

WESTERN INSURANCE COMPANY

P.O. BOX 21030, RENO, NV 89515

Address

YUNG T. MULLICK, ATTORNEY-IN-FACT

Address

Attest:

(Seal)

Individual Principal

Business Address

(Seal) Individual Principal

Business Address

TITANIUM CONSTRUCTION GROUP, INC.

Corporate Principal

13467 1/2 PUMICE STREET, NORWALK, CA 90650

Business Address

By

(Affix Corporate Seal)

WDEL FLOWERS, PRESIDENT

Attest:

Corporate Principal

Business Address

By

(Affix Corporate Seal)

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

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

**ACKNOWLEDGMENT**

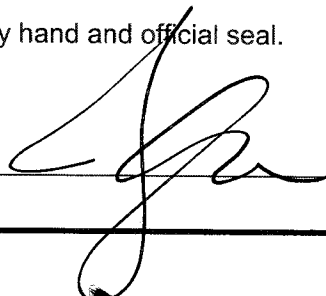
State of California  
County of Orange )

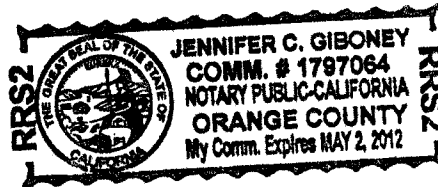
On JANUARY 7, 2011 before me, JENNIFER C. GIBONEY, Notary Public  
(insert name and title of the officer)

personally appeared YUNG T. MULLICK,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~  
subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in  
his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the  
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Signature  (Seal)



WESTERN INSURANCE COMPANY  
POWER OF ATTORNEY

337048

KNOW ALL MEN BY THESE PRESENTS: That WESTERN INSURANCE COMPANY a corporation organized and existing under the laws of the State of Nevada and having its principal office at the City of Reno, in the State of Nevada, does hereby constitute and appoint

Yung T. Mullick, James W. Moilanen, Jennifer C. Giboney  
P. Austin Neff

Of the STATE OF NEVADA its true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety to, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof on behalf of the Company in its business of guaranteeing the fidelity of persons; guaranteeing the performance of contracts; and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, the said WESTERN INSURANCE COMPANY has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its President and Secretary, this 2nd day of March, 2010.

WESTERN INSURANCE COMPANY



(Signed) By [Signature] President

(Signed) By [Signature] Secretary

STATE OF NEVADA)

SS:

COUNTY OF WASHOE)

On this 2nd day of March, 2010, before me personally came DICK L. ROTTMAN, PRESIDENT of the WESTERN INSURANCE COMPANY and ALICE A. MOLASKY ARMAN, SECRETARY of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said that they, the said DICK L. ROTTMAN and ALICE A. MOLASKY ARMAN were respectively the PRESIDENT and the SECRETARY of the said WESTERN INSURANCE COMPANY, the corporation described in which executed the foregoing Power of Attorney that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so affixed by order of the Board of Directors of said corporation, and that they signed their names thereto by like orders as PRESIDENT and SECRETARY, respectively, of the Company.

My Commission expires the 1st day in April, 2014.



PATRICIA A. LETSON  
Notary Public - State of Nevada  
Appointment Recorded in Washoe County  
No. 06-104833-2 - Expires April 1, 2014

(Signed) By [Signature] Notary Public

This Power of Attorney is granted under and by authority of the following Resolutions adopted by the Board of Directors of the WESTERN INSURANCE COMPANY on March 2, 2010.

RESOLVED, that in connection with the fidelity and surety insurance business of the Company, all bonds, undertakings, contracts and other instruments relating to said business may be signed, executed, and acknowledged by person or entities appointed as Attorney(s)-in-Fact pursuant to a Power or Attorney issued in accordance with these resolutions. Said Power(s) of Attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman, or the President, or a Vice President, jointly with the Secretary, under their respective designations. The signature of such officers may be engraved, printed or lithographed. The signature of each of the foregoing officers and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Attorney(s)-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and, unless subsequently revoked and subject to any limitations set forth therein, any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is validly attached.

RESOLVED, that Attorney(s)-in-Fact shall have the power and authority, unless subsequently revoked and, in any case, subject to the terms and limitations of the Power of Attorney issued to them, to execute and deliver on behalf of the Company and to attach the seal of the Company to any and all bonds and undertakings, and other writings obligatory in the nature thereof, and any such instrument executed by such Attorney(s)-in-Fact shall be as binding upon the Company as if signed by an Executive Officer and sealed and attested to by the Secretary of the Company.

I ALICE A. MOLASKY ARMAN, Secretary of the WESTERN INSURANCE COMPANY, do hereby certify that the foregoing is a true excerpt from the Resolution of the said Company as adopted by its Board of Directors on March 2, 2010 and that this resolution is in full force effect.

I, the undersigned Secretary of the WESTERN INSURANCE COMPANY do hereby certify that the foregoing Power of Attorney is in full force and effect and has not been revoked.

In Testimony Whereof, I have hereunto set my hand and the seal of the WESTERN INSURANCE COMPANY on this

07 day of JANUARY 2011



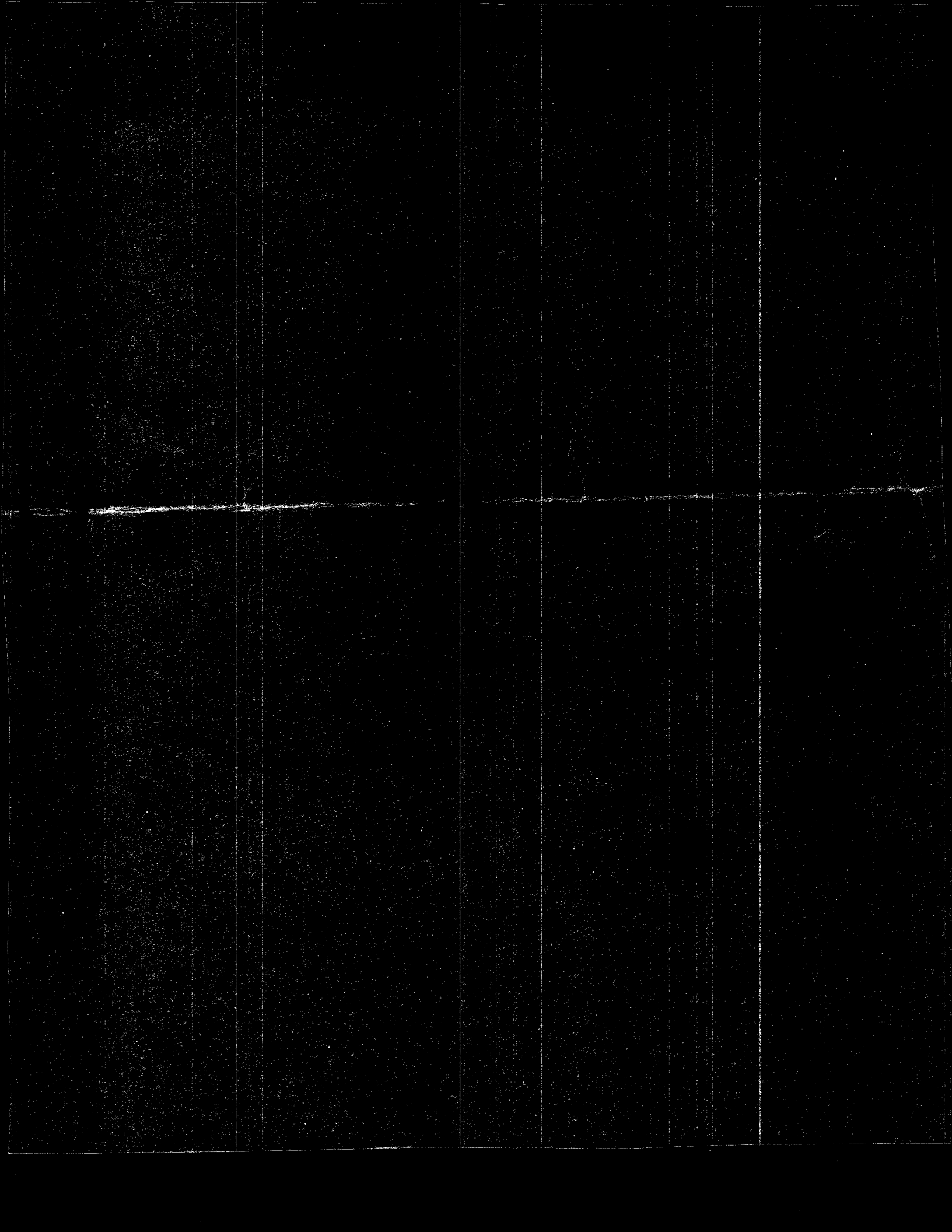
[Signature]  
Secretary

**SEALED BID RECEIVED**  
**CLERK OF THE BOARD OF SUPERVISORS**

---

RECEIVED RIVERSIDE COUNTY  
CLERK / BOARD OF SUPERVISORS

2011 JAN 10 PM 1:40



CONTRACTORS PROPOSAL

TO THE GOVERNING BOARD OF  
THE  
REDEVELOPMENT AGENCY  
FOR THE COUNTY OF RIVERSIDE

Date 01/05/2010  
Freeway Electric  
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 **Mission Boulevard Improvement Project Phase III Median Electrical Infrastructure**, Mission Boulevard Median between Crestmore Road and Riverview Drive in Riverside, CA, hereby proposes and agrees to furnish all tools, equipment, services, apparatus, facilities, transportation, labor and materials necessary to complete the construction in strict conformity with the Plans and Specifications, including all work specified in Addenda numbered and dated:

Addendum No. 1 Date 12/30/2010  
Addendum No. 2 Date 1/4/2011  
Addendum No. \_\_\_\_\_ Date \_\_\_\_\_

for the total sum, including all applicable taxes, permits and licenses as follows:

Base Bid (with course of construction insurance) \$ 186,558  
Base Bid (without course of construction insurance) \$ 185,058

The determination of the low bidder will not include the costs of course of construction insurance. Bids must be submitted on all items. Failure to bid on all items may result in the bid being rejected as non-responsive.

DESIGNATION OF SUBCONTRACTORS

In compliance with the Public Contract Code, Sections 4104-4144, the undersigned submits the following complete list of each subcontractor who will perform work or labor or render services in or about the construction in an amount in excess of 2 of 1% of said total bid.

PORTION OF THE WORK	SUBCONTRACTOR	LOCATION	LICENSE NO.
<u>PTN OF CONDUIT WORK</u>	<u>HAC Construction</u>	<u>5747 Lucretia Ave</u> <u>Mira Loma, Ca 91752</u>	<u>883826</u>



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 Freeway Electric

Type of Organization \_\_\_\_\_

Signed By 

Title of Signer Brian Mendoza, Sole Owner

Address of Bidder 5942 Acorn St. Riverside, CA 92504

Telephone Number 951.710.1000

Contractor's License 684572

Classification B; A; C10; C31; C32; Haz

If bidder is a corporation, and signer is not President or Secretary, attach certified copy of Bylaws 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.



**AFFIDAVIT FOR INDIVIDUAL CONTRACTORS**

Brian Mendoza \_\_\_\_\_ declares as follows:

That he or she is the party making the foregoing proposal or bid; that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, associations, 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 County of Riverside or 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.

**I declare under penalty of perjury, that the foregoing is true and correct.**

Dated this 5th (day) of January (month), 2011 (year)  
at Riverside, California

Signature of affiant:



Brian Mendoza, Sole Owner

Note: Notarization of signature required

# CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Riverside

On 01/05/2011 before me, Elizabeth H.M. McRae, Notary Public  
(Here insert name and title of the officer)

personally appeared Brian Mendoza

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(ies) and that by his/~~her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

(Notary Seal)



## ADDITIONAL OPTIONAL INFORMATION

### DESCRIPTION OF THE ATTACHED DOCUMENT

(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages \_\_\_\_\_ Document Date \_\_\_\_\_

(Additional information)

### CAPACITY CLAIMED BY THE SIGNER

- Individual (s)  
 Corporate Officer

(Title)

- Partner(s)  
 Attorney-in-Fact  
 Trustee(s)  
 Other \_\_\_\_\_

### INSTRUCTIONS FOR COMPLETING THIS FORM

*Any acknowledgment completed in California must contain verbiage exactly as appears above in the notary section or a separate acknowledgment form must be properly completed and attached to that document. The only exception is if a document is to be recorded outside of California. In such instances, any alternative acknowledgment verbiage as may be printed on such a document so long as the verbiage does not require the notary to do something that is illegal for a notary in California (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required.*

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/they, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - ❖ Indicate title or type of attached document, number of pages and date.
  - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document

AFFIDAVIT FOR JOINT VENTURE OR COPARTNERSHIP CONTRACTOR

\_\_\_\_\_ declares as follows:

That he or she is a member of the joint venture or copartnership firm designated as \_\_\_\_\_ which is the party making the foregoing proposal or 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 County of Riverside or 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.

That he has been and is duly vested with authority to make and sign instruments for the joint venture or copartnership by

\_\_\_\_\_ who constitute the other members of the joint venture or copartnership.

**I declare under penalty of perjury, that the foregoing is true and correct.**

Dated this \_\_\_\_\_ (day) of \_\_\_\_\_ (month), \_\_\_\_\_ (year)  
at \_\_\_\_\_, California

**Signature of affiant:**

Note: Notarization of signature required



AFFIDAVIT FOR CORPORATE CONTRACTOR

\_\_\_\_\_ declares as follows:

That he or she is of \_\_\_\_\_ a corporation which is a party making the foregoing proposal or 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 County of Riverside or 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.

**I declare under penalty of perjury, that the foregoing is true and correct.**

Dated this \_\_\_\_\_ (day) of \_\_\_\_\_ (month), \_\_\_\_\_ (year)  
at \_\_\_\_\_, California

**Signature of affiant:**

Note: Notarization of signature required

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned FREEWAY ELECTRIC, as Principal : and BERKLEY REGIONAL INSURANCE COMPANY, as Surety, are hereby held and firmly bound unto the Redevelopment Agency FOR THE COUNTY OF RIVERSIDE, hereinafter called the "Owner", in the sum of \_\_\_\_\_\* dollars (\$ \_\_\_\_\_ 10% \_\_\_\_\_) for the payment of which sum, well and truly to be made, were hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.  
\* TEN PERCENT OF AMOUNT BID

WHEREAS, the said Principal is herewith submitting its proposal for the construction of MISSION BLVD. IMPROVEMENT PROJECT PHASE III MEDIAN ELECTRICAL INFRASTRUCTURE

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 and faithful performance bond, 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 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.

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 several seals this 5TH day of JANUARY, 2011, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In the presence of:

\_\_\_\_\_

FREEWAY ELECTRIC (Seal)  
Individual Principal

\_\_\_\_\_

Address

5942 ACORN ST. RIVERSIDE, CA 92504  
Business Address

\_\_\_\_\_

  
(Seal)

*Brian Mendon, Sole Owner*  
Individual Principal

\_\_\_\_\_

Address

\_\_\_\_\_  
Business Address

Attest:

BERKLEY REGIONAL INSURANCE COMPANY  
SURETY  
505 N. BRAND BLVD., SUITE 1040 GLENDALE, CA 91203  
Business Address

\_\_\_\_\_

By \_\_\_\_\_  
(Affix Corporate Seal)  
PHILIP VEGA ATTORNEY-in-FACT

Attest:

Corporate Principal

\_\_\_\_\_  
Business Address

\_\_\_\_\_

By \_\_\_\_\_  
(Affix Corporate Seal)

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

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

POWER OF ATTORNEY
BERKLEY REGIONAL INSURANCE COMPANY
WILMINGTON, DELAWARE

NOTICE: The warning found elsewhere in this Power of Attorney affects the validity thereof. Please review carefully.

KNOW ALL MEN BY THESE PRESENTS, that BERKLEY REGIONAL INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Delaware, having its principal office in Urbandale, Iowa, has made, constituted and appointed, and does by these presents make, constitute and appoint: Philip Vega, Frank Morones or Jadon H. Smith of C & D Bonding & Insurance Services, Inc. of Covina, CA its true and lawful Attorney-in-Fact, to sign its name as surety only as delineated below and to execute, seal, acknowledge and deliver any and all bonds and undertakings, with the exception of Financial Guaranty Insurance, providing that no single obligation shall exceed Fifty Million and 00/100 Dollars (\$50,000,000.00), to the same extent as if such bonds had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office in their own proper persons.

This Power of Attorney shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, without giving effect to the principles of conflicts of laws thereof. This Power of Attorney is granted pursuant to the following resolutions which were duly and validly adopted at a meeting of the Board of Directors of the Company held on August 21, 2000:

"RESOLVED, that the proper officers of the Company are hereby authorized to execute powers of attorney authorizing and qualifying the attorney-in-fact named therein to execute bonds, undertakings, recognizances, or other suretyship obligations on behalf of the Company, and to affix the corporate seal of the Company to powers of attorney executed pursuant hereto; and further

RESOLVED, that such power of attorney limits the acts of those named therein to the bonds, undertakings, recognizances, or other suretyship obligations specifically named therein, and they have no authority to bind the Company except in the manner and to the extent therein stated; and further

RESOLVED, that such power of attorney revokes all previous powers issued on behalf of the attorney-in-fact named; and further

RESOLVED, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligation of the Company; and such signature and seal when so used shall have the same force and effect as though manually affixed. The Company may continue to use for the purposes herein stated the facsimile signature of any person or persons who shall have been such officer or officers of the Company, notwithstanding the fact that they may have ceased to be such at the time when such instruments shall be issued."

IN WITNESS WHEREOF, the Company has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 1 day of March, 2010.

Attest:
By [Signature]
Ira S. Lederman
Senior Vice President & Secretary

Berkley Regional Insurance Company
By [Signature]
Robert P. Cole
Senior Vice President

WARNING: THIS POWER INVALID IF NOT PRINTED ON BLUE "BERKLEY" SECURITY PAPER.

STATE OF CONNECTICUT )
) ss:
COUNTY OF FAIRFIELD )

Sworn to before me, a Notary Public in the State of Connecticut, this 1 day of March, 2010, by Robert P. Cole and Ira S. Lederman who are sworn to me to be the Senior Vice President, and the Senior Vice President and Secretary, respectively, of Berkley Regional Insurance Company.

EILEEN M. TEN
NOTARY PUBLIC
MY COMMISSION EXPIRES 03/30/2012

[Signature]
Notary Public, State of Connecticut
my commission expires 6-30-2012

CERTIFICATE

I, the undersigned, Assistant Secretary of BERKLEY REGIONAL INSURANCE COMPANY, DO HEREBY CERTIFY that the foregoing is a true, correct and complete copy of the original Power of Attorney; that said Power of Attorney has not been revoked or rescinded and that the authority of the Attorney-in-Fact set forth therein, who executed the bond or undertaking to which this Power of Attorney is attached, is in full force and effect as of this date.

Given under my hand and seal of the Company, this 5th day of January, 2011.

(Seal) [Signature]
Steven Coward

WARNING - Any unauthorized reproduction or alteration of this document is prohibited. This power of attorney is void unless seals are readable and the certification seal at the bottom is embossed. The background imprint, warning and confirmation (on reverse) must be in blue ink.

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of Los Angeles

On 01/05/2011

Date

before me, Monica Blaisdell, Notary

Here Insert Name and Title of the Officer

personally appeared Philip Vega

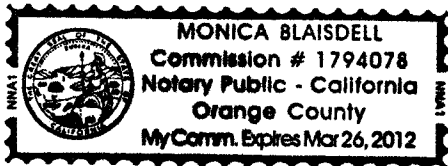
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~) and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Monica Blaisdell  
Signature of Notary Public



Place Notary Seal Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

**RIGHT THUMBPRINT OF SIGNER**  
Top of thumb here

Signer Is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

**RIGHT THUMBPRINT OF SIGNER**  
Top of thumb here

Signer Is Representing: \_\_\_\_\_



MONICA BOWEN  
Commissioner # 139078  
Notary Public - California  
Orange County  
MyComm Expires June 2013



# CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Riverside

On 1/10 /2014 before me, Elizabeth H.M. McRae, Notary Public  
(Here insert name and title of the officer)

personally appeared Brian Mendoza

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the same in his/~~her~~/their authorized capacity(ies), and that by his/~~her~~/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

(Notary Seal)



## ADDITIONAL OPTIONAL INFORMATION

### INSTRUCTIONS FOR COMPLETING THIS FORM

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- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he~~/she/~~they~~, is /~~are~~) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - ❖ Indicate title or type of attached document, number of pages and date.
  - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document

### DESCRIPTION OF THE ATTACHED DOCUMENT

(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages \_\_\_\_\_ Document Date \_\_\_\_\_

(Additional information)

### CAPACITY CLAIMED BY THE SIGNER

- Individual (s)  
 Corporate Officer

(Title)

- Partner(s)  
 Attorney-in-Fact  
 Trustee(s)  
 Other \_\_\_\_\_

DATE: January 4, 2011

PROJECT: Mission Boulevard Improvement Project Phase III – Median Electrical Infrastructure  
Redevelopment Agency for the County of Riverside

ADDENDUM: **Number TWO**

I. INSTRUCTIONS:

- a. This supplement to the bid package is issued prior to the receipt of proposals. All changes covered in this supplement shall be included in the original quotation and the supplement will be considered one of the contract documents.
- b. Contractors, Manufacturers and/or Distributors shall confirm the receipt and consideration of this addendum prior to the submittal of their proposal by noting inclusion of Addendum **TWO** on the Contractor's Proposal.

II. PURPOSE OF ADDENDUM:

- a. The purpose of this addendum is to provide all bidders who attended the job walk held on December 23, 2010 with additional information to be included in the bid.
- b. **The new bid opening date is set for Monday, January 10, 2011.** The bids shall be delivered to the Clerk of the Board of Supervisors on the 1<sup>st</sup> floor of the County Administrative Center, 4080 Lemon Street, Riverside, CA 92501, **no later than 2:00 p.m.**
- c. In addition, the General Conditions for the project are being issued in this Addendum. See attached document "General Conditions of the Contract" for the County of Riverside.

**END**

**GENERAL CONDITIONS**  
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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 Agency 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 Agency. Upon receipt of the Notice of Completion, the Contractor will be relieved of the duty of protecting the work, and the Agency 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 Agency for the design of this Work, as designated on the title sheet of these specifications and Contract Documents.

**BENEFICIAL OCCUPANCY** - The right of the Agency 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.

**AGENCY** - The term Agency when used herein shall mean the Board of Directors of the Redevelopment Agency for the County of Riverside, a public body corporate and politic in the State of California.

**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 Agency 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 Agency 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 Agency during the progress of the Work, which are accepted by the Agency.

**CONTRACTOR'S AGENT** - The representative of the Contractor, approved by the Agency, who shall be present at the Work and be authorized to receive and act upon instructions from the Agency 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 Executive Director of the Redevelopment Agency for the County of Riverside or 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 Agency 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 Agency 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 Agency 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 Agency, 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 Directors alone have the power to bind the Agency 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 Agency; with the exception of the assignments to Agency 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 Agency 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 Agency 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 AGENCY'S RESPONSIBILITIES**

a. The Agency 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 Agency will furnish, at no expense to the Contractor, all on-site inspection of the Work and will 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 Agency'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 Agency, the Contractor shall submit all licenses, permits, and certificates of inspection to the County and Agency.

## **1.6 SEPARATE CONTRACTS**

**1.6.1** The Agency 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 execution of all work and shall not interfere with material, appliances or workmen of the Agency or any other contractor engaged by the Agency at the site of the Work. In case of disagreement regarding such use, the matter shall be referred to the Agency whose decision relative to said use shall govern.

**1.6.2** The Contractor shall afford the Agency 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 on the proper execution or results upon the work of the Agency or any separate contractor, the Contractor shall inspect and promptly report to the Agency 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 Agency'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 Agency because of any damage alleged to have been so sustained, the Contractor agrees to indemnify and defend the Agency in such proceedings with the Agency retaining the right to select and hire independent counsel for the Agency 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 AGENCY'S AUTHORIZED REPRESENTATIVE, INSPECTOR(S), & ARCHITECT**

### **1.7.1 AUTHORIZED REPRESENTATIVE**

The Agency 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 Agency.

### **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 Agency 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 Agency has retained an Architect for this project. The Architect will advise and consult with the Agency, and the Agency will issue instructions to the Contractor. The Architect will be requested to interpret the requirements of the Contract. When requested by the Agency, 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 Agency. 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 Agency 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 Agency 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 Agency 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 and Agency 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 Agency 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, the Agency, their 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 and or Agency property, or used in any manner on behalf of the Agency, 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, Agency, their 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 and or Agency property, or used in any way connected with the accomplishment of the Work performed in this contract.

**2.3.6 COURSE OF CONSTRUCTION INSURANCE**

CONTRACTOR shall provide All Risk Builder's Risk (Course of Construction) insurance, including earthquake and flood if in an earthquake or flood zone (required on financed or bond financing arrangements), covering the COUNTY, AGENCY, and the CONTRACTOR and every subcontractor of every tier for the entire project including property to be used in the construction of the project while such property is at off site storage locations or while in transit. Policy shall include coverage for collapse, faulty workmanship, debris removal, expediting expense, Fire Department Service charges, valuable papers and records, trees, grass, shrubbery and plants. If scaffolding, falsework and temporary buildings are insured separately by the CONTRACTOR or others, evidence of such separate coverage shall be provided to AGENCY prior to the start of the work. Policy shall be written on a completed value form. Policy shall also provide coverage for temporary structures (onsite offices, etc.), fixtures, machinery and equipment being installed as part of the construction project. (The Base Bid including course of construction insurance shall be used for determination of lowest bid, unless otherwise stated in the bid form.)

CONTRACTOR shall provide a bid price with Course of Construction insurance as outlined herein, and shall also separately provide the cost of the Course of Construction insurance and deductible; and shall declare all terms, conditions, coverages and limits upon request of AGENCY. AGENCY RETAINS THE RIGHT TO CHOOSE TO USE ITS OWN COURSE OF CONSTRUCTION PROGRAM. If the AGENCY program is chosen, CONTRACTOR shall assume the cost of any and all applicable policy deductibles (currently \$50,000 per occurrence), and shall insure its own machinery, equipment, tools, etc., from any loss of any nature whatever. If AGENCY elects the CONTRACTOR's All Risk Builder's Risk Program, CONTRACTOR shall be responsible for any and all policy deductibles.

**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 Redevelopment Agency for 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, the Redevelopment Agency for the County of Riverside, their 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 Redevelopment Agency for 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 Redevelopment Agency for 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 Redevelopment Agency for 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 and or AGENCY'S insurance and or deductibles and or self-insured retentions or self-insured programs shall not be construed as contributory.

The Redevelopment Agency for the County of Riverside's Reserved Rights-Insurance. The Redevelopment Agency for 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 and Agency, their 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 and or AGENCY or any officer or employee of said COUNTY, other than the sole active negligence or willful misconduct of COUNTY and or AGENCY-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 and or AGENCY-its Directors and Officers, Specials 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 and or Agency, or County's officers, agents, employees, or independent contractors, CONTRACTOR, upon notice from Agency, shall defend the same at Contractor's expense by counsel satisfactory to Agency.

**2.4.3** Agency shall promptly notify Contractor of any claim, action, or proceeding against County and or Agency, 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 and or Agency shall cooperate fully in the defense of such claim, action, or proceeding.

**2.4.4** Neither the County nor the Agency shall 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 Agency.

**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 Agency. The Contractor shall promptly report in writing to Agency 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 Agency,

Contractor shall be responsible for the resultant losses, including, without limitation, the costs of correcting defective work.

**3.1.4** The Agency 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. The Contractor 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 Agency. Any bench marks or monuments that are lost or destroyed shall be replaced by the Contractor subsequent to notification and approval from Agency.

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

**3.2.1** The Contractor acknowledges by submission of his/her bid that he is satisfied 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 Agency.

### **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 Agency before any work affected thereby has been performed. Failure to notify the Agency before starting work will be considered acceptance by the Contractor. Where doubts as to dimensions exist, Agency shall determine the correct dimensions.

## **ARTICLE 4 SPECIFICATIONS AND DRAWINGS**

### **4.1 GENERAL**

#### **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 Agency 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, two final sets of mylars of project record documents and specifications shall be submitted to the Agency by the Contractor.

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 Agency, 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 Agency 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 Agency 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 Agency.

#### **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) Agency-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 Agency'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. Agency, 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 Agency, Contractor shall remove and replace or adjust work which is not in accordance with the instructions from Agency 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. Agency may charge back to the Contractor, time and expense associated with RFI's, as may be reasonably determined by the Agency to be unnecessary.

##### **4.3.2 ADDITIONAL DETAILED INSTRUCTIONS**

a. The Agency 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 Agency, 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. Agency will then consider such notice and, if in its judgment it is justified, the Agency 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 Agency 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 Agency 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 Agency 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 Agency 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 Agency, 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 Agency 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 Agency.

**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 Agency 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 Agency. 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 Agency 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 Agency.

**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 Agency. Samples which do not meet specification requirements will be rejected. Requests for testing of additional samples by Contractor may be made by the Agency 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 Agency 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 Agency.

**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 Agency shall be the sole judge as to such matters. In the event that the Agency 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 Agency 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 Agency. When specifically requested by the Agency, 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 Agency's authorized representative, and shall be made without additional cost to the Agency, 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 Agency 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 Agency and Contractor.

**6.1.2** If, in the opinion of the Agency, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, without additional cost to the Agency. The Contractor shall submit any supplementary schedule or schedules in CPM form as the Agency 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 Agency'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 Agency, 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 Agency. It is and will be impracticable and extremely difficult to ascertain and determine actual damage which Agency will sustain by reason of such delay; and it is therefore agreed that Contractor will pay to Agency the sum of \$1,000.00 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 Agency 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 Agency 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 Agency in writing of such delay and its cause, in order that the Agency 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 Agency, 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 Agency at the time of their occurrence and found by the Agency 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 Agency 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 Agency, after receipt of such justification and supporting evidence, shall make its finding of fact. The Agency's decision shall be final and conclusive and the Agency will advise the Contractor in writing of such decision. If the Agency finds that the Contractor is entitled to any extension of Contract time, the Agency'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 Agency'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 Agency 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 Agency.

##### **8.2 SUPERVISION**

**8.2.1** Within seven (7) days after the Notice to Proceed, the Contractor shall provide to the Agency 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 Agency. The Project Superintendent shall not be changed except with the consent of the Authorized Representative of Agency, unless the Superintendent proves to be unsatisfactory to the Contractor or ceases to be in his employ. The Agency 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 Agency 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 Agency. 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 Agency.

### **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 Agency'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 Agency. 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 Agency 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 Agency, 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 Agency shall notify the Contractor, who shall indemnify and hold harmless the Agency 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 Agency.

**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 Agency. 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 Agency 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 Agency and without Agency 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 Agency, 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 Agency 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 Agency holidays and no work shall be performed outside of normal working hours without the prior written consent of the Agency. In any event, all work shall be subject to approval of the Agency. Prior to start of such work, the Contractor shall arrange with the Agency 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 Agency holidays, and such requests are granted, the Contractor shall bear all extra expense to the Agency for inspection and other incidental expenses caused by such overtime work. If contractors are requested, in the interest of the Agency, to work overtime by the Agency, or if overtime work is specifically required by these specifications, all extra expense of inspection will be paid by the Agency.

## **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 Agency, 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 and or Agency until authorized to remove them. If such marks are destroyed by the Contractor before their removal is authorized, the Agency 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 and or Agency premises to areas authorized or approved by the Agency.

**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 Agency and shall be built with labor and materials furnished by the Contractor without expense to the Agency. 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 Agency, 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 and or Agency. Upon completing the Work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Agency.

## **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 Agency 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 Agency.

**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 and Agency.

## **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 Agency 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 Agency.

### **ARTICLE 10 AGENCY/COUNTY-FURNISHED PROPERTY**

#### **10.1 AGENCY and or COUNTY -FURNISHED PROPERTY**

**10.1.1** The Agency and or 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 Agency 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 Agency.

**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 Agency.

## **ARTICLE 11 BENEFICIAL OCCUPANCY**

### **11.1 BENEFICIAL OCCUPANCY**

**11.1.1** The Agency shall have the right to take possession of or use any completed or partially completed portion of the Work. The Agency'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 Agency 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 Agency's possession or use. If Contractor believes the partial possession or use by the Agency 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. Agency will then consider such request and, if in its judgment it is justified, the Agency will modify the contract in writing accordingly. In the event the Contractor disagrees with the Agency'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 Agency. The Agency 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** Agency inspections and tests are for the sole benefit of the Agency 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 Agency after Acceptance regarding latent defects, gross mistakes, fraud or the Agency's rights under any warranty or guarantee.

**12.1.3** The presence or absence of an Agency 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 Agency'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 Agency. The Agency 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 Agency not to conform to contract requirements, unless in the public interest the Agency 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 Agency 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 Agency 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 Agency 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 Agency of its readiness for inspection and without the approval or consent of Agency. Should any such work be covered up without such notice, approval, or consent, it must, if required by Agency, be uncovered for examination at the Contractor's expense.

**12.1.8** The Contractor shall notify the Agency at least one (1) work day in advance of the time scheduled for the inspection. Should the Contractor fail to notify the Agency 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 Agency. Should the Contractor request acceptance of such rejected work the Agency 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 Agency after receipt of such certification if the Agency approves of such certification.

**12.1.9** If the Contractor does not promptly replace or correct rejected work, the Agency 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 Agency 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 Agency will pay for initial testing services specified to be performed by the Agency. 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 Agency 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, County of Riverside or City, such work shall be subject to inspection by the officials of such entities and it must pass inspection, in addition to Agency 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 Agency 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 Agency 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 Agency 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 Agency that the Work is complete, nor Acceptance thereof, shall operate as a bar to Agency'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** Agency 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 Agency. 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 and or Agency -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 Agency 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 Agency 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 Agency 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 Agency for extra architectural services required in the enforcement of Contractor's guarantee after Acceptance of the Work shall be paid to the Agency by the Contractor.

**14.1.6** In the event of any emergency constituting an immediate hazard to health or safety of County and or Agency employees, property, or licensees, when caused by work of the Contractor that is not in accordance with the Contract requirements, the Agency 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 and Agency, unless directed otherwise by the Agency; and
- c. Enforce all warranties for the benefit of the County and Agency, unless otherwise directed by the Agency.

**14.1.8** This warranty shall not limit the Agency'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 Agency shall order the Contractor to provide such dust control. If the Contractor does not comply promptly with such order, the Agency 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 Agency. The Agency shall not be held responsible for schedule delays due to actions taken by Agency 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 there from is within the noise tolerance level of that equipment as established by CAL-OSHA.

**15.2.2** Should the Agency 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 Agency, 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 and or Agency 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., 1st 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 Agency, 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 Agency 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 Agency 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 Agency or 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 Agency, 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 Agency.

**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 Agency, 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 Agency.

#### **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 Agency 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 Agency 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 Agency 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 Agency.

**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 Agency, 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 Agency.

### **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 Agency, either:

- a. Substitute any persons as subcontractors in place of the subcontractors designated in his original bid without the consent of Agency. (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 Agency 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 Agency reserves the right to make changes in the work without impairing the validity of the Contract. The Agency 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 Executive Director of the Redevelopment Agency for the County of Riverside in the manner and amounts specified by Board Policy B-11.
- c. By written authorization, issued by the Executive Director of the Redevelopment Agency for the County of Riverside, 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 Agency, 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 Agency 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 Agency 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 Agency's estimate of cost. If the change is issued based on the Agency 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 Agency's estimate was in error.

**19.1.5** If the Agency 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 Agency may issue a Construction Change Directive and the contractor shall proceed with the work. The Agency 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 Agency's estimate, a change order will be issued by the Agency. If no agreement can be reached, the Agency 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 Agency, 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 Agency agrees, a proposed change order will be issued on the Agency'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 Agency, except that when, in the opinion of the Agency, 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 Agency 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 subcontractor 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 Agency'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 Agency 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 Agency 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 Agency 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 Agency 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 Agency, 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 Agency.
- (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 Agency.
- (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 Agency.

b. Change Orders:

- (1) Change orders shall be prepared in accordance with the project contract.
- (2) No insurance costs are paid by Agency, 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 Agency, and approved by the Agency. 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 Agency, and approved by the Agency. 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 Agency.
- (6) Material transportation costs are paid by Agency when justified in the opinion of the Agency, and approved by the Agency'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 Agency. 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 Agency 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 Agency.

**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 Agency shall pay the Contractor the price as provided in this Contract.

**20.1.2** The Agency shall make progress payments monthly as the Work proceeds, on estimates approved by the Agency. The Contractor shall furnish a breakdown of the total contract price, in a format provided by the Agency, 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 Agency 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 Agency 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 Agency will review the requested percentage of completion for each activity. The payment request will be in the format as provided by the Agency and will refer to the schedule.

**20.1.6** Upon receipt of a payment request, the Agency 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 Agency 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 Agency to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which the Agency 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 Agency, 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 Agency 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 Agency 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 Agency, the Agency 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** At the election of the Agency, Contractor shall provide, within ten (10) calendar days of receipt of each progress payment, unconditional waivers and release of lien rights, signed by Contractor and each of its subcontractors and materials suppliers, in the form established therefore by Section 3262 of the Civil Code.

**20.1.14** All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Agency, 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 Agency to require the fulfillment of all of the terms of the contract.

## **20.2 FINAL PAYMENT**

### **20.2.1 GENERAL**

- a. The Agency 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.) Release of all liens and Stop Notices; and
  - 4.) Presentation of release of all claims against the Agency 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 Agency, to indemnify him against any lien.

## **20.2.2 FINAL CERTIFICATE FOR PAYMENT**

a. When the work is ready for acceptance by the Agency, Agency will certify and submit to the Board of Directors 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 Agency 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 Agency shall so certify authorizing the final payment.

## **20.2.3 FINAL PAYMENT**

a. After Acceptance of Work, the Agency will submit to Contractor a statement of the sum due Contractor under this contract, together with Agency 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 Agency, 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 Agency of non-compliance with any requirement of this Contract, fails to promptly initiate appropriate action to comply with the specified requirement, the Agency 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 Agency 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 Agency may designate, and the Agency 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 Agency 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 Agency 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 Agency 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 Agency shall immediately serve written notice thereof upon the surety and the Contractor, and the Agency 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 Agency for any excess cost occasioned the Agency thereby, and in such event the Agency 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 Agency may, without prejudice to any other right or remedy, terminate the Contract.

b. The Agency may terminate performance of work under this Contract in whole or in part, if the Agency determines that a termination is in the Agency's interest. The Agency 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 Agency, 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 Agency, 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 Agency, transfer title and deliver to the Agency (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 Agency.
- (6) Complete performance of work not terminated.
- (7) Take any action that may be necessary, or that the Agency 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 Agency has or may acquire an interest.
- (8) Use its best efforts to sell, as directed or authorized by the Agency, 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 Agency. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Agency under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Agency.

d. After termination, the Contractor shall submit a final termination settlement proposal to the Agency in the form and with the certification prescribed by the Agency. 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 Agency 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 Agency 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 Agency fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Agency 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 Agency 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 Agency 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 Agency shall exclude from the amounts payable to the Contractor the fair value, as determined by the Agency, 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 Agency.

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 Agency 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 Agency.

j. If the termination is partial, the Contractor may file a proposal with the Agency for a Change Order of the price(s) of the continued portion of the Contract. The Agency 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 Agency.

k. The Agency 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 Agency 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 Agency 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 Agency, 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 Agency, 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 Agency may request a Profit & Loss statement and supporting documentation from Contractor. If requested, such documentation must be submitted for the Agency to consider the claim.

222.2.3 Submission of a claim, properly certified, with all required supporting documentation, and written rejection or denial of all or part of the claim by Agency, 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 Agency shall provide notification to the Contractor within a reasonable time after receipt of any third-party claim relating to the Construction Contract.

END

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DATE: December 30, 2010

PROJECT: Mission Boulevard Improvement Project Phase III – Median Electrical Infrastructure  
Redevelopment Agency for the County of Riverside

ADDENDUM: **Number ONE**

I. INSTRUCTIONS:

- a. This supplement to the bid package is issued prior to the receipt of proposals. All changes covered in this supplement shall be included in the original quotation and the supplement will be considered one of the contract documents.
- b. Contractors, Manufacturers and/or Distributors shall confirm the receipt and consideration of this addendum prior to the submittal of their proposal by noting inclusion of Addendum **ONE** on the Contractor's Proposal.

II. PURPOSE OF ADDENDUM:

- a. The purpose of this addendum is to provide all bidders who attended the job walk held on December 23, 2010 with additional information to be included in the bids.
- b. **The bid date remains Thursday, January 6, 2011.** The bids shall be delivered to the Clerk of the Board of Supervisors on the 1<sup>st</sup> floor of the County Administrative Center, 4080 Lemon Street, Riverside, CA 92501, no later than 2:00 p.m.

III. CHANGES AND CLARIFICATIONS:

- a. The County provides the following responses to questions received during the bidding process:

**JD Young Construction, Inc. – Email (12-23-10)**

**RFI #1:**

**Q:** Will Edison be installing 3" stub outs from the various hand holes and vaults prior to commencing of the boring? If the answer is no, then what depths and what distance from the above do the bore shots need to be placed for each location? If Edison performs their work last will they be repairing the pavement and concrete where damaged by the work.

**A:** Edison will not be installing the 3" stub outs for the various structures before the boring. SCE requires a minimum of 30" of cover over all conduits and each conduit will stop no less than 5' from structure. SCE will not be repairing the pavement or concrete where damage is done, this will need to be included within the bid.

**RFI #2:**

**Q:** Regarding the meter pedestals, (A) are new foundations being installed? If so who is doing this work Edison or the winning contractor? (B) If no new foundations, will the meter peds. be de-energized and removed prior to the commencing of boring so that we may core drill the foundation and tunnel up from the bottom or (C) since the peds are already energized will Edison stub a 3" by 90 degree sweep out of them prior to the commencing of boring or will the winning contractor be required to stub the 3" conduit run a certain distance from the peds.?

**A:** (A) No new meter foundations will be poured. (B) We will coordinate with SCE to de-energize the pedestals so the new conduits can be core drilled into the foundation and tunneled up from the

bottom. (C) Pedestals will not be energized when core drilling or conduit sweep installation occurs by winning contractor, SCE will not install any conduits from meter pedestals.

**RFI #3:**

- Q:** Refer to sheet E2.1, Partial Electrical Plan - Section 4, item 9 at station 48+63. The hand hole is shown in the gutter but in fact is actually located in the pavers to the east, on the edge of the wheel chair ramp. The question is where does run get placed, in the gutter area or under the wheel chair ramp? Also, if Edison does not perform their work prior to boring, where is the location of the stub and who is responsible for the replacement of the wheel chair ramp or gutter?
- A:** If I am looking at the correct location (Structure is at sta. 57+59, street crossing is at Sta. 57+22) the conduit run will go directly west from the existing handhole (wheelchair ramp or gutter). The conduit bore will stop no less than 5' from handhole and winning contractor will be expected to repair gutter or wheelchair ramp.

**RFI #4:**

- Q:** Refer to sheet E2.1, PEP Section 4, station 62 + 91. Due to the moratorium on cutting the pavement on Mission Blvd. can the bore run be placed between the planter locations on the east and west side of Mintern street and then from the western planter to the median planter where the pedestal is? This would eliminate any cutting of Mission Blvd.
- A:** Yes.

**RFI #5:**

- Q:** Refer to the "Mandatory Pre-Bid Job Walk - Meeting Agenda" sheet that was handed out at the job walk. Under Project background it lists the scope and lists "Other" please clarify other what does other mean.
- A:** The scope provided in the agenda was very general, "Other" means everything else not mentioned on the agenda but included in the bid documents.

**Questions during mandatory pre-bid job walk - verbal (12-23-10)**

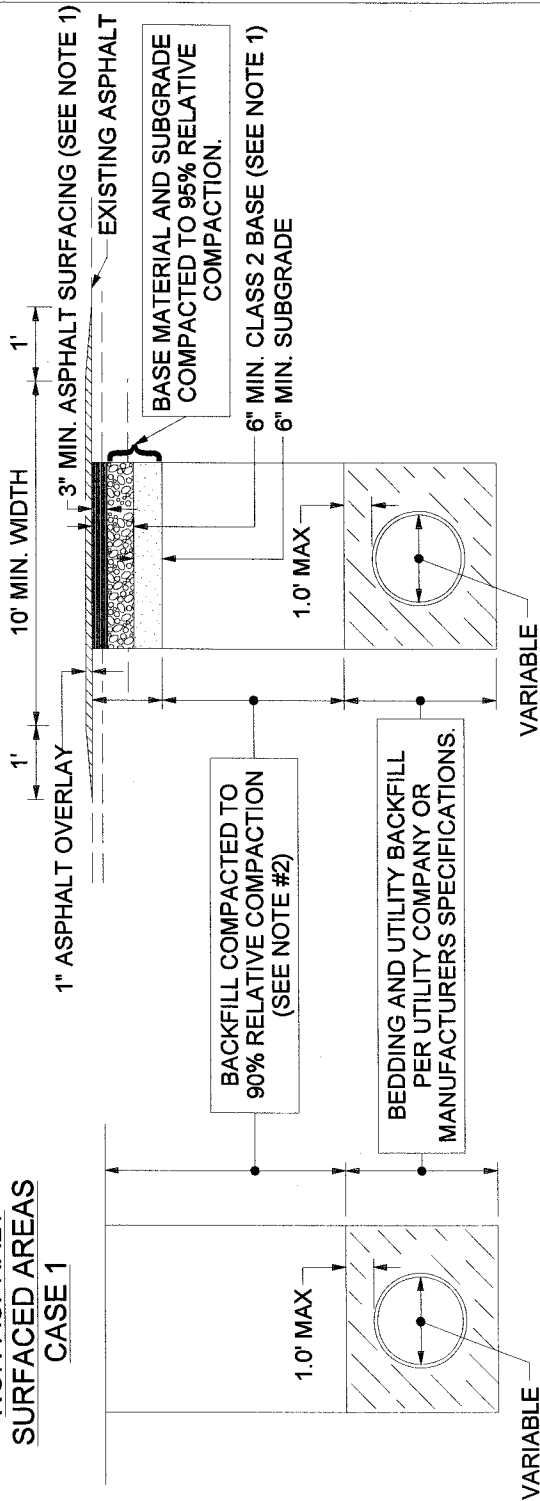
**RFI #6:**

- Q:** Are there any specifications for the repaving of the asphalt street sections.
- A:** Refer to the attached detail and specifications.

**END**

**ASPHALT SURFACED STREETS WITH  
OVERLAY PARALLEL INSTALLATION  
CASE 2**

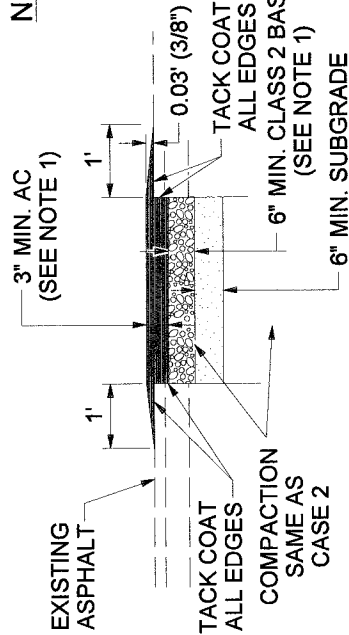
**NON-ASPHALT  
SURFACED AREAS  
CASE 1**



NOT TO SCALE

**NOTES:**

1. REPLACE STRUCTURAL SECTION AS FOLLOWS:  
SURFACING: EXISTING THICKNESS; OR 3" MIN. A.C., TYPE B.  
BASE: CLASS 2 A.B. IN SAME THICKNESS AS EXISTING  
BASE MATERIAL, 6" MIN. AS DIRECTED BY THE INSPECTOR.
2. MAXIMUM LIFT THICKNESS IS 8 INCHES; MAXIMUM LIFT THICKNESS WHEN PONDING AND JETTING IS 4 FEET.
3. WHEN A FIRM FOUNDATION IS NOT ENCOUNTERED, DUE TO SOFT, SPONGY OR OTHER UNSUITABLE MATERIAL, SUCH MATERIAL SHALL BE REMOVED TO THE LIMITS DIRECTED BY THE DIRECTOR OF TRANSPORTATION OR AFFECTED UTILITY COMPANY AND THE RESULTING EXCAVATION BACKFILLED WITH PIPE BEDDING MATERIAL.



**ASPHALT SURFACED STREET WITHOUT  
OVERLAY PERPENDICULAR INSTALLATION  
CASE 3**

APPROVED BY:

*George A. Johnson*  
DIRECTOR OF TRANSPORTATION  
GEORGE A. JOHNSON, RCE 42328

DATE: 05/01/07



COUNTY OF RIVERSIDE

**UTILITY  
TRENCH BACKFILL**

STANDARD NO. 818

REVISIONS		REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
8-77	12-97	1				4			
4-90		2				5			
11-95		3				6			



# SPECIFICATIONS

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The publications referred to herein are as follows:

Standard Specifications of the California Department of Transportation, State Division of Highways, latest issue

“Greenbook”, Standard Specifications for Public Works Construction, latest issue

American Society for Testing Materials (ASTM), Standards and subsequent revisions.

American Association of State Highway and Transportation Officials (AASHTO), Parts I and II, latest edition.

American Water Works Association (AWWA), latest edition.

American National Standard Practice for Roadway Lighting,

American National Standards Institute.

## 1. DEFINITIONS

- 1.01 Director of Transportation:** Shall mean the Director of Transportation of the County of Riverside, California, and/or his duly appointed deputies, inspectors or agents, as referred to herein.
- 1.02 Standard Specifications:** As herein referred to shall mean the Standard Specifications of the State of California, Department of Transportation, Division of Highways, latest issue as currently available in published form from the State Printing Office.
- 1.03 Contractor:** As herein referred to shall mean the agency or individual engaged in doing the work, and furnishing the materials herein discussed. Said Contractor shall represent the Subdivider insofar as the execution of the work shall be concerned, and it will be assumed that he has been so authorized by the Subdivider.
- 1.04 Agreement:** As herein referred to shall mean the formal Subdivision Improvement or Agreements entered into with the Board of Supervisors of the County of Riverside by the Subdivider, as completed and executed by both parties. Said Agreements to set forth all requirements for improvement of the subject Subdivision, including roads, water supply systems, drainage structures, sewers, monuments or other work as set forth therein.
- 1.05 Plans:** The plans, profiles, detail sheets or other drawings or instructions as prepared by the Subdivider, his Engineer, or other authorized representative, to delineate the nature and scope of the improvement work to be done on the proposed subdivision. Said plans to be approved by the Office of the Director of Transportation, and bearing his signature thereon.
- 1.06 Improvement Standards:** Standard drawings as prepared by the Director of Transportation and adopted by Ordinance, showing the nature of the various items of improvement work to be done and/or made a part of the Agreement.
- 1.07 Engineer:** An authorized representative of the Director of Transportation acting within the scope of his designated authority in the detailed inspection of the work.
- 1.08 Subdivider:** Any person, firm, corporation, partnership or association who caused land to be divided into a Subdivision for himself or for others, and has executed an agreement with the County.
- 1.09 Acceptance:** Completion of all work in accordance with approved plans; in conformance with Riverside County Ordinance 460, Improvement Standards and Specifications; and release of Securities by the Director of Transportation.
- 1.10 Laboratory:** The established laboratory of the Riverside County Transportation Department or other laboratories approved by the Engineer to test materials and work involved in the Agreement.
- 1.11 Terms and Definitions:** In lieu of the following terms and definitions as used in Section 1 of the Standard Specifications, the intent and meaning shall be interpreted as follows:
- a) DEPARTMENT OF TRANSPORTATION. Shall mean the Board of Supervisors of the County of Riverside.
  - b) DIVISION OF HIGHWAYS. Shall mean the Transportation Department, County of Riverside.
  - c) STATE or STATE OF CALIFORNIA. Shall mean the County of Riverside.

## 2. INSPECTION AND TESTING

- 2.02 Conformity with Agreement Documents and Allowable Deviations:** Work and materials shall conform to the lines, grades, cross sections, dimensions and material requirements including tolerances, shown on the plans or indicated in the specifications. Although measurement, sampling and testing may be considered evidence as to such conformity, the Engineer shall be the sole judge as to whether the work or materials deviate from the plans and specifications, and his decision as to any allowable deviations therefrom shall be final.
- 2.03 Lines and Grades:** Such stakes or marks will be set by the Subdivider as the Engineer determines to be necessary to establish the lines and grades required for the completion of the work specified in these specifications and the plans.
- 2.04 Advance Notice:** At least forty-eight (48) hours advance notice shall be given the Director of Transportation when requesting inspection and no paving or concrete operations will be permitted except in the presence of an inspector.
- 2.05 Inspection:** The Contractor or Subdivider shall at all times provide safe access for inspection of the work by the Director of Transportation and/or his appointed agents; and to any shops, plants, or areas wherein materials or portions of the work are in process.
- 2.06 Materials Testing:** Unless otherwise permitted in the agreement, all materials tests shall be performed in accordance with the current published method as specified and used by the following agencies:
- A. American Society for Testing and Materials.
  - B. American Association of State Highway and Transportation Officials.
  - C. Published Federal Specifications (Airports, etc.) (If applicable).
  - D. Test Methods as developed by Materials and Research Department - California Department of Transportation - Division of Highways, Sacramento, California, except that procedures for statistical testing as referred to in Section 6-3.02 of the Standard Specifications will not apply.

Should the developer be authorized to use a private laboratory for control of the work, and in the event that said laboratory desires to perform the materials testing by methods not specified in these specifications, such testing methods will be submitted to the Engineer for approval together with all required data necessary to substantiate the validity of the testing results obtained by using such methods. Following a review of this proposal, the Engineer may indicate his approval of the use of such non-standard testing methods on the project.

- 2.07 Samples:** In general, all samples for testing will be taken by the Director of Transportation from material at, or delivered to the site of the work, and such material should be available in ample time before intended use to allow for such testing. In the event that control testing for the work is performed by a private laboratory, the Director of Transportation reserves the right to stipulate the number and location of those control tests which will relate to ultimate acceptance of the work by the County.
- 2.08 Removal of Rejected and Unauthorized Work:** All work which has been rejected shall be remedied, or removed and replaced in an acceptable manner. Any work done beyond the lines and grades shown on the plans or established by the Engineer, or any work done without written authority will be considered as unauthorized work. Upon order of the Engineer, work shall be remedied, removed, or replaced at no expense to the County.

**2.09 Equipment:** The Contractor shall provide adequate and suitable equipment to meet the above requirements, and when ordered by the Engineer shall remove unsuitable equipment from the work.

**2.10 Final Inspection:** When the work has been completed, the Engineer will make the final inspection.

### **3. MATERIALS**

**3.01 Quality of Materials:** In general, materials shall be new, and of a quality equal to that specified. Any material equal to that specified, in the opinion of the Director of Transportation will be approved, provided a proper request for substitution is submitted containing sufficient data or information on the article or material to permit investigation and decision. Unless such a request is made, no substitutions will be permitted. Should it be proposed to include any materials in the work not covered in the "Specifications" attached hereto, said material will, in general, be required to conform to all details of its fabrication, composition and manufacture to the applicable designation specified for the material or article in the current publications of the American Society for Testing Materials (ASTM).

**3.02 Specified Material:** Certain materials shall be of the grades or types specified by the Director of Transportation and said materials will be so specified in the formal agreement with the Subdivider or will be shown on the approved plans of the work. Unless otherwise provided in the agreement, all materials will be furnished by the Contractor.

**3.03 Portland Cement Concrete:** Portland Cement Concrete shall conform to the requirements of Section 90 of the Standard Specifications except as follows:

1. Requirements on the construction plans for Portland Cement Concrete are modified to the PCC Class designations, as described in Section 90-1.01, "Description," of the Standard Specifications as follows:

Class "A" shall mean Class "2" and contain not less than 590 pounds of cementitious material per cubic yard

Class "B" shall mean Class "3" except that the concrete shall contain not less than 550 pounds of cementitious material per cubic yard

Class "C" shall mean Class "4" and contain not less than 420 pounds of cementitious material per cubic yard

Class "D" shall mean Class "1" and contain not less than 675 pounds of cementitious material per cubic yard

Minor Concrete shall mean Class "B" as defined above.

2. Section 90-4.08, "Required Use of Mineral Admixtures," is replaced in its entirety as follows:

When the use of mineral admixtures in concrete is specified or is ordered by the Engineer, the minimum amounts of mineral admixture and portland cement and the type of cement shall be as specified or ordered. If the use of mineral admixture and cement and the cement type have not been specified or ordered, the concrete shall conform to one of the following:

- A. The concrete shall contain "Type IP (MS) Modified" cement conforming to the provisions in Section 90-2.01, "Portland Cement," in an amount sufficient to satisfy the specified minimum cement content.

B. The concrete shall contain "Type II Modified" cement conforming to the provisions in Section 90-2.01, "Portland Cement," in an amount not less than 85 percent of the amount required to satisfy the specified minimum cement content. The concrete shall also contain a mineral admixture in an amount not less than 15 percent by weight of the amount of cement required to satisfy the specified minimum cement content. Where Section 90-1.01, "Description," specifies maximum cement content in pounds per cubic yard the total weight of portland cement and mineral admixture per cubic yard shall not exceed the specified maximum cement content.

3. Section 90-4.09, is replaced in it's entirety and titled "Optional Use of Mineral Admixtures" as follows:

The Contractor will be permitted to replace up to 15 percent of the required portland cement, other than Type IP (MS) Modified or Type III cements, with a mineral admixture in all concrete except where high early strength has been specified or where the use of mineral admixtures is otherwise specified or prohibited. The weight of mineral admixture used shall be equal to or greater than the weight of Portland cement replaced.

**3.04 Certificate of Compliance:** The Engineer may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance stating that the materials involved comply in all respects with the requirements of the specifications. The certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials. A Certificate of Compliance must be furnished with each lot of material delivered to the work and the lot so certified must be clearly identified in the certificate.

All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the work which conforms to the requirements of the plans and specifications and any such material not conforming to such requirements will be subject to rejection whether in place or not.

The County reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance.

**3.05 Local Material:** Local material is defined as rock, sand, gravel, earth, or other mineral material obtained or produced from sources in the vicinity of the work specifically for use on the project. Local material does not include materials obtained from established commercial sources.

When requested by the Contractor or Subdivider in writing, the County will test materials from any local source which has not been previously tested. If satisfactory material from such local source is used in the work, the Contractor or Subdivider will not be charged for the costs of the tests.

**3.06 Disposal of Excess Excavation or Materials:** Excess earth excavation or other materials resulting from construction operations shall be disposed of by the Contractor outside of the right-of-way.

#### **4. SCOPE OF THE WORK**

**4.01 General:** The scope of the work shall be set forth in the agreement with the Subdivider, as shown on the plans, improvement standards as specified in these specifications, or as directed by the Director of Transportation.

**4.02 Alterations in the Work:** Minor changes in the work due to unforeseen local conditions shall not be made without prior approval of the Director of Transportation. Major alterations in design or standard of work will only be permitted following execution of an amended Agreement and any work performed prior to the completion of such an amended Agreement will be performed at the owner's risk.

## **5. OBSTRUCTIONS**

**5.01 Utility Facilities:** Any relocation of existing power, telephone poles, sewers, waterlines, gas lines, or other utility installations necessary to clear the limits of the proposed work shall be the responsibility of and paid for by the Subdivider, and he shall make all necessary arrangements with the owners thereof.

**5.02 Existing Highway Facilities:** Revisions or relocations of existing Transportation Department installations shall be shown on the plans. In addition, the Contractor will be required to cooperate with County forces on the work as may be necessary to maintain proper public service. The Contractor shall protect any existing signs, culverts or other highway facilities during his operations and will be liable for any damage to same.

**5.03 Trees:** Tree removal as shown on the plans or as directed by the Engineer shall be the responsibility of the Subdivider. An existing tree whose trunk face is located closer than eight feet from the face of the curb shall be removed unless otherwise specifically directed by the Director of Transportation.

## **6. PUBLIC SAFETY**

**6.01 Laws to be Observed:** The Contractor shall keep himself fully informed of all existing and future State and national laws and County and municipal ordinances and regulations which in any manner affect those engaged or employed in the work or the materials used in the work, or which in any way affect the conduct of the work. He shall at all times observe and comply with, and shall cause all of his agents and employees to observe and comply with, all such existing and future laws, ordinances, regulations, orders and decrees of bodies or tribunals having any jurisdiction or authority over the work; and shall protect and indemnify the County of Riverside, and all of its and their officers and agents and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulations, order or decree, whether by himself or his employees. If any discrepancy is discovered in the plans, drawings, specifications, or contract for the work in relation to any such law, ordinance, regulations, order or decree, the Contractor shall forthwith report the same to the Director of Transportation in writing.

**6.02 Permits and Licenses:** The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work. The Contractor is required to secure from the Transportation Department Permit section an encroachment permit for the following:

- A. Utility construction within the right-of-way of the subdivision.
- B. Utility construction within existing County roads.
- C. Any construction within existing County roads.
- D. Temporary closure of existing County roads.

**6.03 Public Convenience:** The Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience to public traffic, and he shall have under construction no greater length

or amount of work than he can prosecute properly. On existing roads, unless otherwise provided in the agreement, traffic shall be permitted to pass through the work with as little inconvenience and delay as possible. Spillage of materials resulting from hauling operations along or across the traveled way shall be removed immediately. Existing traffic signal and highway lighting systems shall be kept in operation for the benefit of the traveling public during progress of the work, and other forces will continue routine maintenance of existing systems.

Convenience of abutting owners along the road shall be provided for as far as practicable. Convenient access to driveways, houses, and buildings along the line of the work shall be maintained by the Contractor and temporary approaches to crossings or intersecting highways shall be provided and kept in good condition.

In order to expedite the passage of public traffic through or around the work, the Contractor shall install and maintain signs, lights, barricades and other facilities for the sole convenience and direction of public traffic. Such warning systems and devices shall be approved by the Director of Transportation. Also, when so directed by the Director of Transportation he shall provide and station competent flagmen whose sole duties shall consist of directing the movement of public traffic through or around the work.

Water or dust palliative shall be applied if ordered by the Engineer for the alleviation or prevention of dust nuisance. Dust control shall conform to: Section 10 "Dust Control", Section 7-1.01F "Air Pollution Control", Section 17 "Watering", and Section 18 "Dust Palliative" of the State of California Department of Transportation Standard Specifications; Rules no. 401, 402, 403 and 403.1 of the South Coast Air Quality Management District (AQMD); Riverside County Code, Chapter 8.52 "Fugitive Dust Reduction Program For Coachella Valley; and all other applicable Federal and State laws.

**6.04 Public Safety:** Whenever the Contractor's operations create a condition hazardous to traffic or to the public, he shall furnish at his own expense such flagmen and guards as are necessary to give adequate warning to the public of any dangerous conditions to be encountered and he shall furnish, erect and maintain such fences, barricades, lights, signs and other devices as are necessary to prevent accidents, and avoid damage or injury to the public. Flagmen and guards while on duty and assigned to give warning to the public that the highway is under construction and of any dangerous conditions to be encountered as a result thereof shall be equipped with red wearing apparel and a red flag or paddle type signal which shall be kept clean and in good repair. Flags, signs, lights, and other warning and safety devices shall conform to the requirements set forth in the current "Manual of Warning Signs, Lights, and Devices for Use in Performance of Work Upon Highways" issued by the California Department of Transportation and any signs furnished and erected by the Contractor shall be at his own expense.

Should the Contractor appear to be neglectful or negligent in furnishing and maintaining warning and protective measures as above provided, the Director of Transportation may direct attention to the existence of a hazard and the necessary warning and protective measure shall be furnished and installed by the Contractor at his own expense without cost to the County. Should the Director of Transportation point out the inadequacy of warning and protective measures, such action on the part of the Director of Transportation shall not relieve the Contractor from responsibility for public safety or abrogate his obligation to furnish and pay for these devices.

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic, and at the end of each day's work and at other times when construction operations are suspended for any reason, the Contractor shall remove all equipment and other obstruction from that portion of the roadway open for use by public traffic.



- 6.05 Use of Explosives:** When the use of explosives is necessary for the prosecution of the work, the Contractor shall use the utmost care not to endanger life or property.

All explosives shall be stored in accordance with the provisions of Division XI of the Health and Safety Code. Attention is called to local ordinances involving the use or storage of explosives.

- 6.06 Lane Closure:** Lane closures shall conform to the State of California Manual of Traffic Controls for Construction and Maintenance Work Zones or the American Public Works Association Work Area Traffic Control Handbook (WATCH). Should it be necessary for the lane closure to remain in place after work hours, the contractor shall provide a traffic control plan prepared and signed by a Traffic Engineer registered in the State of California.

## **7. CLEARING AND GRUBBING**

- 7.01 General:** Clearing and grubbing operations shall conform with the provisions of Section 16 of the Standard Specifications and the details shown on the plans.

- 7.02 Concrete Removal, Structure Removal or Pavement Removal:** Shall be considered a part of the clearing operations and shall conform with the applicable provisions of Section 15-3 of the Standard Specifications. Such removed materials shall be disposed of as elsewhere provided herein or as approved by the Engineer. When portions of existing concrete or paved surfaces are to be cut back to provide for joining or widening, such surfaces shall be sawed or otherwise cut to neat lines.

## **8. EARTHWORK**

- 8.01 General:** Included under the term "Earthwork" will be all operations involved in grading roadway excavation or embankment construction required to bring the roadway section to the approved grade, and such drainage and structure excavation and backfill as may be required by the approved plans. These operations to include the performance of all incidental work of whatsoever nature required to construct the roadway subgrade and the approaches thereto, and to maintain them in the form specified until the final acceptance by the County.

All earthwork shall conform with the applicable provisions of Section 19 of the Standard Specifications except as herein modified.

- 8.02 Relative Compaction:** The provisions of the second paragraph of Section 19-5.03 shall not be required. This provision will not preclude the necessity of conforming to the provisions of the first paragraph of Section 19-5.03 of the Standard Specifications.
- 8.05 Watering:** Embankments and subgrade shall be watered or sprinkled during construction so as to obtain the specified relative compaction of the material included therein.
- 8.06 Ditches and Channels:** Drainage inlet and outlet ditches and channels shall be constructed to lines and grades shown on the approved plans and profiles and as specified in Section 19-4 of the Standard Specifications. Channels shall be constructed above and below all culverts as necessary to insure proper capacity for same.
- 8.07 Structural Design of Roadbed Section:** Unless otherwise approved by the Director of Transportation, structural design requirements for combined thickness of base and surfacing will be determined by an accepted rational system of design, employing soil testing procedures; and the necessary sampling, testing and the design of the base and surface courses will be performed by the

Office of the Director of Transportation, unless otherwise provided in the Agreement. All street structural sections are tentative. Additional soil tests will be taken after rough grading to determine the exact street structural section requirements.

The following list is the minimum asphalt concrete thickness required for all projects (using Class 2 Aggregate Base, R=78). See Standard No. 114 for the Traffic Index assigned to various road types.

For access roads, if the ultimate road classification is a General Plan Highway, the traffic index requirement is 7.0.

Traffic Index	Minimum A. C. Thickness (Feet)	Traffic Index	Minimum A.C. Thickness (Feet)
5.0	0.25	8.0	0.39
5.5	0.25	8.5	0.43
6.0	0.27	9.0	0.46
6.5	0.30	9.5	0.50
7.0	0.33	10.0	0.53
7.5	0.36	11.0	0.58

The minimum Class-2 Aggregate Base thickness to be used when placed directly upon the subgrade is 0.50 feet.

NOTE: The Transportation Department accepts alternate structural sections including full depth asphalt concrete or multi-layered aggregate subbase, lime or cement treated bases overlaid with Class 2 Aggregate Base. The thickness of the Class 2 Aggregate Base in these instances can be less than 0.5 feet provided the gravel equivalency of the total structural section is maintained.

## 9. FINISHING ROADWAY

**9.01 General:** Upon completion of all construction operations, the entire street system shall be finished and cleaned in accordance with the provisions of Section 22 of the Standard Specifications and these Special Provisions.

**9.02 Shoulders:** Roadways shoulders shall be trimmed and shaped to conform to the requirements of the approved typical section. This will include grading on optimum slope to the property lines if so directed. Included in this portion of the work shall be additional clearing, grubbing, or removal of debris not previously completed by the Contractor.

Concrete curbs-and-gutters, and cross-gutters shall be broomed clean and flushed with water to insure proper operation. Any underground drainage systems or storm drain facilities shall be thoroughly flushed out to insure proper operation.

**9.03 Appurtenances:** Street name signs, barricades and warning devices shall be completed and in place.

**9.04 Monuments:** Unless otherwise approved by the Director of Transportation, all survey monuments located within the improved street area shall be in place and pavement cuts neatly patched.

**9.05 Final Cleanup:** Prior to inspection and acceptance of the completed work, all items of finish work as outline above must be completed.

## 10. BASE MATERIALS

**10.01 General:** Base material to be used in construction of the upper layers of the roadbed shall consist of the following material classifications for the respective Land Division Schedules.

- A. Aggregate Base, Class 3 - Schedule B, C, D, G & H Land Division
- B. Aggregate Base, Class 2 - Schedule A, E, & F Land Division
- C. Lime Treated Base
- D. Cement Treated Bases

NOTE: When roads are accepted for maintenance by the County, the aggregate base shall be Class 3 or higher.

The exact type of base material to be used on the work will be specified in the agreement and shown on the plans.

**10.02 Aggregate Base, Class 3:** Aggregate Base, Class 3 shall be clean and free from roots, vegetable matter and other deleterious substances, and be of such character that when wet it will compact to form a firm stable base. The material shall be of such sizes that the percentage composition by weight of material shall conform to the following grading at the time the material is deposited on the roadbed when determined by Test Method No. Calif. 202.

Sieve Size	Class 3 Percentage Passing Sieve
1 inch	100
No. 4	60 - 95
No. 30	20 - 60
No. 200	03 - 15

The material shall conform to the following requirements:

Tests	Test Method No. Calif.	Class 3 Requirements
Resistance ("R" Value)	301	70 Min. or as specified
Sand Equivalent	217	30 Min.

**10.03 Aggregate Base, Class 2:** Aggregate Base, Class 2 shall conform to the provisions of Section 26 of the Standard Specifications and as modified herein. Section 26-1.02A Class 2 Aggregate Base, first paragraph shall be modified to read:

Aggregate for Class 2 aggregate base shall be free from organic matter and other deleterious matter, and shall be of such nature that it can be compacted readily under watering and rolling to form a firm and stable base. Aggregate may consist of broken and crushed asphalt concrete or Portland cement concrete and may contain crushed aggregate base or other rock materials. The material may contain no more than 3 percent brick by weight as determined by California test method 202 as modified: Brick material retained on a No.4 sieve shall be identified visually and separated manually. Brick quantification shall be based on total weight of dry sample. Also, material retained on the 4.75 mm

(No.4) sieve shall contain no more than 15 percent of particles (gravel) that have no more than one fractured face. Processed Miscellaneous Base shall not be used.

The Quality Requirements contained in Section 26-1.02A shall be modified to read:

QUALITY REQUIREMENTS

Test	Contract Compliance
Resistance (R-value)	
Virgin Rock	78 Min.
Crushed Miscellaneous	80 Min.
Sand Equivalent	35 Min.
Durability Index	35 Min.
Percentage Wear	
100 revolutions	15 Max.
500 revolutions	52 Max.

**10.04 Lime Treated Base:** Lime treated base shall conform to the provisions of Section 24 of the Standard Specifications.

**10.05 Cement Treated Base:** Cement treated base shall conform to the provisions of Section 27 or Section 28 of the Standard Specifications.

**11. ASPHALT CONCRETE**

**11.01 General:** Asphalt concrete shall be composed of mineral aggregate and asphalt binder, mixed in a suitable central mixing plant, and placed on the roadbed in accordance with these specifications and in conformity with the lines, grades and dimensions shown on the plans and typical cross-sections. When required by the Director of Transportation, the Subdivider shall provide an asphalt concrete mix design as appropriate for the designated location, prepared under the direction of an Engineer registered in the State of California competent to perform the work.

Asphalt concrete shall be placed on the prepared subgrade or base course in one or more courses to the required thicknesses, grades and cross-sections as shown on the plans and/or specified in the Agreement. All underground utilities shall be in place prior to paving.

In advance of spreading the asphalt concrete, a prime coat of liquid asphalt or asphaltic emulsion shall be applied to the areas to be surfaced if so indicated on the plans. Prime coat shall be applied to all roadbeds to receive surfacing, which have a gradient of ten percent or greater.

**11.02 Asphalt Concrete:** Asphalt concrete shall be Type A and three-quarter inch (3/4-inch) maximum gradation of the mineral aggregate for roads with a TI of 7.0 or greater and Type B for all others or as determined by a special mix design and shall conform to the provisions in Section 39 or the Standard Specifications and these Subdivision Improvement Standards. Unless otherwise directed, the gradation of the mineral aggregate for roads with a TI of less than 7.0 shall be one-half inch (1/2-inch) maximum for final course and three-quarter inch (3/4-inch) maximum for base course. Aggregate gradation shall be medium or coarse depending on the TI specified.

Paving asphalt shall conform to the provisions in this Section, "Asphalt." The asphalt binder to be mixed with aggregate shall conform to the provisions in "Asphalt," of these special provisions and shall be of the Performance Grade (PG) designated below or as determined by the Engineer.

- A. Grade PG 64-10 (Inland Valleys)
- B. Grade PG 64-16 (South Mountain)
- C. Grade PG 70-10 (Desert)

The amount of asphalt binder to be mixed with the mineral aggregate shall be between three percent and seven percent by weight, of the dry mineral aggregate. The exact amount of asphalt binder to be mixed with the mineral aggregate will be determined by the Contractor and submitted to the Engineer for approval or as determined by a special mix design.

Liquid asphalt for prime coat shall conform to the provisions in Section 93, "Liquid Asphalts," of the Standard Specifications and shall be Grade PG 64-10 unless otherwise specified in the Special Provisions.

*Asphalt emulsion for paint binder (tack coat) shall conform to the provisions in Section 94, "Asphaltic Emulsions," of the Standard Specifications for the rapid-setting or slow-setting type and shall be grade PG 64-10.*

Paving asphalt for Asphalt Rubber Hot Mix (ARHM) shall be grade PG 64-16 for all regions.

Paving asphalt to be used as a binder for pavement reinforcing fabric shall conform to the provisions in "Asphalt," of these special provisions and the grade shall be Grade PG 64-10 unless otherwise specified in the Special Provisions.

**11.03 Placing Asphalt Concrete:** Asphalt concrete will not be permitted to be placed upon unstable, yielding or working subgrade.

In addition to the provisions in Section 39-5.01, "Spreading Equipment," of the Standard Specifications, asphalt paving equipment shall be equipped with automatic screed controls and a sensing device or devices.

When placing asphalt concrete to the lines and grades established in the Plans and as directed by the Engineer, the automatic controls shall control the longitudinal grade and transverse slope of the screed. Grade and slope references shall be furnished, installed, and maintained by the Contractor. Should the Contractor elect to use a ski device, the minimum length of the ski device shall be 30 ft (9 m). The ski device shall be a rigid one piece unit and the entire length shall be utilized in activating the sensor.

When placing the initial mat of asphalt concrete on existing pavement, the end of the screed nearest the centerline shall be controlled by a sensor activated by a ski device not less than 30 ft (9 m) long. The end of the screed farthest from centerline shall be controlled by an automatic transverse slope device set to reproduce the cross slope designated by the Engineer, by a sensor activated by a similar ski device or as directed by the Engineer.

When paving contiguously with previously placed mats, the end of the screed adjacent to the previously placed mat shall be controlled by a sensor that responds to the grade of the previously placed mat and will reproduce the grade in the new mat within a 3 mm tolerance. The end of the screed farthest from the previously placed mat shall be controlled in the same way it was controlled when placing the initial mat.

Should the methods and equipment furnished by the Contractor fail to produce a layer of asphalt concrete conforming to the provisions, including straightedge tolerance, of Section 39-6.03, "Compacting," of the Standard Specifications or elsewhere in these Special Provisions, the paving operations shall be discontinued and the Contractor shall modify the equipment or methods, or furnish substitute equipment.

Should the automatic screed controls fail to operate properly during a day's work, the Contractor may manually control the spreading equipment for the remainder of that day. However, the equipment shall be corrected or replaced with alternative automatically controlled equipment conforming to the provisions in this section before starting another day's work.

In lieu of the table of Section 39-6.01, asphalt concrete shall be spread and compacted in the number of layers as outlined in the table below:

Total Thickness Shown on Plans	Minimum No. of Layers	Top Layer Thickness		Next Lower Layer Thickness		All Other Lower Layer Thickness	
		Min.	Max.	Min.	Max.	Min.	Max.
0.23' or less	1	-	-	-	-	-	-
0.24' through 0.44'	2	0.10'	0.21'	0.14'	0.23'	-	-
0.45' or more	3 or more	0.10'	0.20'	0.15'	0.23'	0.20'	0.23'

Associated footnotes to this table shall be revised as follows:

- <sup>a</sup> No Change.
- <sup>b</sup> Deleted.
- <sup>c</sup> At least 4 layers shall be placed if total thickness 0.90 ft (270 mm).

In addition to the straightedge provisions in Section 39-6.03, "Compacting," of the Standard Specifications, asphalt concrete pavement shall conform to the surface tolerances specified herein.

The uppermost layer of asphalt concrete surfacing shall be profiled in the presence of the Engineer using a California Profilograph or equivalent in conformance with California Test 526 and as specified in these special provisions. The California Profilograph or equivalent will not be required for the following areas of the pavement surface but shall conform to the straightedge requirements in Section 39 6.03, "Compacting," of the Standard Specifications:

- A. Pavement with a total thickness less than 0.24 ft (75 mm).
- B. Pavement on horizontal curves with a centerline curve radius of less than 1000 ft (300m) and the pavement within the superelevation transition on those curves.
- C. Pavement placed in a single lift when required by the special provisions.

- D. Pavement with extensive grade or cross slope correction which does not receive advance leveling operations in conformance with the provisions in Section 39-6.02, "Spreading," of the Standard Specifications.
- E. Pavement for ramps and connectors with steep grades and high rates of superelevation, as determined by the Engineer.
- F. Shoulders and miscellaneous areas.

The Contractor shall conform to California Test 526, except a zero (null) blanking band shall be used for determining the Profile Index. Prior to beginning profiles, the profilograph shall be calibrated in the presence of the Engineer. Two profiles shall be obtained within each traffic lane, 3 feet (one meter) from and parallel with the edges of the lane. Pavements profiled shall conform to the following Profile Index requirements:

- A. Pavement on tangent alignment and pavement on horizontal curves having a centerline curve radius of 2000 ft (600 m) or more shall have a Profile Index of 0.16 ft (48 mm) or less for each 330 ft (100 m) section profiled.
- B. Pavement on horizontal curves having a centerline curve radius of 1000 ft (300 m) or more but less than 2000 ft (600 m), including the pavement within the superelevation transition of these curves, shall have a Profile Index of 0.32 ft (96 mm) or less for each 330 ft (100 m) section profiled.
- C. Pavement within any 330 ft (100 m) section, containing high point areas with deviations in excess of 0.025 ft (7.5 mm) in a length of 25 ft (7.5 m) or less, when tested in conformance with the requirements in California Test 526, shall be corrected by the Contractor regardless of the Profile Index.

The Contractor shall complete initial runs of the profilograph prior to opening the pavement to public traffic. Profilograph operations shall be in conformance with the lane closure requirements in Section 6, "Public Safety" of these specifications. If initial profiles cannot be made prior to opening the pavement to public traffic, the initial runs of the profilograph shall be made the next day that traffic control is permitted for the area to be profiled.

Areas of the top surface of the uppermost layer of asphalt concrete pavement that do not meet the specified surface tolerances shall be brought within tolerance by abrasive grinding. Abrasive grinding shall be performed to reduce individual deviations in excess of 0.025 ft (7.5 mm), and to reduce the Profile Index of the pavement to be within the specified tolerance. Areas which have been subjected to abrasive grinding shall receive a seal coat. Deviations in excess of 0.025 ft (7.5 mm) which cannot be brought into specified tolerance by abrasive grinding shall be corrected by either (1) removal and replacement or (2) placing an overlay of asphalt concrete. The corrective method for each area shall be selected by the Contractor and shall be approved by the Engineer prior to beginning the corrective work. Replacement or overlay pavement not meeting the specified tolerances shall be corrected by the methods specified above. Corrective work shall be at the Contractor's expense. The Contractor shall run profilograms on the areas that have received abrasive grinding or corrective work until the final profilograms indicate the Profile Index of the area is within the specified tolerance.

When abrasive grinding is used to bring the top surface of the uppermost layer of asphalt concrete surfacing within the specified surface tolerances, additional abrasive grinding shall be performed as necessary to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from, and parallel with, the nearest lane line or pavement edge, and in each longitudinal direction so that the grinding begins and ends at lines normal to the pavement

centerline, within a ground area. Ground areas shall be neat rectangular areas of uniform surface appearance and shall receive a seal coat prior to acceptance of the work.

The original of the final profilograms that indicate the pavement surface is within the Profile Index specified shall become the property of the State and shall be delivered to the Engineer prior to acceptance of the contract.

**11.04 Underground Installation:** All underground facilities, including laterals, shall be in place and tested prior to paving the street section, including, but not limited to, the following: sewer, water, electric, gas, drainage, communications, cable TV, and irrigation. The Contractor shall provide written verification from the affected utilities of acceptable test results prior to proceeding with paving operations.

**11.05 Seal Coat:** A fog seal coat shall be required on all asphalt concrete surfaces. After fourteen days following placement of the asphalt surfacing the fog seal coat shall be applied at a rate of 0.05 gallon per square yard. Asphalt emulsion shall conform to Sections 37, 39, and 94 of the State Standard Specifications.

**11.06 Asphalt:** Asphalt shall consist of refined petroleum or a mixture of refined liquid asphalt and refined solid asphalt, prepared from crude petroleum. Asphalt shall be:

- A. Free from residues caused by the artificial distillation of coal, coal tar, or paraffin.
- B. Free from water.
- C. Homogeneous.

The Contractor shall furnish asphalt in conformance with the State of California Department of Transportation's "Certification Program for Suppliers of Asphalt." The Department maintains the program requirements, procedures, and a list of approved suppliers at:  
<http://www.dot.ca.gov/hq/esc/Translab/fpmcoc.htm>.

The Contractor shall ensure the safe transportation, storage, use, and disposal of asphalt.

The Contractor shall prevent the formation of carbonized particles caused by overheating asphalt during manufacturing or construction.

The Contractor shall provide a sampling device in the asphalt feed line connecting the plant storage tanks to the asphalt weighing system or spray bar. The sampling device shall be accessible between 2.0 ft (600 mm) and 2.5 ft (750 mm) above the platform. The Contractor shall provide a receptacle for flushing the sampling device.

The sampling device shall include a valve:

- A. With a diameter between 10 mm and 20 mm.
- B. Manufactured in a manner that a one-liter sample may be taken slowly at any time during plant operations.
- C. Maintained in good condition.

The Contractor shall replace failed valves.

In the presence of the Engineer, the Contractor shall take 2 one-liter samples per operating day. The Contractor shall provide round friction top containers with one-liter capacity for storing samples.

Unless otherwise specified, the Contractor shall heat and apply asphalt in conformance with the provisions in Section 93, "Liquid Asphalts." Paving asphalt shall be applied at a temperature between 250°F (120°C) and 375°F (190°C). The Engineer will determine the exact temperature of paving asphalt.



Performance grade paving asphalt shall conform to the testing requirements in the table below:

Performance Graded Asphalt Binder

Property	AASHTO Test Method	Specification Grade		
		PG 64-10	PG 64-16	PG 70-10
Original Binder				
Flash Point, Minimum °C	T48	230	230	230
Solubility, Minimum % <sup>a</sup>	T44	99	99	99
Viscosity at 135°C, <sup>b</sup> Maximum, Pa·s	T316	3.0	3.0	3.0
Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G*/sin(delta), kPa	T315	64 1.00	64 1.00	70 1.00
RTFO Test <sup>d</sup> , Mass Loss, Maximum, %	T240	1.00	1.00	1.00
RTFO Test Aged Binder				
Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G*/sin(delta), kPa	T315	64 2.20	64 2.20	70 2.20
Ductility at 25°C Minimum, cm	T51	75	75	75
PAV <sup>e</sup> Aging, Temperature, °C	R28	100	100	110
RTFO Test and PAV Aged Binder				
Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G*/sin(delta), kPa	T315	31 <sup>c</sup> 5000	28 <sup>c</sup> 5000	34 <sup>c</sup> 5000
Creep Stiffness, Test Temperature, °C Maximum S-value, MPa Minimum M-value	T313	0 300 0.300	-6 300 0.300	0 300 0.300

Notes:

- a. The Engineer will waive this specification if the supplier is a Quality Supplier as defined by the Department's "Certification Program for Suppliers of Asphalt."
- b. The Engineer will waive this specification if the supplier certifies the asphalt binder can be adequately pumped and mixed at temperatures meeting applicable safety standards.
- c. Test the sample at 3°C higher if it fails at the specified test temperature. G\*/sin(delta) shall remain 5000 kPa maximum.
- d. "RTFO Test" means the asphaltic residue obtained using the Rolling Thin Film Oven Test, AASHTO Test Method T240 or ASTM Designation: D 2827.
- e. "PAV" means Pressurized Aging Vessel.

## **12. ROAD-MIXED ASPHALT SURFACING**

**12.01 General:** Road-mixed asphalt surfacing shall consist of mineral aggregate and liquid asphalt, mixed and spread on the roadbed to required width and thickness, and compacted and finished in conformity to the following specifications.

Permission to use road-mixed asphalt surfacing shall be specifically set forth in the Agreement and shall be subject to all conditions contained therein.

**12.02 Road-Mixed Asphalt Surfacing:** Shall conform with the provisions of these subdivision Improvement Standards.

**12.03 Liquid Asphalt (Bituminous Binder):** the grade of liquid asphalt to be used as bituminous binder will be governed by the quality of the aggregate, weather, and anticipated traffic conditions, and will be designated by the Director of Transportation. Ordinarily those grades of high viscosity of the slow or medium curing types shall be used.

The quality of such liquid asphalt shall conform to Section 93 of the Standard Specification for the designation required. Certificates of Compliance will be required from the manufacturer of the material.

**12.04 Mineral Aggregate:** Unless otherwise approved, mineral aggregate shall conform to the following physical characteristics:

- A. COARSE AND FINE AGGREGATES. Material will conform with the provisions of Section 39-2.05A of the Standard Specifications.
- B. GRADATION. Limits as defined for 3/8" maximum size aggregate as shown in Section 39.02 of the Standard Specifications.
- C. TESTS. The mineral aggregate shall conform to all the requirements of Section 39-2.05C of the Standard Specifications; and in addition thereto shall demonstrate no Film Stripping in excess of twenty percent when tested for this property in accordance with Test Method No. Calif 302; or the Water-Asphalt Preferential Test (Standard Specification Division of Highways Edition 1949 Section 6 Article (g)(13). Affinity of the aggregate for water as demonstrated by either of these tests will be considered cause for immediate rejection, or for requiring the inclusion of approved anti-stripping additives to the asphalt binder.

**12.05 Seal Coats:** A medium or medium fine seal coat as elsewhere defined herein will be required over all road-mixed asphalt surfacing.

## **13. SEAL COATS**

**13.01 General:** A seal coat shall conform to Section 37 of the Standard Specifications.

**13.02 Description:** The seal coat shall consist of an application of bituminous binder and stone screenings applied to the surfacing as herein specified.

In general, the seal coat shall consist of high viscosity type asphaltic emulsion applied at the rate of fifteen hundredths (0.15) to twenty-five hundredths (0.25) gallon per square yard of surfacing, and covered with stone screenings spread at the rate of eighteen (18) pounds to twenty-five (25) pounds per square yard. The exact rate of application of the binder and the screenings will be determined at the time of the application by the Engineer.

**13.03 Bituminous Binder:** In general shall be high viscosity asphaltic emulsion of a type specified by the Engineer conforming to the requirements of Section 94 of the Standard Specifications.

#### **14. CONCRETE STRUCTURES**

**14.01 Description:** Concrete bridges, culverts, head walls, catch basins, retaining walls, and all other types of concrete structures shall be constructed to the lines and grades in accordance with the designs shown on the plans. Unless otherwise indicated on the plans, Class 2 Concrete (590 lbs/cuyd) will be used.

**14.02 Concrete Structures:** Portland Cement concrete structures shall conform to the provisions in Section 51 of the Standard Specifications and these Special Provisions.

**14.03 Reinforcement:** Bar reinforcing steel and mesh reinforcement shall conform to the provisions in Section 52 of the Standard Specifications.

**14.04 Air-Blown Mortar:** Air-blown mortar shall conform to the provisions in Section 53 of the Standard Specifications.

**14.05 Precast Concrete Structures:** Precast concrete catch basins and drop inlets shall conform to the provisions in Section 70 of the Standard Specifications.

#### **15. CULVERT PIPE**

**15.01 General:** The type, strength, classification or gauge of drainage pipe to be furnished and installed will be designated on the plans. Details of the materials and work will conform to the Standard Specifications and Caltrans Highway Design Manual Guidelines, latest editions.

**15.02 Design Service Life:** All drainage facility material types shall have a minimum design service life of 50 years. All metal pipes shall be subject to the requirements of the Caltrans Chart for 50 years Maintenance Free Service Life as contained in the Caltrans Design Manual. Soil tests using Caltrans Test Method 643 shall be provided to determine the pH and resistivity levels of the native soils and imported backfill materials.

**15.03 Alternate Materials:** When two or more materials meet the service life, the structural requirements, and the hydraulic requirements; the plans and specifications may provide for alternative pipe materials for optional selection by the contractor. Allowable pipe materials are:

- Aluminum Spiral Rib
- Cast-in-Place Concrete
- Corrugated Aluminum
- Corrugated Steel
- Plastic Pipe (HDPE)
- Reinforced Concrete
- Structural Aluminum Plate
- Structural Steel Plate
- Steel Spiral Rib

When alterations or extensions of existing systems are required, the pipe material type may be selected to match the type used in the existing system.

Each pipe material type selected as an alternative must have the appropriate protection from deterioration from corrosion, abrasion, or both. Corrosion may result from active elements in the soil, the water, and the atmosphere. Abrasion depends upon the frequency, duration, and the velocity of flow, and the character and amount of bedload.

Utilization of alternate pipe materials shall be evaluated by the Director of Transportation or his designee. Approval of alternative pipe materials not shown on the approved plans shall only be granted on a site by site basis.

**15.04 Protective Coatings and Linings:** Protective coatings for corrugated metal pipe shall conform to Section 66 of the Standard Specifications.

Plastic (asphalt mastic or polymeric) coatings are acceptable coatings for non-abrasive flow conditions on the inside of the pipe.

Paved invert lining shall be applied on all metal storm drain facilities. Invert lining may be required for metal pipes subject to excessive wear from abrasive flows. All lining material shall conform to the Standard Specifications.

**15.05 Strength Requirements:** The strength requirements for metal pipe fabricated under acceptable methods contained in the Standard Specifications shall be governed by charts published by Caltrans and contained within their Design Manual. The minimum metal thickness for any pipe located within the roadway prism shall be 14 gauge.

**15.06 Aluminum Pipe Materials:** The use of aluminum pipe or plates shall be limited to the acceptable levels for pH, resistivity, and flow velocities. The pH level of soil, backfill, and effluent shall range within 5.5 and 8.5, inclusive. The minimum resistivity of the soil, backfill, and effluent shall be 1500 ohm-cm.

Extra metal thickness for aluminum pipes may be required when flow velocities exceed 5fps. Flow velocities shall not exceed 20 feet per second.

**15.07 Cast In Place Concrete Pipe:** Cast in place concrete pipe shall conform to the Special Specifications prepared and published by the Riverside County Transportation Department and Riverside County Flood Control and Water Conservation District.

**15.08 Reinforced Concrete Pipe (round or oval):** Reinforced Concrete Pipe shall conform to the provisions in Section 65 of the Standard Specifications and Caltrans Standard Plans.

**15.09 Plastic Pipe:** Plastic Pipe shall conform to the provisions in Section 64 of the Standard Specifications, except as otherwise specified in these specifications.

Plastic Pipe shall be corrugated polyethylene pipe with smooth interior wall manufactured from high density polyethylene (HDPE) virgin compounds.

Installation shall be in accordance with the Standard Specifications and as recommended by the pipe manufacturer with the exception that the backfill shall conform to ASTM 2321 (latest edition) Class II or III and that:

- 1) The initial backfill plus soil cover the pipe shall not be less than 2 feet.
- 2) The initial backfill over the pipe shall be a minimum of 12 inches and in accordance with ASTM Class II.

Metallic core or metallic-faced polyethylene plastic warning tape manufactured specifically for warning and identification of buried utility lines shall be installed at 12 inches above the top of pipe continuously and unbroken. The metallic warning tape shall be at a minimum of 3 inch in width, color coded for the intended use with warning and identification imprinted in bold black letters continuously over the entire tape length. Warning and identification to read, "CAUTION, BURIED (intended service) LINE BELOW" or similar wording. Provide permanent color and printing, unaffected by moisture or soil.

Pipe shall be joined using a bell and spigot gasketed joint. Gaskets shall be in accordance with the Standard Specifications and shall be installed by the pipe manufacturer.

Fittings shall be in conformance with the Standard Specifications and as recommended by the pipe manufacturer.

## **16. CONCRETE CURB AND GUTTER AND SIDEWALK**

- 16.01 Concrete Curbs and Sidewalks, etc.:** Portland Cement concrete curbs, sidewalks, local depressions, ramps, cross-gutters, spandrels, island paving, and driveways shall conform to the provisions in Section 73 of the Standard Specifications and these Special Provisions. Unless otherwise indicated on the plans, Class 3 Concrete (550 lbs/cuyd) will be used.
- 16.02 Joints:** Expansion joints shall be 1/2" wide.
- 16.03 Expansive Soil:** Attention is directed to the requirements of providing Class III Aggregate Base material under curb and sidewalks in those areas where the soils report indicate the presence of expansive soils.
- 16.04 High Sulfate Soil:** High Sulfate soils are defined as those soils where the Water-Soluble Sulfate in soil is greater than 0.10 percent. For soils with high sulfate content, use the following table to determine actual cement content and requirements for concrete work. Attention is directed to the requirements of providing Class III Aggregate Base material under curb and sidewalks in those areas where the soils report indicate the Water-Soluble Sulfate is greater than 0.20 percent.

Degree of Sulfate Attack	Water-Soluble Sulfate (as SO <sub>4</sub> ) in Soil Samples (%)	P.p.m. Sulfate (as SO <sub>4</sub> ) in Water Samples	Cement Type	Cement Content Lbs/Cuyd	Aggregate Base Required
Negligible	0.00 to 0.10	0 to 150	II	550	No
Positive	0.10 to 0.20	150 to 1000	II	590	No
Considerable	0.20 to 0.50	1000 to 2000	V	675	Yes*
Severe	Over 0.50	Over 2000	V	715	Yes*

\* 6 mil plastic sheeting to be placed under aggregate base for flatwork and curb and gutter.

- 16.05 Compaction:** Relative compaction of Subgrade shall not be less than 90% for placement of Portland Cement concrete. Relative compaction of Subgrade for curb and gutter, spandrels, local depressions and cross-gutters shall be 95%.
- 16.06 Multiple Mailbox Installation for New or Existing Sidewalk:** Sidewalk and mailbox foundation shall conform to Standard No. 812 or No. 813, whichever applies. Specifications to be furnished by the Postmaster.

## 17. SEWERS

**17.01 Description:** The sanitary sewers for the subdivision shall be constructed in accordance with the plans as approved by the Director of Transportation and the Health Department. All plans shall be signed by a registered civil engineer under whose direction the plans and specifications were prepared. Approval of the operating agency or District shall also be provided.

This section is for the purpose of defining the minimum requirements for the construction of sanitary sewers and is not intended to prohibit the use of any material and methods of construction not specified herein, provided such alternate is approved by the Health Department. In those cases in which utility companies have specified construction standards pertaining to their utility, standards of the utility company shall be accepted in lieu of the County standards specified herein, excepting trench compaction and pavement restoration in County roads.

**17.02 Scope of Work:** The work under this section shall include all work required to complete the construction and testing of all facilities necessary for the satisfactory operation and protection of the system as shown on the plans.

**17.03 Sewer Pipe:** All sizes of sewer pipe shall conform to the applicable requirements of Section 207 of the "Greenbook", Standard Specifications for Public Works Construction, latest revision. All lining of pipe shall be in accordance with the requirements of the supervising agency and shall be approved by the Director of Transportation and the Riverside County Health Department. Plastic pipe shall conform to ASTM D-3034

**17.04 Installation:** The installation of on-site main lines and outfalls shall be within the dedicated road right-of-way except where easements are necessary to provide a gravity flow system, and shall be in accordance with requirements and standards of the County of Riverside.

**17.05 Manholes and Structures:** All manholes and structures, either precast or built up, to be installed within the roadway, shall be designed for a minimum AASHTO H-20 highway loading and shall conform to the requirements of the Improvement Standards and to Section 70-1.02H of the Standard Specifications and Section 302-5.8 of the "Greenbook", Standard Specifications for Public Works Construction.

**17.06 Sewer Connections:** Unless otherwise permitted by the Director of Transportation and Health Department, sewer connections shall be laid in straight lines from the main sewers to a point beyond the curb or to the property line at the time of the laying of the mains in accordance with the approved sewer plans or Improvement Standards.

The contractor shall place "Y" branches of the size and in the positions shown on the approved plans, and the house connection lines shall be placed to the lines and grades shown thereon. Connections to be stubbed off shall be closed at their outer end with an approved stopper and cement grout.

**17.07 Testing of Sewers:** After completion of construction of sewers and manholes, the system shall be tested in accordance with the requirements of the sewer purveyor.

**17.08 Separation of Water Mains and Sanitary Sewers:** Water mains and sanitary sewers shall conform to the criteria as outlined and illustrated in the State of California, Department of Health Services publication "Criteria for the Separation of Water Mains and Sanitary Sewers", latest edition; and the "California Waterworks Standards", Section 64630, Title 22, California Administrative Code.

**17.09 Backfill Requirements:** Pipe backfill shall be placed in accordance with the Standard Specifications for Public Works Construction Section 306-1.3, Backfill and Densification. The Contractor/Utility Owner

shall provide a written report of trench compaction results signed by an Engineer registered in the State of California and competent in the Geotechnical Engineering field along with copies of the daily testing reports prior to paving operations taking place. Testing frequency shall be a minimum of one relative compaction test for every two foot of depth of trench per 200 foot of trench. (example: 1600 foot trench 6 foot deep will have a minimum of 24 relative compaction tests) The testing frequency of laterals shall be one out of every two, alternating between long and short.

## **18. WATER PIPELINES**

**18.01 Description:** The water supply system for the subdivision shall be constructed in accordance with the plans as approved by the Director of Transportation and Health Department. All plans shall be signed by a registered civil engineer under whose direction the plans and specifications were prepared and shall bear evidence of approval of the operating agency or District.

This section is for the purpose of defining the minimum requirements for the construction of water supply and distribution systems and is not intended to prevent the use of any material or method of construction not specified herein, provided such alternate is approved by the Director of Transportation and Health Department. Water facilities shall be designed and constructed in accordance with applicable requirements of either the California Section of AWWA or the Public Utilities Commission. In those in which utility companies have specific construction standards pertaining to their utility, standards of the utility companies shall be accepted in lieu of the County Standards specified herein, excepting trench compaction and pavement restoration in County roads.

**18.02 Scope of Work:** The work under this section shall include all work required to complete the construction and testing of all facilities necessary for the satisfactory operation and protection of the system as shown on the plans.

**18.03 Materials:** All materials shall be of the sizes and classes as shown on the approved plans, and shall conform to the latest revision of the following specifications and standards. All materials shall be new, unless specifically approved by both County agencies involved.

- A. CAST IRON PIPE. Shall conform to AWWA C102, AWWA C106, AWWA C108.
- B. CEMENT-ASBESTOS PIPE. Shall conform to AWWA C400, with the selection of Class of pipe based on AWWA Manual H2.
- C. STEEL PIPE. Shall conform to AWWA C201, AWWA C202, or Federal Specification SS-P-385.
- D. CONCRETE PIPE. Shall conform to AWWA C300, AWWA C301, or Federal Specifications SS-P-381.
- E. PLASTIC PIPE. Shall conform to AWWA C900.
- F. LININGS AND COATING. Minimum protective coating shall be asphalt dipped and asphalt felt wrapped. All coal-tar and cement mortar linings and coatings so designated on the plans or stated in the specifications shall conform to AWWA C104, AWWA C203, or AWWA C205, whichever is applicable. Asphalt mastic coatings shall conform to Specifications M-2 (CS-96) of the Asphalt Institute.

G. **FITTINGS AND SPECIALS.** Shall conform to the applicable sections of AWWA C100, AWWA C110, AWWA C207, AWWA C208, or other approved standard or specification under which the fitting or special is made.

**18.04 Installation:** The installation of on-site pipelines shall be within the road right-of-way of County roads except where easements are necessary to provide a circulating system, and shall be in accordance with the requirements and standards of the County of Riverside.

Trenching, installation, and backfilling shall be in accordance with the applicable requirements of Riverside County, and the recommendations of the pipe manufacturer.

**18.05 Backfill Requirements:** Pipe backfill shall be placed in accordance with the Standard Specifications for Public Works Construction Section 306-1.3, Backfill and Densification. The Contractor/Utility Owner shall provide a written report of trench compaction results signed by an Engineer registered in the State of California and competent in the Geotechnical Engineering field along with copies of the daily testing reports prior to paving operations taking place. Testing frequency shall be a minimum of one relative compaction test for every two foot of depth of trench per 200 foot of trench. (example: 1600 foot trench 6 foot deep will have a minimum of 24 relative compaction tests) The testing frequency of laterals shall be one out of every two, alternating between long and short.

**18.06 Structures:** Any structures necessary for the completion of the water supply system shall be constructed in conformity with the plans and in accordance with applicable provisions of these standards. Concrete structures shall be constructed of Class "2" Portland Cement Concrete.

**18.07 Fire Hydrants:** Unless specifically excepted in the agreement, all water systems shall include fire hydrants installed in conformance with the subdivision improvement standards and at locations shown on the plans.

**18.08 Valve Casings:** All valve stems shall be cased and provided with removable covers in accordance with the subdivision improvements standards. When located in a paved area, cover shall be flush with surfacing. Covers are to be set to the finished surface grade at the time asphalt concrete is placed.

**18.09 Hydrostatic Test and Disinfection of System:** After completion of the connections, the system shall be tested by the admission of water under not less than the full working pressure of the lines. All joints, valves, connections, and fittings shall then be visually inspected for leakage, or the pipe lines backfilled and a leakage tests made to determine the rate of leakage. The allowable rate of leakage shall not exceed 25 gallons per 24 hours per inch of diameter per mile of pipe. All leaks shall be repaired to the satisfaction of the Engineer.

Disinfection of the lines may be accomplished at this time by the inclusion of the disinfection solution to the water used for the test. All lines shall be flushed and disinfected in accordance with AWWA C601 prior to acceptance of the system. Lines shall be thoroughly flushed after treatment with disinfectant prior to being place in service.

## **19. UNDERGROUND UTILITY INSTALLATION**

**19.01 General:** All new utility lines, including but not limited to, electrical service, communications and street lights will be placed underground. The subdivider shall make the necessary arrangements with the serving utilities for the installation of such facilities. Surface mounted transformers, pedestal mounted terminal boxes and meter cabinets, ducts, street lighting, signal control cabinets, and other associated equipment in an underground utility system may be placed above ground in accordance with the



standards and specifications herein and the requirements of a County Encroachment Permit. The Director of Transportation may waive any of the above requirements if topographical, soil, or any other conditions make such underground installations unreasonable or impractical.

All overhead communications conductors, and all overhead electrical distribution conductors, which exist on road and easement frontage to be improved by any land division and commercial development, which is subject to discretionary approval by the County of Riverside, shall be relocated to an underground location, except as follows:

- A. For overhead electrical circuits which exceed 34 Kilovolts.
- B. For distribution overhead communication and electrical circuits which are installed solely for the purposed of providing service to the land division / development, and which are installed on roadways or easements which are not fully improved in accordance with Ordinance no. 461. The portion(s) of such circuits which are adjacent to the land division / development, and which are on roadways that are fully improved in accordance with Ordinance no. 461 shall be placed in an underground location in conformance with Ordinance no. 461.
- C. For the under-grounding of overhead frontage conductors in any land improvement case that has frontage improvements of less than 300 feet in length.

**19.02 Underground Installations:** All underground facilities, including laterals, shall be in place and tested prior to paving the street section, including, but not limited to, the following: sewer, water, electric, gas, drainage, communications, cable TV, and irrigation. The Contractor shall provide written verification from the affected utilities of acceptable test results prior to proceeding with paving operations. If more than one cable TV company serves an area, cables for all TV companies shall be installed prior to paving the street section or underground ducts shall be provided by the developer at all street intersections to provide for the future installation of TV cables in accordance with Standard No. 819 of this Ordinance.

## **20. STREET NAME SIGNS**

**20.01 General:** Street name signs shall consist of two double-face signs showing street name only (no house numbers) mounted at right angles, with provision for a center rod assembly. Each double-faced sign shall be precision stamped and so fabricated that when assembled, it provides a box type sign.

### **20.02 Name Sign Plates:**

- A. **SIZE.** Length either 24", 30", or 48". Width 6" or 9". Box section 1" depth.
- B. **MATERIAL.** Sign shall be anodized aluminum extrusion of 6063T-4 alloy material with average coating thickness of 0.0008 inches and green finish to match lettering background.
- C. **FINISH.** Reflective - Sign faces shall be of reflective sheeting of super engineering grade. Application of the reflective material to the sign shall be by methods as approved by the reflective sheeting manufacturer.
- D. **LETTERING.** Street names to be 4" high or 6" high as required by std. No. 816 or std. No. 815, respectively. Each name is to be individually laid out and stenciled to fit either the 24", 30", or 48" space. The rounded letter to be used is the standard alphabet for highway signs designed by the Federal Highway Administration and approved by the American Association of State Highway Officials and Institute of Transportation Engineers.

E. COLOR. Interstate green background with white lettering.

- 20.03 Bracket Assembly:** The post cap, ornament, and center rod assembly shall mount on 2" I.D. Pipe. The center rod shall be hot-dipped galvanized carriage bolt. Head of bolt shall form top of ornament. Bolt extends through signs and fastens with nut inside post cap. Post cap shall be cast anodized aluminum, deeply grooved to securely hold sign from twisting, and shall be secured to the pipe with three 3/8" allen head stainless set screws. Saddle and top ornament shall be 14 ga. anodized aluminum. Side arm brackets of cast aluminum in place of post or cap and center mount assembly for individual mounting of electroliers.
- 20.04 Posts:** All posts shall be 2" I.D. Standard wall thickness pipe, 12' - 0" long, galvanized and provided with 1/2" x 8" anchor rods 3" from bottom. All posts shall be set in concrete as shown on the Improvement Standards.
- 20.05 Locations:** Minimum one complete sign assembly per intersection when paved or curbed width of all intersecting streets is 40 feet or less (see Standard 816). Two complete sign assemblies will be required at each intersection when any intersecting street is greater than 40 feet in width as before defined (see Standard 815) . When two sign units are placed that they be on diagonally opposite corners, so that they will be on the far right hand side of the intersection for traffic on the major/through street.

## **21. MONUMENTS**

- 21.01 General Requirements:** The subdivision boundaries, lot corners, road, street, highway centerline, angle points in all lines, beginning and end of all curved lines, shall be monumented in accordance with the hereinafter described standard monuments and procedures. Any monument having characteristics other than the hereinafter described may be used only upon written approval of the County Surveyor. If an existing record and identified monument is found on the ground at the location of a subdivision corner, this monument may be used in lieu of replacement with a new monument provided the existing monument is a type considered to be durable.
- 21.02 Standard "A" Monuments:** This monument is to be one inch (inside diameter) iron pipe eighteen (18") inches long. A metal disc or plastic plug bearing the registered civil engineer or land surveyor number shall be securely affixed to the top of the pipe. The top surface of the monument shall be flush with natural ground, flush with surface in paved streets and twelve (12") inches down in unpaved streets.
- 21.03 Standard "B" Monuments:** This monument is to be an eighteen (18") inch long copper clad steel pin to which is secured at one end a one and one-half (1-1/2") inch conical brass cap. The monument may be used as an alternate to the type "A" monument to mark centerline control on streets. The monument is to be driven flush with the street pavement. After setting the monument, the Registered Civil Engineer or Land Surveyor number shall be stamped into the surface of the brass cap. Modification of the above standard may be approved by the County Surveyor. See Standard drawing numbers 900 and 901 for further information.
- 21.04 Standard "C" Monuments:** This monument to consist of a 2" x 2" x 18" long redwood stake cut from clear heartwood firmly set in the ground. The exact point of intersection of the lines shall be marked on the top center of the stake by a suitable tack or nail, which in turn shall be used to secure to the stake the metal disk bearing the Registered Civil Engineer or Land Surveyor Number. A 1/2" rebar, 18" long

with appropriately stamped plastic cap may be used in place of a redwood stake. See monument schedule for use of this monument.

**21.05 Standard "D" Monuments:** This monument to consist of a 3/4" inside diameter x 18" long galvanized iron pipe, driven to a point not to exceed 1" above the natural ground surface. The exact point of intersection of the lines shall be marked on the top center of the pipe by a suitable tack or nail, which in turn shall be used to secure to the pipe the metal disk bearing the Registered Civil Engineer or Land Surveyor Number of plastic plug with RCE or LS number with mark for exact point. See monument schedule for use of this monument.

**21.06 Standard "E" Monuments:** This monument to consist of lead plug or steel pin with metal identification disk set in concrete curb. See monument schedule for use of this monument.

**21.07 Monument Schedule:**

STANDARD	USE OF MONUMENT	REMARKS
"A"	Tract boundary control, street centerline control-unpaved and paved.	As specified by the County Surveyor
"B"	Street centerline control.	May be used in lieu of Type "A" monument in paved streets.
"C"	Lot corner, angle point in lot line, E. C. and B. C. lot line, and right-of-way line.	
"D"	Same as "C"	
"E"	Same as "D"	All lot corner monuments except when lot corner is coincident with boundary corner may be set in the top of the curb on the prolongation of the lot line. In the event improvements in a subdivision include a block wall along the rear lot lines, a Standard "E" monument may be set on both sides of the block wall to indicate direction of the side lot lines. Such points shall be noted on the final map as "points on line".

**21.08 Monument Ties:** Upon completion of the tract monumentation, the engineer or licensed Surveyor shall furnish to the County Surveyor ties to all street centerline monuments. Such ties are to be permanent physical objects, there being not less than three and preferably four ties to each monument.

Whenever curb-and-gutter is installed, street centerline monuments are to be tied to permanent points set in the curb, these permanent points to consist of either of the following: lead and tack (L&T) or steel pin driven into the concrete. Use of a cross cut in the concrete will not be acceptable. Cross over ties are preferred when made with transit and tape. The ties furnished to the County Surveyor are to be prepared on 8-1/2" x 11" sheets of the tracing paper. Sketch to be clear and legible and spaced to avoid confusion or misinterpretation.

## 22. STREET LIGHTING

**22.01 General:** Street and highway lighting shall conform with the provisions of this section and be furnished, funded and installed by the developer or his agent.

**22.02 Specifications and Materials:** Materials and work shall conform with or exceed the requirements of the "American National Standard Practice for Roadway Lighting" approved June 27, 2000 prepared by the IESNA ( Illuminating Engineering Society of North America), American National Standards Institute; the National Electrical Code; the Electrical Safety Orders of the Division of Industrial Safety, Department of Industrial Safety, State of California; and shall conform to approved standards and procedures of the local servicing utility.

In addition to the foregoing, all street lighting shall conform with the following special provisions:

- A. Street lights shall be installed at all intersections and at a minimum of one street light for each 200 lineal feet of roadway, plus or minus 20 feet.
- B. Street lights shall be placed at lot lines wherever practical.
- C. At intersections, street lights should be placed near the curb return at a far right approach.
- D. Luminaires shall be full cut off, high pressure sodium type, unless the project is located within a 30-mile radius of Mt. Palomar Observatory. If the project is located within a 30-mile radius of Mt. Palomar Observatory, the luminaires shall be low pressure sodium type; as required by Board Resolution No. 84-77 and these specifications.

NOTE: For private lighting restrictions within 45-mile radius of Mt. Palomar Observatory, see latest County Ordinance regulating light pollution.

- E. Lighting shall be designed and installed in accordance with the following Street Light Specification Chart.

### STREET LIGHT SPECIFICATION CHART (STANDARD LIGHTING INSTALLATION)

ROADWAY WIDTH (CURB TO CURB)	<i>WATTAGE    TYPE    LUMENS    MOUNTING HT.</i>			
58 feet or greater	200	HPS*	22000	31ft. ± 1 ft.
Less than 58 feet	100	HPS*	9500	26 ft. ± 1 ft.

\* HPS = High Pressure Sodium