entity, including but not limited to: The United States Government, State of California, or City, such work shall be subject to inspection by the officials of such entities and it must pass inspection, in addition to County inspection, and such other inspections as may otherwise be provided for in the Contract Documents.

12.3 FINAL INSPECTION AND TESTS

The Contractor shall give the County at least ten (10) calendar days advance written notice of the date the Work will be fully completed and ready for final inspection and tests. Final inspection and tests will be started within ten (10) calendar days from the date specified in the aforementioned notice unless the County determines that the Work is not ready for final inspection and so informs the Contractor.

ARTICLE 13 ACCEPTANCE

13.1 ACCEPTANCE OF THE WORK

- 13.1.1** After the final inspection by County and all the contract documentation has been received, it will be recommended to the County Board of Supervisors to accept the Work and file a Notice of Completion. Upon approval of the Notice of Completion, a copy will be sent to the Contractor. (See final payment clause.) Upon Acceptance of the Work, Contractor will be relieved of the duty of maintaining and protecting the Work. Neither determination by the County that the Work is complete, nor Acceptance thereof, shall operate as a bar to County's claim against Contractor pursuant to Contractor's warranty and guarantees.
- 13.1.2** Partial payments shall not be construed as acceptance of any part of the Work.

- 13.1.3 In judging the Work, no allowance for deviations from the drawings and specifications will be made, unless already approved in writing at the time and in the manner as called for herein.
- 13.1.4 County shall be given adequate opportunity to make any necessary arrangements for fire insurance and extended coverage.
- 13.1.5 The Acceptance of the Work will not be recommended until all requirements of the Contract Documents are complete and approved by the County. This shall include, but is not limited to, all construction, guarantee forms, parts lists, schedules, tests, operating instructions, as-built drawings, and all other documentation identified by the Contract Documents.

ARTICLE 14 WARRANTY AND GUARANTEES

14.1 CONTRACTOR'S WARRANTY AND GUARANTEE

- 14.1.1 Contractor warrants that all materials and equipment furnished under this Contract shall be new unless otherwise specified, and that all Work performed under this Contract conforms to the Contract requirements and is free of any defect whether performed by the Contractor or any subcontractor or supplier.
- 14.1.2 This warranty shall continue for a period of one (1) year from the date of filing of Notice of Completion on the Work. The Performance Bond shall remain in force during the warranty period.
- 14.1.3 The Contractor shall remedy at the Contractor's expense any damage to County-owned or controlled real or personal property, when that damage is the result of:
- a. The Contractor's failure to conform to Contract requirements or
 - b. Any defect of equipment, material, workmanship, or design furnished by the Contractor.
- 14.1.4 The Contractor shall restore any work damaged in fulfilling the terms and conditions of this Article. The Contractor's warranty with respect to work repaired or replaced will run for one (1) year from the date of repair or replacement.
- 14.1.5 The County shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. The Contractor shall within ten (10) calendar days after being notified in writing by the County of any work not in accordance with the requirements of the Contract or any defects in the Work, commence, and perform with due diligence, all work necessary to fulfill the terms of this Article. If the Contractor fails to remedy any defect, or damage within fourteen (14) calendar days after receipt of notice, the County shall have the right to replace, repair, or otherwise remedy the defect, or damage at the Contractor's expense. Payment due to the Architect from the County for extra architectural services required in the enforcement of Contractor's guarantee after Acceptance of the Work shall be paid to the County by the Contractor.
- 14.1.6 In the event of any emergency constituting an immediate hazard to health or safety of County employees, property, or licensees, when caused by work of the Contractor that is not in accordance with the Contract requirements, the County may undertake at Contractor's expense and without prior notice, all work necessary to correct such hazardous condition(s).
- 14.1.7. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this Contract, the Contractor shall:

- a. Obtain all warranties that would be given in normal commercial practice;
- b. Require all warranties to be executed, in writing, for the benefit of the County, unless directed otherwise by the County; and
- c. Enforce all warranties for the benefit of the County, unless otherwise directed by the County.

14.1.8 This warranty shall not limit the County's rights under the Inspection and Acceptance section(s) of this Contract with respect to latent defects, gross mistakes, or fraud.

ARTICLE 15 ENVIRONMENTAL PROTECTION

15.1 DUST CONTROL

15.1.1 The Contractor shall provide any and all dust control required.

15.1.2 Whenever the Contractor is negligent in providing dust control, the County shall order the Contractor to provide such dust control. If the Contractor does not comply promptly with such order, the County shall have the authority to provide such dust control and charge the Contractor therefore by deducting the cost from progress payments to the Contractor as such costs are incurred by the County. The County shall not be held responsible for schedule delays due to actions taken by County to mitigate the failure of the Contractor in providing dust control.

15.2 EXCESSIVE NOISE

15.2.1 The Contractor shall use only such equipment on the Work and in such state of repair, that the emission of sound therefrom is within the noise tolerance level of that equipment as established by CAL-OSHA.

15.2.2 Should the County determine that the muffling device on any equipment used on the Work is ineffective or defective so that the noise tolerance of such equipment is exceeded, such equipment shall not, after such determination by the County, be used on the Work until its muffling device is repaired or replaced so as to bring the noise tolerance level of such equipment within such standards.

15.3 POLLUTION CONTROL, CLEANING

15.3.1 The Contractor shall not, in connection with the Work, discharge any smoke, dust, or other contaminants into the atmosphere which are in violation of South Coast Air Quality Management District standards or discharge any fluids or materials into any lake, river, stream, or channel as will violate regulations of State of California Water Resources Board. The Contractor shall control accumulation of waste materials and rubbish and dispose of waste materials and rubbish off-site at a minimum of weekly intervals. Burning of materials is not permitted.

ARTICLE 16 EMPLOYMENT PRACTICES

16.1 QUALIFICATIONS FOR EMPLOYMENT AND APPRENTICESHIP STANDARDS

16.1.1 In accordance with Section 1735 of the California Labor Code, no person under the age of 16 years and no person currently serving sentence in a penal or correctional institution shall be employed to perform any Work under this Contract. No person whose age or physical condition is such as to make his employment dangerous to his health or safety or to the health or safety of others shall be employed to perform Work under this Contract; provided that this requirement shall not operate against any physically handicapped persons otherwise employable where such persons may be safely assigned to Work which they ably perform.

- 16.1.2 This contract is subject to the provisions of Sections 1777.5 and 1777.6 of the California Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under him. Section 1777.5 as amended, requires the Contractor or subcontractor employing tradesmen in any apprenticeable occupation to apply to the Joint Apprenticeship Committee nearest the site of this project and which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen that will be used in the performance of the Contract.
- 16.1.3 The Contractor is required to make contributions to funds established for the administration of apprenticeship programs if he employs registered apprentices or journeymen in any apprenticeable trade on such contracts and if other contractors on the public works site are making contributions.
- 16.1.4 All employees engaged in work on the project under this Contract shall have the right to organize and bargain collectively through representatives of their own choosing, and such employees shall be free from interference, restraint, and coercion of employers in the designation of such employees for the purpose of collective bargaining or other mutual aid or protection, and no person seeking employment under this Contract shall be required as a condition of initial or continued employment to join any company, union, or to refrain from joining, organizing, or assisting a labor organization of such person's own choosing. No person in the employment of the County shall be employed by this contractor.

16.2 WAGES & RECORDS

16.2.1 WAGE RATES

- a. Pursuant to Section 1770 and 1773 et seq. of the Labor Code of the State of California, the Director of Industrial Relations has ascertained the general prevailing rate of per diem wages and the rates for overtime and holiday work in the locality in which the work is to be performed for each craft, classification, or type of workman needed to execute the contract which will be awarded to the successful bidder, copies of which are on file and available upon request at the Clerk of the Board, Board of Supervisors, 4080 Lemon St., 14th Floor, Riverside, CA 92501-3655, and shall be posted at the job site.
- b. It shall be mandatory upon the Contractor and upon any subcontractor under him, to pay not less than the said specified rates to all laborers, workmen, and mechanics employed in the execution of the Contract. It is further expressly stipulated that the Contractor shall, as a penalty to County, forfeit twenty-five dollars (\$25.00) for each calendar day, or portion thereof, for each laborer, workman, or mechanic paid less than the stipulated prevailing rates for any work done under this Contract by him or by any subcontractor under him; and Contractor agrees to comply with all provisions of Section 1770 et. seq. of the Labor Code.
- c. In case it becomes necessary for the Contractor or any sub-contractor to employ on the project under this Contract any person in a trade or occupation (except executives, supervisory, administrative, clerical, or other non-manual workers as such) for which no minimum wage rate is herein specified, the Contractor shall immediately notify the County who will promptly thereafter determine the prevailing rate for such additional trade or occupation and shall furnish the Contractor with the minimum rate based thereon. The minimum rate thus furnished shall be applicable as a minimum for such trade or occupation from the time of the initial employment of the person affected and during the continuance of such employment.
- d. The County will not recognize any claim for additional compensation because of the

payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth as provided herein. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his bid, and will not under any circumstances be considered as the basis of a claim against the County on the Contract.

16.2.2 WAGE RECORDS

- a. The Contractor and each subcontractor shall keep or cause to be kept an accurate record (certified payroll) showing the names and occupations of all laborers, workers, and mechanics employed by him in connection with the execution of this Contract or any subcontract thereunder. The record shall show the actual per diem wages paid to each of said workers, which records shall be provided to the County, and to the Division of Labor Standards Enforcement upon its request. Copies provided will include one which has the name and social security numbers marked out.

16.3 NOTICE OF LABOR DISPUTES

16.3.1 If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this Contract, the Contractor shall immediately give notice, including all relevant information, to the County.

16.3.2 The Contractor agrees to insert the substance of this clause, including this paragraph into any subcontract in which a labor dispute may delay the timely performance of this Contract; except that each subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify the next higher tier subcontractor or the prime Contractor, as the case may be, of all relevant information concerning the dispute.

16.4 NONDISCRIMINATION

16.4.1 EQUAL EMPLOYMENT OPPORTUNITY

- a. Contractor agrees for the duration of this Contract that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap. The Contractor will take affirmative action to insure that employees are treated during employment or training without regard to their race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- b. The Contractor will in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap.
- c. The Contractor will send to each labor union or other representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the workers' representative of the Contractor commitments under this agreement.

- d. The Contractor agrees that it will comply with the provisions of Titles VI and VII of the Civil Rights Act, Revenue Sharing Act Title 31, U.S. Code Section 2716, and California Government Code Section 12990.
- e. The Contractor agrees that it will assist and cooperate with the County, the State of California and the United States Government in obtaining compliance with the equal opportunity clause, rules, regulations, and relevant orders of the State of California and United States Government issued pursuant to the Acts.
- f. In the event of the Contractor's non-compliance with the discrimination clause, the affirmative action plan of this contract, or with any of the said rules, regulations or orders, this Contract may be canceled, terminated, or suspended in whole or in part by the County.

16.4.2 HANDICAPPED NON-DISCRIMINATION

This project is subject to Section 504 of the Rehabilitation Act of 1973 as amended, (29 U.S.C. 794), and the Americans with Disabilities Act of 1990, as amended, and all requirements imposed by the guidelines and interpretations issued thereto. In this regard, the County and all of its contractors and subcontractors will take all reasonable steps to ensure that handicapped individuals have the maximum opportunity for the same level of aid, benefit or service as any other individual.

16.4.3 FAIR EMPLOYMENT AND HOUSING ACT ADDENDUM

In the performance of this Contract, the Contractor will not discriminate against any employee or Applicant for employment because of race, sex, color, religion, ancestry, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, sex, color, religion, ancestry, or national origin. Such action shall include, but not limited to, the following: employment, upgrading, promotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by the State or local agency setting forth the provisions of this Fair Employment and Housing Section.

16.4.4 ACCESS TO RECORDS

The Contractor will permit access to his records of employment, employment advertisements, application forms, and other pertinent data and records by the State Fair Employment and Housing Commission, or any other agency of the State of California designated by the awarding authority, for the purposes of investigation to ascertain compliance with the Fair Employment and Housing section of this Contract.

16.4.5 REMEDIES FOR WILLFUL VIOLATION

The State or local agency may determine a willful violation of the Fair Employment and Housing provision to have occurred upon receipt of a final judgment having that effect from a court in an action to which Contractor was a party, or upon receipt of a written notice from the Fair Employment and Housing Commission that it has investigated and determined that the Contractor has violated the Fair Employment and Housing Act and has issued an order or obtained an injunction under Government Code Sections 12900, et seq.

ARTICLE 17 SUBCONTRACTING

17.1 SUBCONTRACTORS

- 17.1.1** A subcontractor is an individual, firm or corporation having a direct contract with the Contractor or with any other subcontractor for the performance of a part of the Work. In accordance with Section 4104 of the Public Contract Code, each Contractor, in his bid, shall include the name and location of each subcontractor who will perform work or labor, or render services to the Contractor in or about the Work in an amount in excess of one half of 1% of the Contractor's total bid.
- 17.1.2** The County reserves the right to approve all subcontractors. Such approval shall be a consideration to the awarding of the Contract and unless notification to the contrary is given to the Contractor prior to the signing of the Contract, the list of subcontractors which is submitted with his proposal will be deemed to be acceptable.
- 17.1.3** The Contractor shall be as fully responsible to the County for the acts and omissions of his subcontractors and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- 17.1.4** Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the County.
- 17.1.5** The divisions or sections of the specifications are not intended to control the Contractor in dividing the Work among subcontractors or to limit the work performed by any trade.

17.2 RELATIONS OF CONTRACTOR AND SUBCONTRACTOR

- 17.2.1** The Contractor agrees to bind every subcontractor by the terms of the Contract with the County, the General Conditions, Supplementary Conditions, and the drawings and specifications as far as applicable to his work, unless specifically noted to the contrary in a subcontract approved in writing as adequate by the County.

17.3 SUBCONTRACTS

- 17.3.1** Pursuant to the provisions of Sections 4100 to 4114 of the California Public Contract Code, inclusive, the Contractor shall not, without the consent of the County, either:
- a. Substitute any persons as subcontractors in place of the subcontractors designated in his original bid without the consent of County. (The County's consent can only be given in cases permitted by Public Contract Code Section 4107.)
 - b. Permit any subcontract to be assigned or transferred or allow any work to be performed by anyone other than the original subcontractor listed in his bid.
 - c. Sublet or subcontract any portion of the work in excess of one-half of one percent of his bid to which his original bid did not designate a subcontractor.

Should the Contractor violate any of the provisions of Sections 4100 to 4114, inclusive, of the Public Contract Code, his so doing shall be deemed a violation of this Contract, and the County may either cancel the contract, or assess the Contractor a penalty in the amount of not more than ten (10) percent of the amount of the subcontract involved, or both.

ARTICLE 18 TAXES

18.1 SALES AND PAYROLL TAXES

18.1.1 Each Contractor, subcontractor, and material dealer shall include in their bid all applicable taxes including but not limited to sales tax and payroll taxes required by law.

ARTICLE 19 CHANGES

19.1 CHANGE ORDER WORK

19.1.1 The County reserves the right to make changes in the work without impairing the validity of the Contract. The County may make changes to the work, or suspend the work, and all such changes or suspension are within the contemplation of the parties and will not be a basis for compensable delay. Such changes may be made in accordance with any of the following methods:

- a. By written change order to the Contract ordered by the Board of Supervisors.
- b. By written change order, signed by the Assistant County Executive Officer/EDA/FM in the manner and amounts specified by Board Policy B-11.
- c. By written authorization, issued by the Assistant County Executive Officer/EDA/FM, for items of work done under unit prices. The cost or credit for such added or omitted work shall be determined by multiplying the number of units added to or omitted from the work by the applicable unit price.

19.1.2 Upon receipt of a proposed Change Order from County, the Contractor shall submit a proposal in accordance with the requirements and limitations set forth in this "Change Orders" article, for work involved in the contemplated change.

19.1.3 The Contractor must submit a cost proposal within fifteen (15) calendar days after receipt of the proposed change order. The Contractor must submit cost proposals in less than fifteen (15) calendar days if requested by the County or if required by schedule limitations.

19.1.4 If the Contractor fails to submit the cost proposal within the 15-day period (or as requested), the County has the right to order the Contractor in writing to commence the work immediately on a force account basis and/or issue a lump sum change to the contract price in accordance with the County's estimate of cost. If the change is issued based on the County estimate, the Contractor will waive his right to dispute the action unless within fifteen (15) calendar days following completion of the added/deleted work, the Contractor presents proof that the County's estimate was in error.

19.1.5 If the County disagrees with the proposal submitted by Contractor, it will notify the Contractor in writing and the Contractor may elect to proceed under the DISPUTE article of this Contract, or, in the event either party contests the price or time extension of Change work, or time is of the essence, the County may issue a Construction Change Directive and the contractor shall proceed with the work. The County will provide its opinion of the appropriate price and/or time extension in a "Response to Change Order Request." If the contractor agrees with the County's estimate, a change order will be issued by the County. If no agreement can be reached, the County shall have the right to issue the Change Order Directive setting forth its unilateral determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. Such determination shall become final and binding if the Contractor fails to submit a Claim in writing to the County, within twenty-one (21) days of the Change Order Directive, disputing the terms of such Directive. No

dispute, disagreement or failure of the parties to reach agreement regarding the amount, if any, of any adjustment to the contract sum or contract time shall relieve the Contractor from the obligation to proceed with performance of the work, including extra work, promptly and expeditiously.”

- 19.1.6** The Contractor will give notice of a requested change on his letterhead within seven (7) calendar days of discovery and, if the County agrees, a proposed change order will be issued on the County's standard change order form.
- 19.1.7** If any change involves an increase or decrease in the cost of the Contractor's work, a change order shall state the amount to be added or deducted from the Contract amount, and the additional time, if any, needed for the performance of such work.
- 19.1.8** Any changes to the Contract amount shall be in a lump sum mutually agreed to by the Contractor and the County, except that when, in the opinion of the County, such basis is not feasible the change to the Contract amount shall be determined upon a cost-plus-percentage basis with a guaranteed maximum lump sum cost within the limitations provided by law.
- 19.1.9** Each lump sum quotation from the Contractor shall be accompanied by sufficiently detailed estimates to permit verification of totals in accordance with (a) through (d) in 19.1.11 below.
- 19.1.10** When the work is to be done on a cost-plus-percentage basis, the Contractor shall submit statements as required by the County showing all labor, material, and equipment costs incurred, and upon completion of the work, a summary of costs, including overhead and profit, and in accordance with Item (a) through (d) in 19.1.11 below.
- 19.1.11** Estimates for lump sum quotations and accounting for cost-plus-percentage work shall be limited to direct expenditures necessitated specifically by the subject extra work, and shall be segregated as follows:
- a. Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the extra work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the extra work cost will not be permitted unless the contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.
 - b. Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight and delivery.
 - c. Tool and Equipment Use. No payment will be made for the use of tools which have a replacement value of \$100 or less. Regardless of ownership, the rates to be used in determining equipment use costs shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the work is performed.
 - d. Overhead, Profit and Other Charges. The mark-up for overhead and profit on work added to the Contract shall be according to the following Schedule.
 - (1) For work performed by the Contractor's forces the added cost for overhead and profit shall not exceed fifteen (15%) percent of the net cost of the work, equipment, labor and materials.

- (2) For work performed by a subcontractor, the added cost for overhead and profit shall not exceed fifteen (15%) percent of the net cost of the work, equipment, labor and materials, to which the Contractor may add five (5) percent of the subcontractor's price of the work.
- (3) For work performed by a sub-subcontractor the added cost for overhead and profit shall not exceed fifteen (15 %) percent of the net cost for work, equipment, labor and materials to which sub-contractor and general contractor may each add an additional five (5 %) percent of the total price from the lower tier subcontractor.
- (4) "Net Cost" is defined as consisting of costs of labor, materials and equipment use and/or rental only. The costs of applicable insurance and bond premium will be reimbursed to the Contractor and subcontractors at cost only, without mark-up.
- (5) The cost of direct supervision, except when provided by working foreman whose time is included above, of change order work when done exclusively, and not in conjunction or at the same time as, other work performed on the job and when approved in advance by the County's authorized representative, including only payroll taxes, insurance, pension and direct costs for the labor of supervision may be charged to the change order. The cost of transportation, use of vehicle and other costs incurred by supervision will not be allowed.

19.1.12 For added or deducted work by subcontractors, the Contractor shall furnish to the County the subcontractor's signed detailed estimate of the cost of labor, material and equipment, including the markup by such subcontractor for overhead and profit. The same requirement shall apply to sub-subcontractors.

19.1.13 For added or deducted work furnished by a vendor or supplier, the Contractor shall furnish to the County a detailed estimate or quotation of the cost to the Contractor for such work, signed by such vendor or supplier.

19.1.14 Any change in the work involving both extras and credits shall show a new total cost, including subcontracts. Allowance for overhead and profit, as specified therein, shall be applied if the net total cost is an extra; overhead and profit allowances shall not be applied if the net total cost is a credit. The estimated cost of deductions shall be based on labor and material prices on the date the Contract was executed.

19.1.15 The Contractor shall identify any adjustment in time of the final completion of the Work as a whole which is directly attributable to the changed work within fifteen (15) calendar days of receipt of the proposed change order. The Contractor's request for a change in time will be supported by a detailed schedule analysis including a schedule indicating the activities which have been affected and the additional time being requested.

- a. For a change in time for the Work, the Contractor shall be entitled only to such adjustments where completion of the entire Work (critical path) is delayed due to the performance of the changed work. Failure to request extra time when submitting such estimate shall constitute waiver of the right to subsequently claim adjustment in time for final completion based upon such changed work.
- b. If the County and the Contractor fail to arrive at an agreement on the amount of extra cost, credit or time extension for a proposed change, a change order will be processed in the amount believed by the County to be reasonable, and the Contractor shall proceed with the work. If the Contractor believes that the amount or time stipulated in the change order is not

reasonable for the work required, he may elect to issue a notification in accordance with the DISPUTES article for review by the County, stating therein the basis for his dispute with such change order.

- 19.1.16 Any change in the Work shall conform to the original Contract Documents insofar as they may apply without conflict to the conditions involved in the change.
- 19.1.17 Payment for additional work or extras, if any, shall become due and payable in accordance with the provisions for payment in the Contract.
- 19.1.18 Contractor shall not reserve a right to assess impact cost, extended job site costs, extended overhead, and/or constructive acceleration at a later date as related to any and all changes. All costs or estimated costs must be supported with full schedule and cost documentation with each proposed change within the prescribed submission times. If a request for a change is denied and the Contractor disputes the denial, the Contractor must supply the aforementioned documentation to support his claim under the DISPUTES article of this Contract. No claims shall be allowed for impact, extended overhead costs, and/or construction acceleration due to the multiplicity of changes and/or clarifications. Any attempt by Contractor to change or modify the change order form (sample included herein) shall void the form, including any letters the Contractor may issue in conjunction therewith.
- 19.1.19 All alterations, extensions of time, extra and additional work and other changes authorized by these specifications or any part of the Contract may be made without securing consent of the surety or sureties on the contract bonds.

19.2 CHANGE ORDERS AND LABOR RATES GUIDELINES

19.2.1 The following are guidelines for preparing change orders:

a. Labor Rates:

- (1) To establish the labor rate for each classification and trade, a breakdown shall be submitted to the County.
- (2) Labor rates are based on current prevailing state and federal wages. Only those benefits mandated by law or a valid labor contract are paid by the County.
- (3) Payroll taxes shall be paid as mandated by law. Labor related insurances shall be paid according to industry standard average.
- (4) No other costs related to labor shall be paid by County.

b. Change Orders:

- (1) Change orders shall be prepared in accordance with the project contract.
- (2) No insurance costs are paid by County, except for labor insurances specified in this guideline under section 1 titled "LABOR RATES".
- (3) Material cost shall be broken down on a separate sheet, and for those jobs designated as time and material shall be supported by valid invoices from suppliers.

- (4) Hours for non-productive labor, such as non-working foremen or general foremen, shall be paid only when justified in the opinion of the County, and approved by the County. The total number of nonproductive labor hours shall be limited to a maximum of 15% of the total number of productive labor hours.
- (5) Cost of use of special equipment shall be paid when justified in the opinion of the County, and approved by the County. Equipment refers to special equipment that is needed to perform that specific job, and does not include the usual tools customarily required for that trade. Small tools costs are not paid by County.
- (6) Material transportation costs are paid by County when justified in the opinion of the County, and approved by the County's authorized representative.
- (7) Overhead, profit and fees on subcontracts, are paid according to the contract.
- (8) No costs other than those designated above shall be paid by County. The percentages of overhead and fee allowed with change orders have been established to account for any other direct or indirect costs that might be incurred due to the change order.

19.3 AUDIT

- 19.3.1 The County shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the County.
- 19.3.2 The Contractor shall make available at its office at all reasonable times the materials described in paragraph 19.3.1 above, for examination, audit, or reproduction, until 4 years after final payment under this Contract.
- 19.3.3 The Contractor shall insert a clause containing all the provisions of this 19.3, including this paragraph, in all subcontracts over \$10,000 under this contract.

ARTICLE 20 PAYMENT

20.1 PROGRESS PAYMENTS

- 20.1.1 The County shall pay the Contractor the price as provided in this Contract.
- 20.1.2 The County shall make progress payments monthly as the Work proceeds, on estimates approved by the County. The Contractor shall furnish a breakdown of the total contract price, in a format provided by the County, showing the amount included therein for each principal category of the work, in such detail as requested, to provide a basis for determining progress payments.
- 20.1.3 Contractor shall submit to the County vouchers, schedule activities, or other satisfactory proof of the value of any work for which he claims payment on such account, and receipts showing that progress payments have been duly made on such contracts, and for materials furnished.
- 20.1.4 In the preparation of estimates, the County may authorize 75% of the value of material delivered and satisfactorily stored on the site, and preparatory work done to be taken into consideration for major equipment if:

- a. Consideration is specifically authorized by this Contract; and
 - b. The Contractor furnishes certified receipt that it has acquired title and paid invoices for such material and that the material will be used to perform this Contract.
- 20.1.5** On the 25th of each month the Contractor will submit his request for payment. Prior to that submittal the County will review the requested percentage of completion for each activity. The payment request will be in the format as provided by the County and will refer to the schedule.
- 20.1.6** Upon receipt of a payment request, the County shall:
- a. Review that request as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request; and
 - b. Any payment request determined not to be a proper request suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven (7) calendar days after receipt. The returned request for payment shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.
- 20.1.7** Any progress payment which is undisputed and properly submitted and remains unpaid for thirty (30) calendar days after receipt by County shall accrue interest to the Contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the California Code of Civil Procedure. The number of days available to the County to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which the County exceeds the seven-day return requirement set forth in 20.1.6 above.
- 20.1.8** In making these progress payments, there shall be retained ten percent (10%) from the amount of each progress payment until the work is 50% complete. After the 50% completion point, if satisfactory progress is being made and at the sole discretion of the County, the retention may be reduced to a minimum of 5% of the contract.
- 20.1.9** Except as otherwise prohibited by law, the Contractor may elect to receive all payments due under the contract pursuant to this section without any retention, by posting securities in accordance with Public Contract Code Section 22300.
- 20.1.10** Contractor and each subcontractor shall pay each of its employees engaged in work under this Contract in full (less deductions made mandatory by law) in accordance with California law.
- 20.1.11** The County may withhold (in excess of retentions) or, on account of subsequently discovered evidence, nullify the whole or a part of any certificate to such extent as may be necessary to protect the County from loss on account of:
- a. Defective work not remedied.
 - b. Claims filed or reasonable evidence indicating probable filing of claims.
 - c. Failure of the Contractor to make payments properly to subcontractors or for material or labor.
 - d. Damage to another Contractor.

- e. Delays in progress toward completion of the work, with the stipulated amount of liquidated damages being withheld for each day of delay for which no extension is granted.
- f. Default of the Contractor in the performance of the terms of the Contract.

20.1.12 Should stop notices be filed with the County, County shall withhold the amount required plus 25% from certificates until such claims shall have been resolved pursuant to applicable law. California Civil Code Section 3179 et seq.

20.1.13 Contractor shall provide (1) forms of conditional releases of stop notice and bond rights upon progress payment, complying with California Civil Code Section 3262(d)(1), for all work performed during the time period covered by the current Application for Payment, signed by the Contractor and the subcontractors of every tier; and (2) forms of unconditional release of stop notice and bond rights upon progress payment, complying with Civil Code Section 3262(d)(2) for all work performed during the time period covered by previous Application for Payment, signed by Contractor and the subcontractors of every tier.

20.1.14 All material and work covered by progress payments made shall, at the time of payment, become the sole property of the County, but this shall not be construed as:

- a. An acceptance of any work not in accordance with the Contract Documents; or
- b. Waiving the right of the County to require the fulfillment of all of the terms of the contract.

20.2 FINAL PAYMENT

20.2.1 GENERAL

- a. The County shall pay the amount due the Contractor under this Contract after:
 - 1.) The Acceptance of all work and Notice of Completion per the terms of this Contract;
 - 2.) Presentation of a properly executed voucher;
 - 3.) Submission of conditional releases and wavers of stop notice and bond rights upon final payment in the form required by California Civil Code Section 3262(d)(3) executed by Contractor and by all the subcontractors of every Tier.
 - 4.) Presentation of release of all claims against the County arising by virtue of this Contract, other than claims and disputes in stated amounts, that the Contractor has specifically excepted from the operation of the release.
- b. The Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the County, to indemnify him against any lien.

20.2.2 FINAL CERTIFICATE FOR PAYMENT

- a. When the work is ready for acceptance by the County, the Department of Facilities Management will certify and submit to the Board of Supervisors a Notice of Completion. Upon approval of the Notice of Completion, a copy will be sent to the Contractor.

- b. Notice of Completion will be recorded by the County upon completion and Acceptance of the Work. Providing no stop notices have been filed, thirty-five (35) calendar days after filing of such Notice of Completion, payment due under the contract will become due to the Contractor and the County shall so certify authorizing the final payment.

20.2.3 FINAL PAYMENT

- a. After Acceptance of Work, the County will submit to Contractor a statement of the sum due Contractor under this contract, together with County payment in the amount thereof. Said statement shall take into account the contract price, as adjusted by any change orders; amounts already paid; sums to be withheld for incomplete work; liquidated damages; and for any other cause under the Contract.
- b. The Contractor shall, from the effective date of Acceptance until the expiration of four years after final settlement under this Contract, preserve and make available to the County, all its books, records, documents, and other evidence bearing on the costs and expenses of the Contractor under this Contract.

ARTICLE 21 SUSPENSION OF WORK/TERMINATION

21.1 NON-COMPLIANCE WITH CONTRACT REQUIREMENTS

21.1.1 In the event the Contractor, after receiving written notice from the County of non-compliance with any requirement of this Contract, fails to promptly initiate appropriate action to comply with the specified requirement, the County shall have the right to withhold payment for work completed under the Contract until the Contractor has complied with the notice or has initiated such action as may be appropriate to comply, within a reasonable period of time. The Contractor shall not be entitled to any extension of contract time or payment for any costs incurred for work under this article.

21.1.2 Should the Contractor abandon the Work called for under the Contract, or assign his Contract, or unnecessarily and unreasonably delay the work, or willfully violate or perform the work in bad faith, the County shall have the power to notify the Contractor to discontinue all work or any part thereof under this Contract, and thereupon the Contractor shall cease to continue said work or such part thereof as the County may designate, and the County shall have the power to employ such persons as it may consider desirable, and to obtain by contract, purchase, hire or otherwise, such implements, tools, material or materials as the County may deem advisable to work at and be used to complete the work herein described, or such part thereof as shall have not been completed, and to use such material as it may find upon the site of the work, and to charge the expense of such labor and material, implements and tools to the Contractor, and the expense so charged shall be deducted and paid by the County out of such monies as may either be due, or may at any time thereafter become due to the Contractor under the Contract.

21.2 TERMINATION

21.2.1 TERMINATION FOR BREACH

If the Contractor should be adjudged bankrupt or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he or any of his subcontractors should violate any of the provisions of the Contract, the County may serve written notice upon him and his surety of its intention to terminate Contractor's performance hereunder, said notice shall contain the reasons for such intention to terminate Contractor's performance, and, unless within ten (10) calendar days after serving of said notice, such violation shall cease and satisfactory arrangements for correction thereof be made,

Contractor's performance shall, upon the expiration of said ten (10) calendar days, cease and terminate. In the event of any such termination, the County shall immediately serve written notice thereof upon the surety and the Contractor, and the County may take over the Contractor's work and prosecute the same to completion by contract or by any other method it may deem advisable, for the account and at the expense of the Contractor, and the Contractor and his surety shall be liable to the County for any excess cost occasioned the County thereby, and in such event the County may without liability for so doing take possession of and utilize in completing the work, such materials, appliances, plants, and other property belonging to the Contractor as may be on the site of the work and necessary therefore.

21.2.2 TERMINATION FOR CONVENIENCE

- a. If the construction of the project herein is damaged, which damage is determined to have been proximately caused by an Act of God, in excess of 5% of the contract amount, provided that the work damaged is built in accordance with applicable building standards and the plans and specifications, then the County may, without prejudice to any other right or remedy, terminate the Contract.
- b. The County may terminate performance of work under this Contract in whole or in part, if the County determines that a termination is in the County's interest. The County shall terminate by delivering to the Contractor a Notice to Terminate specifying the extent of termination and the effective date.
- c. After receipt of such Notice, and except as directed by the County, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:
 - (1) Stop work as specified in the notice.
 - (2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete any continued portion of the Contract.
 - (3) To terminate all subcontracts to the extent they relate to the work terminated.
 - (4) With approval or ratification to the extent required by the County, settle all outstanding liabilities and termination settlement proposals arising from termination of subcontracts; the approval or ratification will be final for purposes of this clause.
 - (5) As directed by the County, transfer title and deliver to the County (1) the fabricated or unfabricated parts; work in progress, completed work, supplies, and other material produced or acquired for the work terminated; and (2) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the County.
 - (6) Complete performance of work not terminated.
 - (7) Take any action that may be necessary, or that the County may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the County has or may acquire an

interest.

- (8) Use its best efforts to sell, as directed or authorized by the County, any property of the types referred to in subparagraphs above; provided, however, that the Contractor (1) is not required to extend credit to any purchaser and (2) may acquire the property under the conditions prescribed by, and at prices approved by the County. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the County under this contract, credited to the price or cost of the work, or paid in any other manner directed by the County.
- d. After termination, the Contractor shall submit a final termination settlement proposal to the County in the form and with the certification prescribed by the County. The Contractor shall submit the proposal promptly, but no later than thirty (30) days from the effective date of termination. If the Contractor fails to submit the proposal within the time allowed, the County may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.
 - e. Subject to subparagraph (2) above, the Contractor and the County may agree upon the whole or any part of the amount to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, may not exceed the total contract price as reduced by:
 - (1) the amount of payments previously made and;
 - (2) the contract price of work not terminated. The contract shall be amended with a Change Order, and the Contractor paid the agreed amount.
 - f. If the Contractor and County fail to agree on the whole amount to be paid the Contractor because of the termination of work, the County shall pay the Contractor the amounts determined as follows:
 - (1) For contract work performed before the effective date of termination, the total (without duplication of any terms) of:
 - (i) The cost of this work;
 - (ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (i) above; and
 - (iii) A sum, as profit on (i) above, determined by the County to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the County shall allow no profit under this subdivision (iii).
 - (2) The reasonable costs of settlement of the work terminated including:
 - (i) Accounting, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data; and
 - (ii) Storage, transportation, and other costs incurred, reasonably necessary for

the preservation, protection, or disposition of the termination inventory.

- g. Except for normal spoilage, the County shall exclude from the amounts payable to the Contractor the fair value, as determined by the County, of defective work, and of property that is destroyed, lost, stolen, or damaged so as to become undeliverable.
- h. The Contractor shall have the right to make a claim under the DISPUTES article, from any determination made by the County.
- i. In arriving at the amount due the Contractor, there shall be deducted:
 - (1) All unliquidated advance or other payments to the Contractor under the terminated portion of this Contract;
 - (2) Any claim which the County has against the Contractor under this Contract; and
 - (3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the County.
- j. If the termination is partial, the Contractor may file a proposal with the County for a Change Order of the price(s) of the continued portion of the Contract. The County shall process any Change Order agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within thirty (30) days from the effective date of termination unless extended in writing by the County.
- k. The County may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the Contract, if the County believes the total of these payments will not exceed the amount to which the Contractor will be entitled. If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the County upon demand, together with interest.
 - l. Unless otherwise provided in this Contract or by statute, the Contractor will maintain all records and documents relating to the terminated portion of this Contract for 4 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this Contract. The Contractor shall make these records and documents available to the County, State and/or the U.S. Government or their representatives at all reasonable times, without any direct charge.

ARTICLE 22 DISPUTES/CLAIMS

22.1 CLAIMS RESOLUTION

In accordance with Public Contract Code Sections 20104 20104.6 and other applicable law, public works claims of \$375,000 or less which arise between the Contractor and the Owner shall be resolved under the following the statutory procedure unless the Owner has elected to resolve the dispute pursuant to Public Contract Code Section 10240 et seq.

- a. All claims shall be submitted in writing and accompanied by substantiating documentation. Claims must be filed on or before the date of final payment unless other notice requirements

are provided in the contract. "Claim" means a separate demand by the claimant for (1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the claimant and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled, or (3) an amount the payment of which is disputed by the Owner.

- b. Claims Under \$50,000. The Owner shall respond in writing to the claim within 45 days of receipt of the claim, or, the Owner may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the Owner may have. Of additional information is needed thereafter, it shall be provided upon mutual agreement of the Owner and the claimant. The Owner's written response shall be submitted 15 days after receiving the additional documentation, or within the same period of time taken by the claimant to produce the additional information, whichever is greater.
- c. Claims over \$50,000 but less than or equal to \$375,000. The Owner shall respond in writing within 60 days of receipt, or, may request in writing within 30 days of receipt of the claim, any additional documents supporting the claim or relating to defenses or claims the Owner may have against the claimant. If additional information is needed thereafter, it shall be provided pursuant to mutual agreement between the Owner and the claimant. The Owner's response shall be submitted within 30 days after receipt of the further documents, or within the same period of time taken by the claimant to produce the additional information or documents, whichever is greater. The Contractor shall make these records and documents available to the County, State and/or the U.S. Government or their representatives at all reasonable times, without any direct charge.
- d. If the claimant disputes the Owner's response, or if the Owner fails to respond within the statutory time period(s), the claimant may so notify the Owner within 15 days of the receipt of the response or the failure to respond, and demand an informal conference to meet and confer for settlement. Upon such demand, the Owner shall schedule a meet and confer conference within 30 days.
- e. If following the meet and confer conference, the claim or any portion thereof remains in dispute, the claimant may file a claim pursuant to Government Code 900 et seq. and Government Code 910 et seq. For purposes of those provisions, the time within which a claim must be filed shall be tolled from the time the claimant submits the written claim until the time the claim is denied, including any time utilized for the meet and confer conference.
- f. If a civil action is filed to resolve any claim, the provisions of Public Contract Code 20104.4 shall be followed, providing for nonbinding mediation and judicial arbitration.

22.2 CLAIM FORMAT/REQUIREMENTS

22.2.1 The Contractor will submit the claim justification in the following format:

- a. Summary of claim merit and price plus clause under which the claim is made.
- b. List of documents relating to claim
 - (a) Specifications
 - (b) Drawings
 - (c) Clarifications (RFIS)
 - (d) Schedules
 - (e) Other

- c. Chronology of events and correspondence
- d. Analysis of claim merit
- e. Analysis of claim cost
- f. Analysis of Time in CPM format
- g. Cover letter and certification (form included herein)

22.2.2 If any claim submitted includes a request for overhead, the County may request a Profit & Loss statement and supporting documentation from Contractor. If requested, such documentation must be submitted for the County to consider the claim.

22.2.3 Submission of a claim, properly certified, with all required supporting documentation, and written rejection or denial of all or part of the claim by County, is a condition precedent to any action, proceeding, litigation, suit, general conditions claim, or demand for arbitration by Contractor.

22.3 NOTICE OF THIRD PARTY CLAIMS

The County shall provide notification to the Contractor within a reasonable time after receipt of any third-party claim relating to the Construction Contract.

SECTION 02070

SELECTIVE DEMOLITION AND RECONSTRUCTION

PART 1 -- GENERAL

1.01 SUMMARY

Division 0, Contract requirements and Division 1, General Conditions apply to this section.

1.02 SCOPE OF WORK

A. Work included:

1. Carefully demolish and remove from the site those items scheduled to be so demolished and removed. Furnish materials and perform labor required to execute this work as required by the Drawings and/or as specified and as necessary to complete the Contract, including, but not limited to, these major items:
 - a. Protection of existing work to remain.
 - b. Barricades, lights, signs and safety precautions required by governing codes.
 - c. Removal and disposition of all material resulting from this work, except materials to be stored for Owner.
 - d. Patching as necessary to match existing.
 - e. Saw-cutting existing concrete and asphalt concrete.
 - f. Protection of existing vegetation or shrubbery to remain.
 - g. Cleaning existing items to remain.
 - h. Relocation of existing items as necessary to provide for new construction and as required by the Drawings.
 - i. Removal and/or relocation of utility lines (water, electric, sewer) as required by the Drawings, and such lines not shown but encountered in the course of the work.
 - j. Removal and/or relocation of existing irrigation lines.

1.03 GENERAL REQUIREMENTS

- A. Codes: Perform all work in accordance with the Codes listed in 1.3.3 of General Conditions and as required by local governing authority.
- B. All bidders submitting bids for this work shall first examine the site and all conditions and limitations thereon and thereabouts. Bid shall take into account all such conditions and limitations, whether or not the same are specifically mentioned in any of the contract documents and every bid shall be construed as including whatever sums are needed to complete the work in every part as shown, described, or reasonably required or implied, and attain the completed conditions contemplated by the Contract. The demolition drawings, including demolition work shown on construction drawings, shall be considered as a guide only. The exact extent of the demolition and reconstruction work shall be determined by a site visit and investigation.
- C. Partial removal: Items scheduled to be removed and of salvageable value to Contractor, excluding those items to be retained by the Owners, may be removed from the structure as work progresses. Salvaged items must be transported from site as they are removed.

1. Storage or sale of removed items on site will not be permitted.
 - D. Noise control: Carry on all work in a manner which will produce the least amount of noise. Instruct all workmen in noise control procedures.
 - E. Items of existing work indicated to remain upon completion of the Contract, but which require removal to complete the work, shall be carefully removed and replaced upon completion. The replaced work shall match its condition at the start of the work.
- 1.04 QUALITY ASSURANCE
- Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- 1.05 SUBSTITUTIONS
- Substitutions will be considered per Article 5 of the General Conditions.
- 1.06 SUBMITTALS
- A. In accordance with Article 5 of the General Conditions.
 - B. Schedule: Submit proposed methods and operations of building demolition to Architect for review prior to start of work. Include in schedule coordination for shut-off, capping, and continuation of utility services as required.

PART 2 -- PRODUCTS

As necessary for proper completion of this Work.

PART 3 -- EXECUTION

- 3.01 EXAMINATION
- A. Examine the areas and conditions under which work of this Section will be performed.
 - B. Correct conditions detrimental to timely and proper completion of the Work.
 - C. Do not proceed until unsatisfactory conditions are corrected.
 - D. Beginning of installation means acceptance of conditions.
- 3.02 GENERAL PROVISIONS
- A. By careful study of the Contract Documents, determine the location and extent of selective demolition to be performed.
 - B. In company with the Architect and Owner, after receiving Notice to Proceed, visit the site and verify the extent and location of selective demolition required.
 1. Carefully identify limits of selective demolition.
 2. Mark interface surfaces as required to enable workmen also to identify items to be removed and items to be left in place intact.
 - C. Take into consideration as necessary work, all obvious existing conditions and installations on the site as though they were completely shown or described. Accept the site of the work as it exists and clear obstructions to the work shown.
 - D. Examine the site and all conditions and limitations thereon and thereabouts. Take into account all such existing conditions and limitations whether or not the same are

specifically shown or mentioned in any of the Contract Documents and include whatever is needed to complete the work in every part as shown, described or reasonably required or implied to attain the completed condition contemplated by the Contract.

- E. Prepare and follow an organized plan for demolition and removal of items.
 - 1. Shut off, cap, and otherwise protect existing public utility lines in accordance with the requirements of the public agency or utility having jurisdiction. Review plans, and confer with the Architect, to determine which lines are to be abandoned and which are to be kept active.
 - 2. Completely remove items scheduled to be so demolished and removed, leaving surfaces clean, solid, and ready to receive new materials specified in other Sections of these Specifications.
 - 3. In all activities, comply with pertinent regulations of governmental agencies having jurisdiction.
- F. Demolished material shall be considered to property of the Contractor and shall be completely removed from the job site. Do not store or permit debris to accumulate on the site. Burning of removed materials from demolished operations will not be permitted on site.

3.03 POLLUTION CONTROLS

- A. Use temporary enclosures and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations pertaining to environmental protection.
 - 1. Do not use water when it may create hazardous or objectionable conditions such as ice, flooding, and pollution.
- B. Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations, as directed by Architect or governing authorities. Return adjacent areas to condition existing prior to start of work.

3.04 PROTECTION

- A. Site security: Erect wire or solid wood fences, barricades, warning lights and signs as required by the governing building code, to protect all manner of person from injury, to prevent trespassing, and to prevent theft or damage to the work.
- B. Protection of work to remain: Use stakes, barricades, and such other means of protection as required to prevent damage to existing work and equipment to remain.
- C. Protect all landscaping scheduled to remain.
- D. Ensure safe passage of persons around area of demolition. Conduct operations to prevent injury to adjacent buildings, structures, other facilities, and persons.
 - 1. Erect temporary covered passageways as required by authorities having jurisdiction.
 - 2. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement or collapse of building structure to remain.

3.05 TRAFFIC

- A. Conduct demolition operations and removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
- B. Do not close or obstruct streets, walks or other occupied or used facilities without permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

3.06 UTILITY SERVICES

- A. Maintain existing utilities, keep in service, and protect against damage during demolition operations.
- B. Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to governing authorities.

3.07 REPLACEMENTS

- A. In the event of demolition of items not so scheduled to be demolished, promptly replace such items to the acceptance of the Architect and at no additional cost to the Owner.
- B. Patch and fill holes caused by removal of piping and conduit in concrete slabs, and concrete walls with 3,000 psi concrete; level flush with adjacent surfaces.

3.08 ASPHALT CONCRETE PAVEMENT

All asphalt concrete pavement damaged, cut, trenched, etc. and any base material under the pavement shall be replaced and/or repaired using same specifications as existing pavement.

3.09 REMOVED MATERIALS TO BE SALVAGED OR REUSED

- A. Materials to be salvaged will be noted as such on the Construction Drawings. Existing Vertical blinds shall be included in salvage. Where room sizes match blind sizes, Contractor to include reinstallation of blinds as directed by Owner. Blinds shall be cleaned prior to reinstallation.
- B. Exercise extreme care when removing materials to be salvaged or reused. Use only mechanics skilled in the appropriate crafts.
- C. Store and protect salvaged materials until needed to be re-installed on the project, or deliver to Owner in good condition.

3.010 DEMOLITION

- A. Asphalt Concrete: Remove existing asphalt concrete and base material scheduled to be removed and prepare surface. All edges shall be saw-cut in straight and true lines.
- B. Concrete: Exercise due caution in cutting and/or patching concrete so as not to damage or deface that portion of the existing structure which is to remain. Should any such impairment occur, immediately clean or restore to original condition at no cost to Owner.

3.011 RECONSTRUCTION - GENERAL

- A. By careful study of the Contract Documents, determine the location and extent of reconstruction to be performed.
- B. In company with the Architect, visit the site and verify the extent and location of reconstruction required.
- C. Inspect existing surfaces to determine required surface preparation procedures.
- D. Plumbing and Electrical: In any case where a new line may tie into and extend existing line within the limits of the reconstruction Work, Contractor shall examine the entire existing line and determine whether the new Work will be adversely affected by it, and notify Architect of any such defect before tying in.

3.012 IN ALL RECONSTRUCTION WORK

Use means necessary to prevent dust becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.

END OF SECTION

SECTION 02220
EXCAVATING, BACKFILLING, AND COMPACTING

PART 1 -- GENERAL

1.01 SUMMARY

Division 0, Contract requirements and Division 1, General Conditions apply to this section.

1.02 DESCRIPTION

Work included: Rough grading and compaction of the site and building pad areas to a tolerance of ± 0.10 of a foot. Excavate for foundations, backfill and compact as necessary and fine grade the site to the elevations shown on the Drawings, as specified herein, and as needed to meet the requirements of the construction shown in the Contract Documents.

1.03 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Use equipment in size, capacity, and numbers to accomplish the work of this Section in a timely manner.
- C. In addition to complying with requirements of governmental agencies having jurisdiction, comply with the directions of the Soils Engineer.

1.04 SUBSTITUTIONS

Substitutions will be considered per Article 5 of the General Conditions.

1.05 SUBMITTALS

- A. In accordance with Article 5 of the General Conditions.
- B. Schedule: Submit proposed Products to Architect for review at least two weeks prior to start of work.

PART 2 -- PRODUCTS

2.01 SOILS MATERIALS

Fill and backfill materials:

- 1. Provide soil materials free from organic matter and deleterious substances, containing no rocks or lumps larger than 2" in their greatest dimension, and equal to the on-site material.
- 2. Fill material is subject to the acceptance of the Soils Engineer, and is that material removed from excavations or imported from off-site borrow areas, predominantly granular, non-expansive soils free from roots and other deleterious matter.
- 3. Imported materials shall be tested and accepted by the Soils Engineer before being brought to the site.
- 4. Cohesion-less material used for structural backfill: Provide sand free from organic material and other foreign matter, and as accepted by the Soils Engineer.

2.02 WEED KILLER

- A. Provide a dry, free-flowing, dust-free chemical compound containing not less than 30% sodium chlorate or a chlorpyrifos or Permethrin compound, non-flammable, not creating a fire hazard when applied in accordance with the manufacturer's recommendations, soluble in water, and capable of being spread dry or in solution. Chemical shall comply with Section 815-3.6 of FMA MP 5.
- B. Acceptable products:
 - 1. "Duraban TC":
 - 2. "Dragnet":
 - 3. Or equal.

2.03 TERMITE TREATMENT

Provide a dry, free-flowing, dust-free chemical compound, non-flammable, not creating a fire hazard when applied in accordance with the manufacturer's recommendations, soluble in water, and capable of being spread dry or in solution. Chemical shall comply with State of California requirements

2.04 OTHER MATERIALS

Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the acceptance of the Architect.

PART 3 -- EXECUTION

3.01 EXAMINATION

- A. Examine the areas and conditions under which work of this Section will be performed.
- B. Correct conditions detrimental to timely and proper completion of the Work.
- C. Do not proceed until unsatisfactory conditions are corrected.
- D. Beginning of installation means acceptance of conditions.
- E. If the Contractor encounters conditions at the site that (a) are materially different from those indicated in the contract plans or in specifications, or (b) could not have been reasonably anticipated as inherent in the work of the character provided in the contract, the Contractor shall immediately notify the Owner verbally and in writing within 24 hours. This notification shall be a condition precedent before any negotiations for "changed or differing site conditions" can proceed. If the Owner determines that conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, then negotiations shall commence between Owner and Contractor to provide equitable adjustment to Owner or Contractor resulting therefrom.

3.02 PROCEDURES

- A. Utilities:
 - 1. Unless shown to be removed, protect active utility lines shown on the Drawings or otherwise made known to the Contractor prior to excavating. If damaged, repair or replace at no additional cost to the Owner.
 - 2. If active utility lines are encountered, and are not shown on the Drawings or otherwise made known to the Contractor, promptly take necessary steps to assure that service is not interrupted.
 - 3. If existing utilities are found to interfere with the permanent facilities being constructed under this Section, immediately notify the Architect and secure his instructions.

4. Do not proceed with permanent relocation of utilities until written instructions are received from the Architect.
- B. Protection of persons and property:
1. Barricade open holes and depressions occurring as part of the Work, and post warning lights on property adjacent to or within public access.
 2. Operate warning lights during hours from dusk to dawn each day and as otherwise required.
 3. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, washout, and other hazards created by operations under this Section.
- C. De-watering:
1. Remove all water, including rain water, encountered during trench and sub-structure work to an approved location by pumps, drains, and other approved methods.
 2. Keep excavations and site construction area free from water.
- D. Use means necessary to prevent dust from becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.
- E. Maintain access to adjacent areas at all times.

3.03 EXCAVATING

- A. Perform excavating of every type of material encountered within the limits of the Work to the dimensions and elevations indicated and specified herein.
- B. Excavated materials: Transport to, and place in, fill or embankment areas within the limits of the Work; dispose of such excess material away from the site in a location arranged and paid for by the Contractor.
- C. Excavate and backfill in a manner and sequence that will provide proper drainage at all times.
- D. Unauthorized excavation:
1. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific instruction from the Architect or the Soils Engineer.
 2. Under footings, foundations, or retaining walls:
 - a. Sub-excavate and recompact earth materials in the affected area as directed by the Soils Engineer.
 - b. When acceptable to the Soils Engineer, lean concrete fill may be used to bring the bottom elevation to proper position.
 3. Elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations, unless otherwise directed by the Soils Engineer.
- E. Stability of excavations:
1. Slope sides of excavations to 1:1 or flatter, unless otherwise directed by the Soils Engineer.
 2. Shore and brace where sloping is not possible because of space restrictions or stability of the materials being excavated.
 3. Maintain sides and slopes of excavations in a safe condition until completion of backfilling.

- F. Shoring and bracing:
1. Provide materials for shoring and bracing as may be necessary for safety of personnel, protection of work, and compliance with requirements of governmental agencies having jurisdiction.
 2. Maintain shoring and bracing in excavations regardless of the time period excavations will be open.
 3. Carry shoring and bracing down as excavation progresses.
- G. Excavating for structures:
1. Conform to elevations and dimensions shown within a tolerance of 0.10 ft.
 2. Where concrete is anticipated to be placed directly against earth surfaces, widen excavations by one inch at each contact surface beyond that specified on the plans.
 3. In excavating for footings and foundations, take care to create accurate and straight planes and shapes.
 - a. Excavate by hand tools to final grade where necessary.
 - b. Trim bottoms to required lines and grades to leave solid base to receive concrete.
- H. Excavating for pavements:
- Cut surface under pavements to comply with cross-sections, elevations, and grades.

3.04 FILLING AND BACKFILLING

- A. General:
1. For each classification listed below, place acceptable soil material in layers to required subgrade elevations.
 2. In excavations, use satisfactory excavated or borrowed material.
 3. Under asphalt pavements, use subbase materials.
- B. Placing and compacting:
1. Place backfill and fill materials in layers not more than 8" in loose depth.
 2. Before compacting, moisten or aerate each layer as necessary to provide the optimum moisture content.
 3. Compact each layer to required percentage of maximum density for area.
 4. Do not place backfill or fill material on surfaces that are muddy, frozen, or containing frost or ice.
 5. Place backfill and fill materials evenly adjacent to structures, to required elevations.
 6. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around the structure to approximately the same elevation in each lift.
- C. Backfill excavations as promptly as progress of the Work permits but not until completion of the following:
1. Acceptance of construction below finish grade including, where applicable, damp-proofing and waterproofing.
 2. Inspecting, testing, approving, and recording locations of underground utilities.

3. Removing concrete formwork.
4. Removing shoring and bracing, and backfilling of voids with satisfactory materials.
5. Removing trash and debris.
6. Placement of horizontal bracing on horizontally supported walls.

3.05 COMPACTING

- A. Control soil compaction for any areas disturbed during construction to provide the minimum percentage of density specified for each area as determined according to ASTM D1557. Soils Engineer's recommendations found in the Soils Report will take precedence.
- B. Provide not less than the following maximum density of soil material compacted at optimum moisture content for the actual density of each layer of soil material in place, and as approved by the Soils Engineer.
 1. Structures: Compact each layer of fill and material or backfill material at 90% of maximum density.
 2. Lawn and unpaved areas:
 3. Compact the top 8" of subgrade and each layer of fill material or backfill material at 90% of maximum density.
 4. Compact the upper 12" of filled areas, or natural soils exposed by excavating, at 85% of maximum density.
 5. Paving: Compact each layer of fill material or backfill material at 95% of maximum density.
- C. Moisture control:
 1. Where subgrade or layer of soil material must be moisture-conditioned before compacting, uniformly apply water to surface of subgrade or layer of soil material to prevent free water appearing on surface during or subsequent to compacting operations.
 2. Remove and replace, or scarify and air dry, soil material that is too wet to permit compacting to the specified density.
 3. Soil material that has been removed because it is too wet to permit compacting may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing, or pulverizing until moisture content is reduced to a satisfactory value as determined by moisture-density relation tests approved by the Soils Engineer.

3.06 FINE GRADING

- A. General:
 1. Uniformly grade the areas within limits of grading under this Section, including adjacent transition areas.
 2. Smooth the finished surfaces within specified tolerance.
 3. Compact with uniform levels or slopes between points where elevations are shown on the Drawings, or between such points and existing grades.
- B. Grading outside building lines:
 1. Grade areas adjacent to buildings to achieve drainage away from the structures, and to prevent ponding.
 2. Finish the surfaces to be free from irregular surface changes, and:

- a. Shape the surface of areas scheduled to be under walks to lines, grade, and cross-section, with finished surface not more than 0.10 ft. above or below the required subgrade elevation.
- b. Shape the surface of areas scheduled to be under pavement to line, grade, and cross-section, with finished surface not more than 0.05 ft. above or below the required subgrade elevation.

3.07 MAINTENANCE

- A. Protection of existing graded areas:
 1. Protect existing graded areas from traffic and erosion, and keep free from trash and weeds;
 2. Repair and re-establish grades in settled, eroded and rutted areas to the specified tolerances.
- B. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, reshape, and compact to the required density prior to further construction.

*****END OF SECTION*****

SECTION 02510
ASPHALT CONCRETE PAVING

PART 1 -- GENERAL

1.01 SUMMARY

Division 0, Contract requirements and Division 1, General Conditions apply to this section.

1.02 DESCRIPTION

Work included: Provide base course, asphaltic concrete paving, weed killer, striping and sealer where shown on the Drawings, as specified herein, and as needed for a complete and proper installation. All of the requirements of the Contract Documents apply to this Section.

1.03 QUALITY ASSURANCE

Use adequate number of skilled workman who are thoroughly trained and experienced in the necessary craft and who are completely familiar with the specified requirements and methods needed for proper performance of the work of this Section.

1.04 STANDARDS

A References herein to State Standard Specifications are to the Standard Specifications of the Department of Transportation, State of California (Caltrans), Latest Edition.

B References herein to Standard Specifications are to the Standard Specifications for Public Works Construction, prepared by the Southern California Chapters of the American Public Works Association and The Associated General Contractors of America, 1995 Edition.

1.05 GUARANTEE

Submit one year guarantee in accordance with and in form required in Division 1. Guarantee shall include bringing to grade and repairing of defective surfacing due to grade settlement of fills, trench fills or any portion of base or surfacing.

1.06 SUBSTITUTIONS

Substitutions will be considered per Article 5 of the General Conditions.

1.07 SUBMITTALS

Product data: Within 35 calendar days after the Contractor has received the Owner's notice to proceed, submit:

A In accordance with Article 5 of the General Conditions.

B Materials list of items proposed to be provided under this Section.

C Certificates, signed by the materials producer and the asphaltic paving subcontractor, stating that materials meet or exceed the specified requirements.

PART 2 -- PRODUCTS

2.01 PAVEMENT SYSTEM

Parking Lots: See Drawings for recommended section.

2.02 AGGREGATES

A. Provide aggregates consisting of crushed stone, gravel, sand, or other sound, durable, mineral materials processed and blended, and naturally combined.

- B. Base aggregate: State Standard Specifications, Section 26, Class 2, maximum size:
 - 1. Base courses over 6 inches: 1-1/2 inch.
 - 2. Other base courses: 3/4 inch.
 - 3. The aggregate base shall also have a sand equivalent value of not less than 30 when tested in conformance with Test Method No. California 217.
- C. Aggregates for asphaltic concrete paving: Standard Specifications Section 203-6, Type I - Class C (1/2") for 1-1/2" lifts. Aggregate shall be Type I - Class D (3/8") for 1" lifts.
- D. Slurry Seal Aggregate: Standards Specification, Section 203-5.

2.03 ASPHALTS

- A. Asphalt concrete pavement shall comply with Section 203-6 and 302-5 of the Standard Specifications, except that asphalt concrete shall not be placed when the atmospheric temperature is below 50°F. Paving asphalt shall be AR 4000.
- B. Slurry Seal Binder: Standard Specifications, Section 203-5; SS-1H asphaltic emulsion.
- C. Comply with provisions of Standard Specifications, Section 302-5:
 - 1. Asphalt cement: Penetration grade 50/60
 - 2. Prime coat: SC-70 Liquid Asphalt
 - 3. Tack coat: Uniformly emulsified, grade SS-1H

2.04 MIXING ASPHALTIC CONCRETE MATERIALS

Provide hot plant mixed asphaltic concrete paving materials in accordance with Standard Specifications, Section 203-6.

- 1. Temperature leaving the plant: 290°F. Minimum, 320°F maximum.
- 2. Temperature at time of placing: 280°F minimum.

2.05 WEED KILLER

- A. Provide a dry, free-flowing, dust-free chemical compound containing not less than 30% sodium chlorate or a chlorpyritos or Permethrin compound, non-flammable, not creating a fire hazard when applied in accordance with the manufacturer's recommendations, soluble in water, and capable of being spread dry or in solution. Chemical shall comply with Section 815-3.6 of FMA MP 5.
- B. Acceptable products:
 - 1. "Duraban TC":
 - 2. "Dragnet":
 - 3. Or equal.

2.06 HEADERS AND STAKES

Provide Redwood, Construction grade, in dimensions shown on the Drawings or 2 x 4 sizes for the use where dimensions are not shown on the Drawings.

2.07 MARKING PAINT

Provide traffic paint as indicated on the Drawings and as manufactured by J.E. Bauer Company (or equal), in colors selected by the Architect from standard colors of the manufacturer.

PART 3 -- EXECUTION

3.01 EXAMINATION

- A. Examine the areas and conditions under which work of this Section will be performed.
- B. Correct conditions detrimental to timely and proper completion of the Work.
- C. Do not proceed until unsatisfactory conditions are corrected.
- D. Beginning of installation means acceptance of conditions.

3.02 FINAL PREPARATION OF SUBGRADES

- A. After preparation of subgrade as specified in another Section of these Specifications, thoroughly scarify and sprinkle the entire area to be paved, and then compact to a smooth, hard, even surface of 90% compaction to receive the base aggregates or 95% to receive the asphaltic concrete.
- B. Apply the specified weed killer to the entire area to be paved. Adhere to the manufacturer's application recommendations.

3.03 PLACEMENT OF BASE COURSE

- A. Base:
 - 1. The aggregate base material shall be spread as specified in Section 26-1.035 and 26-1.04 of the State Standard Specifications. The aggregate base material shall be compacted as specified in Section 26-1.05 of the State Standard Specifications.
 - 2. Spread the specified base material to a thickness providing 6 inch minimum thickness unless otherwise noted.
 - 3. Compact to 95%.
- B. Thickness tolerance: Provide the compacted thicknesses shown on the Drawings within a tolerance of minus 0.0" to plus 0.5".
- C. Smoothness tolerance: Provide the lines and grades shown on the Drawings within a tolerance of 3/8" in ten feet.

Deviations: Correct by removing materials, replacing with new materials, and reworking or recompacting as required.
- D. Moisture content: Use only the amount of moisture needed to achieve the specified compaction.

3.04 PLACEMENT OF ASPHALTIC CONCRETE PAVING

- A. The method of depositing, distributing and rolling the asphalt concrete shall be in accordance with Sections 302-5.4 and 302-5.5 of the Standard Specifications.
- B. Install the specified headers and stakes to achieve the arrangement of paving shown on the Drawings.
- C. Remove all loose materials from the compacted base.
- D. Apply the specified prime coat, and tack coat where required, Standard Specification, Sections 302-5.2 and 302-5.3, and allow to dry.
- E. Adjust frames and covers, if so required, to meet final grades.
- F. Receipt of asphaltic concrete materials:
 - 1. Do not accept material unless it is covered with a tarpaulin until unloaded, and unless the material has a temperature of not less than 280°F.

2. Do not commence placement of asphaltic concrete materials when the atmospheric temperature is below 50° F, nor during fog, rain, or other unsuitable conditions.

G. Spreading:

Spread material in manner which requires the least handling.

H. Rolling:

1. After the material has been spread to the proper depth, roll until the surface is hard, smooth, unyielding, and true to the thickness and elevations shown on the Drawings.
2. Roll in at least two directions until no roller marks are visible.
3. Finished paving smoothness tolerance:
 - a. Free from birdbaths.
 - b. No deviations greater than 1/8" in six feet.

3.05 FLOOD TEST

A. Prior to application of seal coat, perform a flood test in the presence of the Architect.

B. Method:

1. Flood the entire asphaltic concrete paved area with water by use of a tank truck or hoses.
2. If a depression is found where water ponds to a depth of more than 1/8" in six feet, fill or otherwise correct to provide proper drainage.
3. Feather and smooth the edges of fill so that the joint between fill and original surface is invisible.

3.06 APPLICATION OF SEAL COAT

A. Prepare the surfaces, mix the seal coat material, and apply in accordance with Standard Specifications, Sections 302-4.

B. Apply one coat of the specified sealer.

C. Achieve a finished surface seal which, when dry and thoroughly set, is smooth, tough, resilient, of uniform black color, and free from coarse textured areas, lap marks, ridges, and other surface irregularities.

3.07 PAVEMENT MARKING

A. Prepare the surfaces and apply the specified paint in accordance with the manufacturer's recommendations as accepted by the Architect.

B. Contractor shall provide two coats as necessary to provide sufficient contrast from paving.

3.08 PROTECTION

Protect the asphaltic concrete paved areas from traffic until the sealer is set and cured and does not pick up under foot or wheeled traffic.

*****END OF SECTION*****

SECTION 02550
SITE CONCRETE WORK

PART 1 -- GENERAL

1.01 SUMMARY

Division 0, Contract requirements and Division 1, General Conditions apply to this section.

1.02 SCOPE OF WORK

A. Complete site concrete work as shown on drawings and specified herein.

1. Final Subgrade Preparation
2. Forms for this Work
3. Placing Concrete
4. Concrete Finishing
5. Concrete Curing
6. Reinforcement

1.03 GENERAL REQUIREMENTS

A. Reference Standards:

1. CBC: All work shall conform to the requirements of the 2007 edition.
2. County of Riverside.

B. Tests and Inspection:

1. Tests shall be performed as required by the Inspector.
2. Contractor shall notify testing laboratory a minimum of forty-eight (48) hours before pouring of concrete.
3. A minimum of three (3) test cylinders will be taken by molded cylinder method for each fifty (50) yards of each grade of structural concrete. A minimum of one set of cylinders shall be taken for each day placement of each grade.

1.04 SUBSTITUTIONS

Substitutions will be considered per Article 5 of the General Conditions.

1.05 SUBMITTALS

A. In accordance with Article 5 of the General Conditions.

B. Contractor shall submit all necessary Product Data and a complete list of material sources for all products to be incorporated into the project for review and approval of the Architect. The Performance of all Mix Designs shall be established either by stamped by an individual licensed to specify concrete mix designs engaged by Concrete Supplier or by break test data from at least 30 different projects for each mix design.

1.06 CLOSEOUT

Upon completion of work of this Section, the Contractor shall remove all equipment, excess material, and waste products from the site.

PART 2 -- PRODUCTS

2.01 MANUFACTURER

Materials used in concrete work shall be all new from domestic sources approved by the Architect.

2.02 MATERIALS

- A. Cement: Shall be a standard brand of domestic Portland cement conforming to "Standard Specifications for Portland Cement", ASTM Des. C-150 Type I or II.
- B. Concrete Aggregates: Shall conform to ASTM Des. C-33 and UBC Standard No. 26-2 for stone weight concrete and in addition shall comply with the following:

- 1. Aggregates shall be from approved local pits and shall not contain opaline, feldspar, siliceous magnesium limestone, or other deleterious substances. No pumice aggregate will be allowed. If aggregate is from pits having a high alkali content, cement shall be "low alkali" with a maximum of 0.6% free alkali as determined by standard tests in ASTM C-114.
- 2. Concrete aggregates for stone concrete shall conform to UBC Standards, except as modified by this section. Any suitable individual grading of coarse aggregates may be used, provided the "grading of combined aggregates" shown below are obtained. Both the coarse and fine aggregate shall be tested by the use of a solution of sodium or magnesium sulfate, or both, whenever in the judgment of the Architect or Structural Engineer or the Building Department, such tests are necessary to determine the quality of the materials. Such tests shall be performed in accordance with the standard method of tests for "Soundness of Aggregates by Use of Sodium Sulphate or Magnesium Sulphate", ASTM C88. The loss shall not exceed six percent for either fine or coarse aggregate. Aggregate failing to comply with this requirement may be used in the work provided it contains less than 2 percent of shale and other deleterious particles and shows a loss in the soundness test of not more than ten (10) percent when tested in the sodium sulphate solution.

3. Grading of Combined Aggregate:

	SAME NUMBER AS ONE & ONE HALF	ONE INCH	THREE-FOURTHS
<u>SIZE IN INCHES</u>	<u>INCH MAXIMUM</u>	<u>MAXIMUM</u>	<u>INCH MAXIMUM</u>
Passing a 2 inch	--	--	--
Passing a 1-1/2"	95 - 100	--	--
Passing a 1"		75 - 90	90 - 100
Passing a 3/4"	55 - 77	70 - 90	90 - 100
Passing a 3/8"	40 - 35	45 - 65	60 - 80
Passing a No. 4	30 - 40	31 - 47	40 - 60
Passing a No. 8	22 - 35	23 - 40	30 - 45
Passing a No. 16	16 - 30	17 - 35	20 - 35
Passing a No. 30	10 - 20	10 - 23	13 - 23
Passing a No. 50	2 - 8	2 - 10	5 - 15
Passing a No. 100	0 - 3	0 - 3	0 - 5

- 4. Coarse Aggregate: Shall be clean, hard, fine-grained, sound washed gravel, or crushed stone, containing not more than 2% by weight of flat, thin elongated, friable, or laminated pieces. Maximum sizes of gradations for concrete work shall be 3/4" and 1-1/2" for locations as hereinafter designated. The nominal

maximum size of the aggregate shall not be larger than one-fifth of the narrowest dimensions between sides of forms, one-third of the depth slabs, nor three-fourths of the minimum clear spacing between individual reinforcing bars.

- C. Water: For all concrete and cement work shall be clean, free from strong acids, alkali, oil, or organic materials and shall be supplied by Contractor from domestic source.
- D. Form Coatings: Standard product resin type sealer, free of oil, grease, wax or any other substance deleterious to materials applied to concrete, delivered in unopened labeled containers. Do not use form oil or any oil-bearing material.
- E. Forms: Conform to shape, lines and dimensions of the members as shown on the plans. Properly brace or tie together to maintain position and shape. Make forms sufficiently tight to prevent leakage of mortar. Lumber shall be Construction grade Douglas Fir conforming to WCLA Grading Rules 16, as revised.
- F. Other Admixtures:
 - 1. For workability, an admixture may be added in accordance with manufacturer's recommendations. Obtain approval of material prior to use. Approval will be based on the following requirements:
 - a. Reduction of mixing water by at least ten (10) percent.
 - b. Reduction of segregation and bleeding.
 - c. Increasing of placability and viscosity of concrete.
 - d. No reduction in strength for any proportion of water/cement ration.
 - 2. Add air-entrainment material to concrete mix at the rate of 4-6% per cubic yard of concrete.

2.03 CONCRETE

- A. Transmit-mixed concrete shall be mixed and delivered in accordance with the requirements set forth in ASTM C94 and, in addition, shall in no case be mixed for a period of less than ten (10) minutes at a peripheral drum speed of approximately 200 feet per minute, and mixing shall be continued until discharge is completed. At least 3 minutes of the mixing period shall be at the job site. Concrete shall be rejected if not placed in final position within one (1) to one and a half (1-1/2) hours after water is first added to the batch. The concrete at the time of placing shall be in such condition that it can be properly placed.
- B. Site-mixed Concrete: Conform to "Arbitrary Mix" in Uniform Building Code.
- C. All concrete shall be six (6) sack mix concrete having a twenty-eight (28) day strength of not less than two thousand (3000) PSI or as noted on the plans and details.
- D. Curing Materials:
 - 1. Liquid curing compound: Thompson's approved standard product fugitive resin type, or equal conforming to ASTM C309, free of wax or oil, compatible with subsequently applied finishes or coverings, not deleterious to bond of cementitious materials to concrete. Deliver in unopened, labeled containers.
 - 2. Concrete Curing Paper: Sisalkraft, non-staining reinforced type, or equal conforming to ASTM C171.
- E. Expansion Joint Material: "Fleximastic" or other approved hot-pour rubber type conforming to ASTM D1190.
- F. Concrete Finish: Medium Salt Finish and/or broom finish as called out on the Drawings.
- G. Patching Mortar: One part Portland cement or equal (part white and part gray adjusted to match color of paving being patched) and two and one-half (2-1/2) parts sand with the

least water required to produce a workable mass. Rework this mortar until it is the stiffest consistency that will permit placing.

- H. Reinforcing fibers: Shall be polypropylene, collated, fibrillated fibers from Fibermesh Company (615) 892-7243, or approved equal. Follow NER 284 and manufacturers requirements for installation. Only fibers designed and manufactured specifically for use in concrete and so certified shall be acceptable.

PART 3 -- EXECUTION

3.01 EXAMINATION

- A. Examine the areas and conditions under which work of this Section will be performed.
- B. Correct conditions detrimental to timely and proper completion of the Work.
- C. Do not proceed until unsatisfactory conditions are corrected.
- D. Beginning of installation means acceptance of conditions.

3.02 SUBGRADE PREPARATION

- A. Construct the subgrade true to grade and detail as shown on the plans.
- B. Contractor shall verify the acceptability of the work of other sections to be concealed by concrete work prior to commencing concrete placement.
- C. Preparation Before Placing: Water shall be removed from excavation before concrete is deposited. Any flow of water shall be diverted without washing over freshly deposited concrete. Hardened concrete, debris and foreign materials shall be removed from interior of forms and from inner surfaces of mixing and conveying equipment. Reinforcement shall be secured in position, inspected and approved before pouring of concrete. Wheeled concrete-handling equipment shall not be wheeled over reinforcement nor shall runways be supported on reinforcement. Sub-grade for paving over native earth or fill shall be finished to exact location and section of bottom of slab and shall be maintained in a smooth, compacted condition, until concrete is placed. Sub-grade shall be thoroughly moistened but not muddy at time concrete is deposited.
- D. Subgrade to 95% maximum density at optimum moisture content.
- E. Prior to pouring concrete, call Contractor's Soil Engineer for approval of subgrade compaction and moisture content. Give Soil Engineer minimum 24 hours notice prior to inspection time. Soil Engineer's fee will be paid by Contractor.

3.03 FORMING

- A. Set forms with upper edges true to line and grade. Remove side forms not sooner than twelve (12) hours after finishing has been completed.
- B. Form curves so that there are no abrupt offsets or jogs at points of tangency. Secure approval of form alignment both horizontally and vertically prior to pouring and make necessary adjustments to conform to plans and details as directed.
- C. Where forms adjoin existing concrete, the transition shall be smooth and even in both alignment and in horizontal plane.
- D. Forming shall not be secured to surface which will remain exposed, with powder shot studs or any other manner which will damage finish.
- E. Rigidly construct and shore to prevent mortar leakage, sagging, displacement, or bulging between supports. Use clean, sound approved form material, coated with specified materials only, not oil. Provide backing on all plywood joints.

1. Form Ties: Bolts or rods with internal ties and spreaders; designed so that no permanent metal is within one (1) inch of exterior surface or one-half (1/2) inch of interior surface.
 2. Wood: Leave no wood in forms except as indicated nailing blocks and inserts.
 3. Shores: Of substantial construction to prevent deflection under imposed loads, double-wedged with large bearing blocks, kept tight during concrete placing, or with approved jacks.
- F. Embedded Items: Install work built into concrete such as sleeves, anchor bolts, wood nailers, reglets, frames and sleeves for piping, conduit and fittings. Provide facilities and supervision required for installation of inserts specified under other sections and perform cutting and reinforcing of forms required to accommodate them. Do not place any concrete until all inserted items are installed in their proper locations, secured against displacement, cleaned, inspected and approved. Set such items according to approved shop drawings and setting plans. Furnish ties and supports necessary to keep embedded items in place when concrete is placed.

3.04 CONCRETE INSTALLATION

- A. Construct concrete work to conform to plans and details.
- B. Weather: Do not place concrete during rain unless approved measures are taken to prevent damage to concrete. Cure concrete placed during periods of dry winds, low humidity, high temperatures and other conditions causing rapid drying, initially with a fine fog maintained until final curing operations are begun.
- C. Slump: Conform to ASTM C143. Not over five (5) inches for slabs on grade and not over four (4) inches for walls and footings.
- D. Mix for footings shall be Class B concrete.
- E. Transit Mix:
 1. Transit mixed concrete shall conform to ASTM C-94 and UBC Standards. Transit mixers shall be equipped with automatic devices for recording number of revolutions of drum.
 2. Admixture: Shall comply with UBC Standards and shall be installed in accordance with manufacturer's recommendations.
 3. Transit mix concrete shall comply with UBC Standards and not be delivered to work with total specified amount of water incorporated therein. Withhold two and a half (2-1/2) gallons of water per cubic yard which may be incorporated in mix before concrete is discharged from mixer truck. Adding of any water shall be under direct inspection of Architect. Each mixer truck shall arrive at job site with its water container full.

3.05 PLACING FORMED CONCRETE

- A. Notify Architect not less than 48 hours before starting any concrete placing. No concrete shall be poured until reinforcing steel and forms have been approved by the Structural Engineer or Architect or by jurisdictional Inspector.
- B. Cleaning of Forms: Before placing of any concrete, thoroughly clean all forms, wash out with water, and make tight.
- C. Concrete: Deliver to point of placing so as not to fall vertically more than six (6) feet, and deposit so that surface is kept horizontal and level, a minimum amount being allowed to flow from one portion to another. Deposit concrete in forms as nearly as possible in its final location. Under no circumstances deposit concrete which has partially hardened.

- D. Vibration and Tamping: As concrete is placed in forms, work concrete around reinforcing steel, built-in items and into corners and angles. Provide mechanical vibrators operated by experienced men for agitating concrete in forms and vibrate thoroughly within five (5) minutes after layer is placed. Vibration shall be carried well into previous layer. Supplement vibration by suitable methods to eliminate voids along forms for full depth of layer as directed. Do not use vibrators to work concrete along the forms. Keep at least one spare vibrator on the job at all times while concrete is being placed. Comply with ACI 309 (609.60), Consolidating of Concrete.
- E. Stoppage: Upon completion of pour and after concrete has partially hardened, wash scum or laitance off surface with stiff brush and stream of water. When work is resumed, brush clean with wire brushes or as specified, then place fresh concrete. A chemical retarding agent may be used on joint surfaces to expose the aggregate. Remove retarded mortar within 24 hours after placing and wash surface to produce a rough, exposed aggregate bonding surface.

3.06 FLATWORK

- A. Set forms as shown on plans.
- B. Deposit concrete evenly, consolidate with mechanical vibrators, particularly at side forms and strike off to indicated elevations and contours. Depress slabs for applied finishes as required. Maintain full indicated thickness of slab over all parts of cambered supports.
- C. Screed concrete to elevations and contour indicated or required for the work. Compact concrete with grid tamper to eliminate voids and pockets and to produce a uniformly dense slab.
- D. Where rough slabs are left to receive deferred finishes, provide protection against contamination from time of placing mechanically, leaving a clean surface.
- E. Expansion Joints:
 - 1. Building/Paving: Three-fourths (3/4) inch expansion joints with one-half (1/2) inch deep poly-sealant caulk water seal. Install typically where concrete paving meets the building shell and columns.
 - 2. Sidewalks: Expansion joints shall be provided in all sidewalks at twenty (20) feet o.c. Joints shall be filled with one-half (1/2) inch asphalt impregnated felt.
 - 3. All exterior flat work shall be marked off as indicated on the Drawings. Make markings with an approved "V" shaped tool, straight, even, properly spaced and uniformly deep matching contraction joints.
- F. Contraction Joints: Locate where indicated on plans, to full depth and slightly below finish surface. Make joints as detailed extending entirely through slab, using material conforming to ASTM D1751. Contraction joints for walks and paving unless otherwise indicated shall be tooled one-fifth (1/5) the depth of the slab and one-eighth (1/8) inch wide. Joints shall be five (5) feet on center unless otherwise indicated on the plans.
- G. Test surface as work progresses and eliminate high or low spots. Smooth gradient transitions are required.
- H. Tolerances: Cement finish shall be true in line, plane and elevations as shown. Finished concrete slab surfaces shall not deviate from a flat plane more than one-eighth (1/8) inch when tested with a ten (10) foot straight edge held in any direction. Furnish and maintain in good condition a ten (10) foot straight edge for use by the Architect.
- I. Defective Finish: Any slab showing a greater variation than the specified one-eighth (1/8) inch, showing voids or separation of the aggregates, or showing a texture in variance to the plans shall be deemed defective and the entire slab shall be removed and replaced with acceptable concrete at the Subcontractor's expense.

3.07 SURFACE FINISHES

- A. Finish all surfaces to present a uniform appearance throughout the area involved, and throughout adjacent areas with the same treatment. Locations of required finish shall be as indicated on plans. Provide two (2) samples of each finish. The approved samples shall act as examples for all concrete work.
- B. Formed surfaces shall be free of flaws, cracks, rock pockets, voids or spalls and be true to line and detail.
- C. Ensure exposed to view finish surfaces of concrete are uniform in color and texture.
- D. Where finishing occurs adjacent to finished metal or other finished surfaces, particularly where serrated or indented, remove all traces of cement film before it hardens. This applies particularly to stair nosings and similar items.
- E. Broomed: After floating, draw broom across the surface at right angle to flow of traffic producing a uniform non-skid surface. For light broom finish, use a fiber broom, leaving depressings approximately one-sixteenth (1/16) inch deep. Use liquid curing membrane.
- F. Medium Salt Finish: After floating, finish with steel trowel. Add salt in density approved in sample. Wash clean after concrete set. Protect landscape areas from salt.
- G. Steel Trowel With "Sack" Finish: Shiner band at joints and paving edges shall be steel troweled. Do not burnish smooth. Sack finish to provide a smooth but skid-proof surface. Use liquid curing membrane.

3.08 CURING

- A. Commence curing as soon as feasible after finishing without marring surfaces, and in any case on same day.
- B. Paper Curing: Except as otherwise specified, use concrete curing paper only, joints sealed with pressure-sensitive tape; immediately repair any tears during curing period. Verify that surfaces remain damp for full curing period; if necessary, lift paper and wet surfaces with clean water, and replace paper.
- C. Liquid Curing Compound: Do not apply on any surface to receive retardant, mortar, or any other material adhered by bond, except as otherwise specified. Carefully mask and protect adjoining surfaces where compound is used.
- D. Fugitive Dye Type: Subject to approval, may be used where no other finish or material is to be applied, ASTM C309, clear, Type 1.
- E. Curing Period and Protection: Maintain curing mediums in proper sealed condition for minimum of ten days after application. Keep traffic on curing surfaces to minimum possible, and completely off liquid compound cured surfaces. Immediately restore any damaged or defective curing media.
- F. Curing Formed Concrete: Keep forms containing concrete thoroughly wet, including tops and exposed portions of concrete, for not less than fourteen (14) days from time of placing concrete. Continuously wet concrete between hours of 8:00 a.m. and sunset each day, including Saturdays, Sundays and holidays, for first ten (10) days, and not less than three (3) times daily for remaining four (4) days. Polyethylene film or equal may be used as approved.

3.09 DEFECTIVE CONCRETE

- A. If any concrete work is not formed as indicated, or is not true to intended alignment, or is not plumb or level; or has voids, honeycombs, or has been cut or resurfaced; or has voids or honeycombs that have been filled, unless under the direction of Architect or has any sawdust, shavings, wood or debris embedded in it; or does not fully conform to provisions of contract; then such concrete work shall be deemed to be defective materials and/or

faulty workmanship and Contractor shall remove same from site in accordance with contract.

- B. Defective concrete will be cut out by Contractor. Patch and fill surfaces which are to remain exposed and indicated to be smooth so as to match adjoining areas.
- C. Fill rock pockets, "honeycombs" and holes resulting from the removal of nails, ties and spreaders and like items with mortar formed of cement and fine aggregate in the proportion used in concrete mix, and non-shrink grout material in quantity as recommended by the manufacturer, using a pressure gun. Chip away defective areas to solid concrete, forming perpendicular or slightly undercut edges. Drench area of patch and surrounding area with water. Brush a thin coat of cement grout onto base and edges of patch area. Pack full with mortar. Match surrounding concrete surfaces in color and texture using part white Portland cement where necessary. Remove fins and irregularities in exposed concrete; patching must match adjoining surface and approved sample.

*****END OF SECTION*****

SECTION 04100
MORTAR AND GROUT

PART 1 -- GENERAL

1.01 SUMMARY

Division 0, Contract requirements and Division 1, General Conditions apply to this section.

1.02 SCOPE OF WORK

Work included in this Section:

Mortar and grout for masonry.

1.03 SUBSTITUTIONS

Substitutions will be considered per Article 5 of the General Conditions.

1.04 SUBMITTALS

In accordance with Article 5 of the General Conditions.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site.

B. Maintain packaged materials clean, dry, and protected against dampness, freezing, and foreign matter.

1.06 ENVIRONMENTAL REQUIREMENTS

A. Maintain materials and surrounding air temperatures to minimum 40° F prior to, during, and 48 hours after completion of masonry work.

B. Protect construction from direct exposure to wind and sun when erected in ambient air temperature of 99° F in the shade, with relative humidity less than 50%.

1.07 MIX TESTS

A. Testing of Mortar Mix: in accordance with ASTM C780. Test mortar mix for compressive strength. Refer to structural drawings for required strength.

B. Testing of Grout Mix: in accordance with ASTM C1019. Test grout mix for compressive strength. Refer to structural drawings for required strength.

PART 2 -- PRODUCTS

2.01 MATERIALS

A. Portland Cement: ASTM C150, Type I or II (Type I for glass block).

B. Mortar Aggregate: ASTM C144, standard masonry type.

1. Provide clean, sharp, well-graded aggregate free from injurious amounts of dust, lumps, shale, alkali, surface coatings, and organic matter complying with UBC Standards.

2. Not less than 3% shall pass the No. 100 sieve.

C. Hydrated Lime: ASTM C207, Type S.

D. Grout "Course": 1 part Portland cement to 2-1/4 parts minimum to 3 parts maximum of damp loose sand to 1/10 part lime putty and 2 parts coarse of maximum 3/8 inch aggregate with sufficient water to achieve fluid consistency per ASTM C476. Not less

than 5% of the sand shall pass No. 100 sieve. Use in grout spaces 2 inches wide or more and in all filled cell construction.

- E. Grout "Fine": 2-1/4 to 3 parts maximum damp, loose sand to 1/2 to 1/4 part lime putty with 1 part Portland cement and sufficient water to achieve fluid consistent per ASTM C476. Not less than 5% of the sand shall pass No. 100 sieve. To be used where shown on Drawings and where grout space is less than 2" in least dimension.
- F. Water: Clean, potable and free from deleterious amounts of acids, alkalis and organic materials.
- G. Lime Putty: Shall be made from pulverized (processed) quick lime or from hydrated lime.

2.02 COLOR

Mortar and Grout Color: Provide pre-ground mineral oxides, non-fading and alkali proof as manufactured by L.M. Scofield or approved equal. The Architect shall select color.

2.03 MORTAR MIXING

- A. Thoroughly mix mortar ingredients in quantities needed for immediate use in accordance with ASTM C270 - Type S.
- B. Add mortar color in accordance with manufacturer's instructions. Provide uniformity of mix and coloration.
- C. Do not use anti-freeze compounds to lower the freezing point of mortar. Do not use any admixtures unless specifically accepted in advance by the Architect through the submittal process.
- D. Use mortar within two hours after mixing at temperatures of 80° F, or two-and-one-half hours at temperatures under 50° F.
- E. Mechanically mix in a batch mixer for not less than three minutes, using only sufficient water to produce a mortar that is spreadable and of a workable consistency.
- F. Re-temper mortar with water as required to maintain high plasticity. Do not re-temper mortar after 1-1/2 hours following initial mixing.

2.04 GROUT MIXING

- A. Mix concrete in accordance with ASTM C94.
- B. Add admixtures in accordance with manufacturer's instructions when previously approved. Provide uniformity of mix.
 - a. Waterproofing admixture shall be A.C. Horn's "Hydratite" or approved equal.
 - b. To reduce early water loss and produce expansive action admixture shall be Sika Grout Aid.
- C. Do not use anti-freeze compounds to lower the freezing point of grout.

PART 3 -- EXECUTION

3.01 EXAMINATION

- A. Examine the areas and conditions under which work of this Section will be performed.
- B. Correct conditions detrimental to timely and proper completion of the Work.
- C. Do not proceed until unsatisfactory conditions are corrected.
- D. Beginning of installation means acceptance of conditions.
- E. Request inspection of spaces to be grouted. Do not proceed until all sub-surfaces and spaces are acceptable.

3.02 INSTALLATION

- A. Install mortar and grout to requirements of the specific masonry Sections.
- B. Work grout into masonry cores and cavities to eliminate voids.
- C. Do not displace reinforcement while placing grout.
- D. Remove grout spaces of excess mortar.

*****END OF SECTION*****

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SECTION 04200
REINFORCED UNIT MASONRY SYSTEM

PART 1 -- GENERAL

1.01 SUMMARY

Division 0, Contract requirements and Division 1, General Conditions apply to this section.

1.02 SCOPE OF WORK

The work under this section includes furnishing all labor, materials and equipment, and performing all operations in connection with all masonry work, concrete block and glass block, indicated on the Drawings, specified herein, or reasonably required to complete all masonry work. Coordinate with other trades and install all embeds and inserts required.

1.03 SUBSTITUTIONS

Substitutions will be considered per Article 5 of the General Conditions.

1.04 SUBMITTALS

- A. In accordance with Article 5 of the General Conditions.
- B. Submit shop drawings indicating bar sizes, spaces, locations, quantities of reinforcement, bending and cutting schedules and spacing devices.
- C. Submit product data on masonry units.

1.05 QUALITY CONTROL

- A. Company specializing in performance of work of this Section for a minimum of 5 years. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Design engineered masonry work under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State of California.

1.06 DELIVERY AND STORAGE

All materials shall be delivered, stored and handled so as to prevent the inclusion of foreign materials and/or damage. Packaged materials shall be delivered and stored in original packages until ready for use. Packages or materials showing evidence of damage shall be rejected.

PART 2 -- PRODUCTS

2.01 MASONRY UNITS

- A. Concrete Block shall be hollow concrete masonry units conforming to the requirements for Grade N units, Type I under ASTM Specification C-90.
- B. Masonry Units shall be 8"x8"x16" nominal as manufactured by Orco Block Co. or approved equal (909) 849-7891.

Block types, sizes, and patterns as indicated on the drawings.

2.02 MORTAR AND GROUT

- A. Mortar shall be as specified and shall develop a compressive strength of not less than 750 lbs. per square inch at seven (7) days or less than 1800 pounds per square inch at twenty-eight (28) days or as specified on the Structural Drawings. The total clay content,

including that in the sand, shall not exceed 2 percent of the sand content or 6 percent of the cement content.

- B. Grout fill for cells shall consist coarse grade as specified. Minimum grout strength to be 2000 pounds per square inch (psi) unless otherwise specified on the Structural Drawings.

2.03 REINFORCEMENT AND ANCHORAGE

- A. Single wythe joint reinforcement for CMU: Truss type; hot dip galvanized after fabrication cold-drawn steel conforming to ANSI/ASTM A82.
- B. Reinforcing Steel for CMU: Deformed bar billet type; size as shown on Drawings, unprotected finish.
- C. Strap anchors for CMU: Bent Steel shapes as shown on Drawings or required for complete and proper installation of this Work.

PART 3 -- EXECUTION

3.01 EXAMINATION

- A. Examine the areas and conditions under which work of this Section will be performed.
- B. Correct conditions detrimental to timely and proper completion of the Work.
- C. Do not proceed until unsatisfactory conditions are corrected.
- D. Verify items provided by other Sections of work are properly sized and located.
- E. Verify that built-in items are in proper location, and ready for roughing into masonry work.
- F. Beginning of installation means acceptance of conditions.

3.02 PREPARATION

- A. Direct and coordinate placement of metal anchors supplied to other Sections.
- B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.
- C. Preparation. Concrete surface to receive masonry shall be free from all dirt, oil, curling compound, or other deleterious substance. All such surfaces shall be thoroughly washed with water before laying block and shall be in a condition to provide maximum suction at the time the mortar bed is placed.
- D. Verify that Channel and Anchor placement for Glass Block is at all head and jambs.

3.03 COURSING

- A. Establish lines, levels, and coursing indicated. Protect from displacement.
- B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.
- C. Lay concrete masonry units in running bond. One Course is one unit and one mortar joint and is equal to 8 inches. Form flush mortar joints. Do not use chipped or broken units.

3.04 ENVIRONMENTAL CONDITIONS

- A. Do not place masonry units when air temperature is below 40 degrees F.
- B. Protect masonry from direct exposure to wind and sun. When erected in ambient air temperature of 99 degrees F in the shade, with relative humidity less than 50%.

3.05 PLACING AND BONDING – CMU

- A. General:

1. Do not commence installation of the work of this Section until horizontal and vertical alignment of foundation is within 1/2" of plumb and the lines shown on the Drawings.
 2. Use masonry saws to cut and fit masonry units.
 3. Set units plumb, true to line, and with level courses accurately spaced.
 4. Clean the top surface of foundation free from dirt, debris, and laitance, and expose the aggregate prior to start of installing first course of sandblasting or water blasting.
 5. Accurately fit the units to plumbing, ducts, openings, and other interfaces, neatly patching all holes.
 6. Keep the walls continuously clean, preventing grout and mortar stains. If grout does run over, clean immediately.
 7. All bolts embedded in masonry shall be grouted in place with not less than one inch of grout between the bolt and a masonry unit and shall be accurately set with templates.
- B. Do not use chipped or broken units. If such units are discovered in the finished wall, the Architect may require their immediate removal and replacement with new units at no additional cost to the Owner.
- C. Laying up: Pattern shall be running bond.
1. Place units in mortar with full shoved bed and head joints.
 2. Align vertical cells of hollow units to maintain a clear and unobstructed system of flues.
 3. Hold racking to an absolute minimum.
 4. Provide running bond with vertical joints located at center of masonry units in the alternate course below.
 5. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.
 6. Interlock intersections and external corners.
- D. Buttering corners of joints or excessive furrowing of mortar joints are not permitted.
- E. Remove excess mortar as Work progresses.
- F. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.
- G. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.
- H. Cut mortar joints flush where resilient base is scheduled. Joints shall be 3/8" thick. Split block joints shall be raked.
- I. Isolate masonry partitions from vertical structural framing members with a control joint.
- J. Isolate top joint of masonry partitions from horizontal structural framing members and slabs or decks with compressible joint filler.

3.06 REINFORCEMENT AND ANCHORAGES -- CONCRETE UNIT MASONRY

- A. Install horizontal joint reinforcement 16 inches unless structural plans note otherwise.
- B. Place joint reinforcement continuous in first joint below top of walls.

- C. Lap joint reinforcement ends minimum 40 bar diameters. Install reinforcement in first horizontal course above openings. Extend minimum 24 inches each side of openings.
- D. Support and secure reinforcing bars from displacement. Maintain position with 1/2 inch of dimensioned position. Provide metal accessories to ensure adequate alignment of steel during grout filling operations.
- E. Embed anchors attached to structural steel members. Embed anchorages in every second block joint.
- F. Reinforce joint corners and intersections with strap anchors 16 inches OC.

3.07 GROUTED COMPONENTS

- A. Support and secure reinforcing bars from displacement. Maintain position within 1/2 inch of dimensioned position.
- B. Place and consolidate grout fill without displacing reinforcing. Solidly fill all cells and courses unless otherwise indicated on the Drawings. Maximum grout lift shall be 24 inches.
- C. Consolidate grout at time of pour by puddling with mechanical vibrator to completely fit all voids and interstices in the masonry work.

3.08 ENGINEERED MASONRY

- A. Lay masonry units with core cells vertically aligned clear of mortar and unobstructed.
- B. Place mortar in masonry unit bed joints back 1/4 inch from edge of unit grout spaces, bevel back and upward. Permit mortar to cure seven (7) days before placing grout.
- C. Reinforce masonry unit cores with reinforcement bars and grout as indicated.
- D. Retain vertical reinforcement in position at top and bottom of cells and at intervals not exceeding 192 bar diameters. Splice reinforcement. See Drawings for indication of locations where splicing is unacceptable.
- E. Wet masonry unit surfaces in contact with grout just prior to grout placement.
- F. Grout spaces less than 2 inches in width with fine grout using low lift grouting techniques. Grout spaces equal to or greater than 2 inches in width with course grout using high or low lift grouting techniques.
- G. When grouting is stopped for more than one hour, terminate grout 1-1/2 inch below top of upper masonry unit to form a positive key for subsequent grout placement.
- H. Low Lift Grouting: Place first lift of grout to a height of 16 inches and rod for grout consolidation. Place subsequent lifts in 8-inch increments and rod for grout consolidation.

3.09 CONTROL AND EXPANSION JOINTS

- A. Do not continue horizontal joint reinforcement through control joints.
- B. Install performed control joint devices in continuous lengths. Seal butt and corner joints in accordance with manufacturer's instructions. Control joints shall be 12'-0" O.C. maximum.
- C. Size control joint for sealant performance.

3.10 BUILT-IN WORK

- A. As work progresses, build in metal doorframes, anchor bolts, plates, and other items furnished by other Sections.
- B. Build in items plumb and level.
- C. Bed anchors of metal doorframes in adjacent mortar joints. Fill frame voids solid with grout. Fill adjacent masonry cores with grout minimum 12 inches from framed openings.

D. Do not build in organic materials subject to deterioration.

3.11 DEFECTIVE MASONRY OR MATERIALS

Any masonry materials delivered to the job site that do not conform to the requirements of these Specifications, shall be immediately removed from the work. Completed masonry that does not conform to the requirements of the Drawings and these Specifications shall be deemed defective materials and/or workmanship, and the Contractor shall remove it from the site, at no extra cost to the Owner.

3.12 CURING

All masonry work shall be kept continuously moist until and for not less than three (3) days after grouting. Curing water shall not be permitted to pond around buildings or structures.

3.13 TOLERANCES

- A. Maximum Variation From Alignment of Columns: 1/4 inch.
- B. Maximum Variation From Unit to Adjacent Unit: 1/32 inch.
- C. Maximum Variation From Plane of Wall: 1/4 in. in 10 feet and 1/2 in. in 20 feet or more.
- D. Maximum Variation From Plumb: 1/4 inch per story non-cumulative.
- E. Maximum Variation From Level Coursing: 1/8 inch in 3 feet, 1/4 inch in 10 feet, and 1/2 inch in 30 feet.
- F. Maximum Variation of Joint Thickness: 1/8 inch in 3 feet.

3.14 CUTTING AND FITTING

- A. Cut and fit for pipes, conduits, sleeves, and grounds. Coordinate with other Sections of work to provide correct size, shape, and location.
- B. Obtain Architect approval prior to cutting or fitting masonry work not indicated or where appearance or strength of masonry work may be impaired.

3.15 CLEANING

- A. Clean surfaces of masonry as required for proper application of the specified finishes.
- B. Concrete Unit Masonry:
 - 1. Use all means necessary to prevent staining of the exposed face by mortar, grout, and other material.
 - 2. Remove mortar and grout stains as the work progresses.
 - 3. Upon completion of the work of this Section, clean all exposed veneer surfaces with a 10% solution of muriatic acid in clear water, using fiber bristle brooms or brushes, followed by thorough rinsing with clear water.
 - 4. In the event ordinary cleaning is not adequate, use a light sandblasting or other means as directed by the Architect, and at no additional cost to the Owner.
 - 5. Replace defective mortar. Match adjacent work.

3.16 TEST & INSPECTIONS

- A. Refer to structural drawings.
- B. Mortar shall be tested as per U.B.C. Standards.
- C. Grout shall be tested as per U.B.C. Standards.

3.17 PROTECTION OF FINISHED WORK

- A. Protect finished installation.

- B. Without damaging completed work, provide protective boards at exposed external corners, which may be damaged by construction activities.

*****END OF SECTION*****

SECTION 06100
ROUGH CARPENTRY

PART 1 -- GENERAL

1.01 SUMMARY

Division 0, Contract requirements and Division 1, General Conditions apply to this section.

1.02 SCOPE OF WORK

Work of this Section includes everything necessary for and incidental to completing all Rough Carpentry and its fasteners and supports as indicated on the Drawings and designated herein.

1.03 QUALITY CONTROL

A. Field Inspection:

1. At site, verify all conditions affecting work of this Section, taking required field measurements. Report any discrepancies between Drawings and field dimensions to the Architect before beginning work. Commencing work shall indicate acceptance of conditions and surfaces underlying or adjacent to work of this Section.
2. Field Measurements shall be required to ascertain precise configurations and quantities required.

B. Delivery and Storage:

Deliver and store lumber on sills and cover for protection.

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

D. Reference Standards:

1. UBC -- All work shall conform or exceed the standards set forth in the current edition of the Uniform Building Code.
2. CBC: Work shall conform to California Code Amendments, current edition.
3. ICBO -- All rough hardware products shall be as approved by the International Conference of Building Officials for the use indicated.
4. ASTM -- Designation as specified in the materials paragraph hereinafter.
5. OSHA: Equipment used in work of this Section shall comply with the requirements established by the Occupational Safety and Health Administration.
6. Structural and Framing Lumber and plywood shall be graded in accordance with "Standard Grading and Dressing Rules No. 16" of West Coast Lumber Inspection Bureau.

E. Grade Marking: Each piece of structural and framing lumber and plywood must bear official grade mark of association under whose rules it was graded.

1.04 CLOSEOUT

- A. Upon completion of work of this Section, the Subcontractor shall remove all equipment, excess material, and waste products from the site.
- B. Provide (1) one-year warranty.

1.05 SUBSTITUTIONS

Substitutions will be considered per Article 5 of the General Conditions.

1.06 SUBMITTALS

In accordance with Article 5 of the General Conditions.

PART 2 -- PRODUCTS

2.01 MANUFACTURERS

- A. Products shall be all new, bearing grade markings and shipped in quantities sufficient to maintain proper job progress.
- B. Lumber shall be from a single source when they are similar in usage to avoid minor discrepancies in finished dimension and quality.
- C. Fasteners shall be as manufactured by:
 - 1. Timber Connectors:
Simpson Company
220 North Palm Street
Brea, CA 92621 (714) 871-8873
 - 2. Power Driven Pins and Wedge Anchors:
Hilti Fastening Systems
P.O. Box 45400
Tulsa, OK 74145 (918) 627-9711
 - 3. Or approved equal
- D. Bolts and Anchors: Any source conforming to the requirements designated herein.
- E. Acceptable alternate manufacturers are subject to Architect's approval based upon conformance with the specified products functional properties and compatibility with other project materials.

2.02 MATERIALS

- A. General:
 - 1. Sizing: Provide S4S Lumber, dressed to standard sizes of association under which it is graded.
 - 2. Moisture Content:
 - a. Lumber: Dry to approximately same moisture content as anticipated when in service, maximum 19% moisture content for rough carpentry lumber and 12% for finish lumber.
 - b. Treated Lumber: Dried before and after treatment to maximum 15% moisture content.
 - 3. Glue Laminated Beams: Re-sawn yellow cedar Architectural grade for exterior use; to have concealed connections with countersunk bolts.
- B. Usage: Use various grades as follows, unless otherwise noted on the drawings:
 - 1. Grades as follows for studs and vertical framing unless otherwise shown or specified on structural drawing, nonstructural furring, concealed blocking and stripping, and miscellaneous nailers and backing.