

Instructions to Contractors (Emergency Work)

In compliance with the Americans with Disabilities Act, persons with disabilities may request reasonable accommodations (including auxiliary aids and services at no cost) to participate in Emergency Work by contacting Contracts/Bidding Unit at 951-955-6780 or jjimenez@rivco.org at least 3 business days before the scheduled submittal date of Emergency Work cost estimate.

In compliance with Title II of the Americans with Disabilities Act (ADA), the County of Riverside does not discriminate on the basis of disability in admission to, access to, or operations of its programs, services or activities. It is committed to ensuring that its programs, services and activities are fully accessible to and usable by people with disabilities.

To accommodate persons with disabilities, this Contract Document and Special Provision Book is available in alternate formats upon request.

1. Inspection of Site

Contractor's attention is directed to Standard Specifications Section 2-1.07, "Job Site and Document Examination". Contractors must examine the site and acquaint themselves with all conditions affecting the work. By making and submitting a cost estimate, a Contractor warrants that he has made such site examination as the Contractor deems necessary for the condition of the site, its accessibility for materials, workmen and utilities, and for the ability to protect existing surface and subsurface improvements. No claim for allowances, time or money, will be allowed as to such matters.

2. License

Contractor must have the necessary license(s) required under provisions of the California Business and Professions Code for the scope of work covered in the Contract Documents at the time of cost estimate submission. This includes Joint Ventures.

Each item of work will be performed by a Contractor that is qualified and properly licensed for that work.

Pursuant to California Labor Code §3099, certification is required for all persons who perform work as electricians for Contractors licensed as Class C10 "Electrical Contractor". Proof of certification must be provided to the County before the start of construction.

3. Contract Participation

County encourages general and prime Contractors to solicit competitive subcontracting, trucking and supplier opportunities to minority, women, disabled veteran, and small business firms where possible, in their contracting and procurement activities with the County.

Section 3-1.08, "Small Business Participation Report", of the Standard Specifications is deleted.

4. Subletting, Subcontracting, and Subcontractor List

General

Attention is directed to General Conditions Section 12, "Subcontracting".

Pursuant to Public Contract Code § 4100 et seq., "Subletting and Subcontracting Fair Practices Act", Contractors are required to list each subcontractor who will perform work, provide labor, or render services in or about the construction of work or improvement or a subcontractor who specifically fabricates and installs a portion of the work or improvement according to the details contained in the Plans and Specifications. The Subletting and Subcontracting Fair Practice Act applies to all phases of the work.

Subcontractor List

The Contractor must submit a Subcontractor List when subcontracting is utilized. Subcontractor List must be on the form contained in the Specifications and Contract Documents.

Section 2-1.10, "Subcontractor List" of the Standard Specifications is deleted and replaced with the following:

Contractor must list each subcontractor to perform work, labor or render service in or about the construction in an amount in excess of 1/2 of 1 percent of the total Contract amount or \$10,000, whichever is greater (Public Contract Code § 4100 et seq.).

Pursuant to Public Contract Code § 6109 et seq., the Contractor shall not perform work on a project with a subcontractor who is ineligible to perform work on the project pursuant to Labor Code § 1777.1 or 1777.7.

The Subcontractor List must show the business name, business address, license number, DIR registration number and work portions to be performed by each subcontractor listed. Work portions must be identified by description for each subcontractor listed. The percentage of work to be performed by all listed subcontractors must be written on the bottom of the Subcontractor List form.

An inadvertent error in listing the license number will be processed as required by Public Contract Code § 4104 (a) (2). If partial work is to be performed within a certain construction item or trade, the Contractor shall specify the portions of the work to be performed by the different subcontractors or the directive under Public Contract Code § 4106 shall apply.

Each designated item of work will be performed by a Contractor who is qualified and properly licensed for that listed item of work.

Omission or failure to list a subcontractor for a portion of the work means that the prime Contractor will do that portion of the work (Public Contract Code § 4106).

The County may request additional information to verify submitted Subcontractor List information and for total and/or individual subcontracted percentage amounts. Contractor must provide this information within three (3) business days after the cost estimate submittal due date.

Penalties

The Contractor's attention is directed to other provisions of the Subletting and Subcontracting Fair Practices Act related to the imposition of penalties for failure to observe its provisions by utilizing unauthorized subcontractors or by making unauthorized substitutions.

Clerical error

After the cost estimate submission and prior to award of Contract, inadvertent subcontractor designation clerical error(s) will be processed as required by Public Contract Code § 4107.5 and as required by Labor Code § 1771.1 (c) for subcontractors who are not registered with the DIR.

5. Registration with the Department of Industrial Relations (DIR)

Attention is directed to:

- General Conditions Section 8, "Labor Code"

No Contractor may submit a cost estimate nor a subcontractor be listed on a cost estimate (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code § 1725.5 or excepted from this requirement for bid purposes only under Labor Code § 1771.1(a).

No Contractor or subcontractor may be awarded a Contract (awarded on or after April 1, 2015) or perform work on any contract for public work unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the DIR.

6. Hours of Work

Attention is directed to Section 8-1.05, "Time" and Section 7-1.02K(5), "Working Hours" of the Standard Specifications.

Daily working hours will be between the hours of **7:00 a.m. and 6:00 p.m.**, Monday through Friday, except legal holidays, or as revised in the Special Provisions, and as approved by the Engineer. Exceptions and specific work schedules must be submitted in writing to the Engineer for consideration.

7. Contract Documents

The complete Contract Documents are identified in the Contract. Contractors are cautioned that the successful Contractor incurs duties and obligations under all of the Contract Documents and that they should not merely skim and hastily review the Plans and Specifications (if any) in making their cost estimate.

8. Qualifications of Contractors

No award will be made to any Contractor who cannot give satisfactory assurance to the Board of Supervisors as to his own ability to carry out the Contract, both from his financial standing and by reason of his previous experience as a Contractor on work of the nature contemplated in the Contract. The Contractor may be required to submit his record of work of similar nature to that proposed under these specifications and unfamiliarity with the type of work may be sufficient cause for rejection of cost estimate.

9. Award of Contract

The Contractor's attention is directed to the provisions in these Instructions to Contractors for the requirements and conditions concerning award and execution of Contract.

Section 3-1.04, "Contract Award" of the Standard Specifications is deleted.

The Emergency Contract can be executed in accordance with authority that the Board has delegated to the Director of Transportation by Resolution No. 93-047, now as adopted by Resolution No. 2019-035 (January 29, 2019; agenda item 3.24), and has been approved as to legal form by County Counsel.

Resolution No. 93-047, adopted March 30, 1993, which states that emergency contracts to safe guard life, health or property can be authorized by the Director of Transportation. The resolution requires that the Director of Transportation report back to the Board in a public meeting after executing the Contract.

This work is being performed in accordance with the Force Account provisions of the Standard Specifications and as detailed in the Contract.

10. Payment and Performance Bonds

The County requires a 100% Payment Bond and 100% Performance Bond from the successful Contractor. All bonds must be on County's forms contained in the Contract Document and Special Provision Book.

The bonds must be underwritten by a Surety Company, which is admitted to transact the business of insurance in the State of California, and which carries a rating in the current issue of Best's Insurance Guide of "A" or better with a financial size of at least "VIII". The bond forms included in the Contract Document and Special Provision Book must be used. All signatures on the bonds must be notarized. Bonds must be provided with an executed Power of Attorney issued by the Surety.

11. Submission of Insurance Certificate and Endorsements

Attention is directed General Conditions Section 4 "Insurance and Hold Harmless."

Within five (5) working days of the date of the Notice to Proceed issued by the County and prior to the commencement of work, the successful Contractor must submit a certificate of insurance, including required endorsements, which provides evidence that the Contractor has insurance coverage that meets the requirements of General Conditions "Insurance and Hold Harmless" section. Failure to have complete insurance coverage in place and to provide all required certificates and endorsements within the specified five (5) business day period will be grounds to declare the Contractor as non-compliant with the Contract Documents, rescinding the Notice of Acceptance and awarding to the second low bidding Contractor, at the sole discretion of the County.

Subcontractor List

Bidder/Contractor submits the following complete list of each Subcontractor who will perform work, labor or render service in or about the construction in an amount in excess of 1/2 of 1% of the total bid or \$10,000 whichever is greater.

Check box on right side of row if any construction item, for the listed Subcontractor, is partial work. If partial work is to be performed within a certain construction item or trade, the Bidder/Contractor shall specify the portion(s) of the work to be performed by the different subcontractors or Bidder/Contractor will be subject to provisions of Public Contract Code Section 4106.

Name of Bidder (Prime/General Contractor): _____

	Subcontractor Name	License Number	DIR Registration Number	Business Address (City, State)	Construction Item(s) [Item Number and Description]	Check if Partial Work
1.						<input type="checkbox"/>
2.						<input type="checkbox"/>
3.						<input type="checkbox"/>
4.						<input type="checkbox"/>
5.						<input type="checkbox"/>
6.						<input type="checkbox"/>

Additional Subcontractor List(s) may be attached to the Bid.
(A copy of this form may be attached with additional Subcontractor information.)

Percent of work to be performed by Subcontractors: _____%

Note: A minimum of 50% of the work is required to be performed by the prime/general Contractor.

Contract

THIS CONTRACT is entered into at Riverside, California as of the date set forth below is between County of Riverside hereafter called "County" and **Matich Corporation**, hereafter called "Contractor".

WITNESSETH

Recitals:

1. Contractor has submitted to County his Contractor's Proposal for the construction of County Project, **Emergency Storm Damage Repair Work, Whitewater Canyon Road, Culvert Crossing and Washout, North of City of Palm Springs, Project No. 45-19180101**, in strict accordance with the Contract Documents identified below and County has accepted said Proposal.
2. Contractor states that he has reexamined his Contractor's Proposal and found it to be correct, has ascertained that his subcontractors are properly licensed and possess the requisite skill and forces, has reexamined the site and Contract Documents and is of the opinion that he can presently do the work in accordance with the Contract Documents for the money set forth in his Proposal to be paid as provided in the Contract Documents.

Agreement:

It is agreed by the parties as follows:

1. Contract Documents

The entire Contract consists of the following: (a) The Construction Contract, ~~(b) The Notice to Bidders~~, (c) The Instruction to Contractors Bidders, (d) The Bid, ~~(e) The Bid Bond~~, (f) The Payment Bond, (g) The Performance Bond, (h) The General Conditions, (i) The Special Provisions, (j) The Standard Specifications of the State of California Department of Transportation edition of **2015** as modified in other portions of the Contract Documents and as amended by the State of California Department of Transportation, (k) The Standard Plans of the Department of Transportation identified on the plans or in the Special Provisions, (l) The Plans, ~~(m) Addenda~~ _____, (n) The Determination of Prevailing Wage Rates for Public Works, (o) Any Change Orders issued, and (p) Any additional or supplemental specifications, notice, instructions and drawings issued in accordance with the provisions of the Contract Documents. All of said Documents presently in existence are by this reference incorporated herein with like effect as if here set forth in full and upon the proper issuance of other documents they shall likewise be deemed incorporated. The Bid Bond is exonerated upon execution of this Contract and the Payment Bond and Performance Bond.

2. The Work

Contractor shall do all emergency repairs necessary to construct the work generally described in Recital No. 1 and Special Provisions in accordance with the Contract Documents.

3. Prosecution, Progress and Liquidated Damages

Attention is directed to the provisions in Section 8-1.04, "Start of Job Site Activities", Section 8-1.05, "Time", and in Section 8-1.10 "Liquidated Damages" of the Standard Specifications and these Special Provisions.

Standard Specification Section 8-1.04B, "Standard Start" is modified to read as follows:

The Contractor shall begin work within **two (2) calendar days**, or as revised in the Special Provisions, of the date stated within the written "Notice to Proceed".

The Contractor shall notify the Engineer, in writing, of the Contractor's intent to begin work **at least 24 hours before work** is begun. If the project has more than one (1) location of work, Contractor shall submit a separate notice for each location. The notice shall be delivered to the Transportation Department's Construction Engineer and shall specify the date the Contractor intends to start at said location.

Should the Contractor begin work in advance of receiving a written "Notice to Proceed", any work performed by the Contractor in advance of the date stated in the "Notice to Proceed" shall be considered as having been done by the Contractor at his own risk and as a volunteer and subject to the following:

- A. The Contractor shall, on commencing operations, take all precautions required for public safety and shall observe all the provisions in the Specifications and the Special Provisions.
- B. All work done according to the Contract, prior to the issuance of the "Notice to Proceed", will be considered authorized work and will be paid for as provided in the contract.
- C. The Contractor shall not be entitled to any additional compensation or an extension of time for any delay, hindrance or interference caused by or attributable to commencement of work prior to the issuance of the "Notice to Proceed".

4. Compensation

The Contractor agrees to receive and accept payment, on a force-account basis, as full compensation for furnishing all materials and for doing all the work contemplated and embraced in this Contract, until its acceptance by the County of Riverside, and for well and faithfully completing the work, and the whole there of, in the manner according to ~~the plans and specifications~~, and the requirements of the Engineer.

The estimated cost for this project, prior to commencement of work, is **\$1,500,000.00.**

**Emergency Storm Damage Repair Work
Whitewater Canyon Road
Culvert Crossing and Washout
North of City of Palm Springs
Project No. 45-19180101**

IN WITNESS WHEREOF the parties hereto have executed this Contract as of the date set forth below.

COUNTY OF RIVERSIDE

MATICH CORPORATION

BY: _____

BY: _____

Patricia Romo
Director of Transportation

DATED: _____

TITLE: _____
(If Corporation, affix Seal)

ATTEST:

TITLE: _____

Licensed in accordance with an act providing
for the registration of Contractors,

License No.: **149783**

Federal Employer Identification Number:

95-1810911

Department of Industrial Relations Registration Number:

1000004260

BY _____
"County"

"Corporation"
(Seal)

Performance Bond

Recitals:

1. **Match Corporation** (Contractor) has entered into a Contract with COUNTY OF RIVERSIDE (County) for construction of public work known as **Emergency Storm Damage Repair Work, Whitewater Canyon Road, Culvert Crossing and Washout, North of City of Palm Springs, Project No. 45-19180101.**

2. _____, a _____ corporation (Surety), is the Surety under this Bond.

Agreement:

We, Contractor as Principal and Surety as Surety, jointly and severally agree, state, and are bound unto County, as obligee, as follows:

1. The amount of the obligation of this Bond is 100% of the estimated contract price for the Project of **\$1,500,000.00 (One million five hundred thousand dollars and zero cents)** and inures to the benefit of County.

2. This Bond is exonerated by Contractor doing all things to be kept and performed by it in strict conformance with the Contract Documents for this project, otherwise it remains in full force and effect for the recovery of loss, damage and expense of County resulting from failure of Contractor to so act. All of said Contract Documents are incorporated herein.

3. This obligation is binding on our successors and assigns.

4. For value received, Surety stipulates and agrees that no change, time extension, prepayment to Contractor, alteration or addition to the terms and requirements of the Contract Documents or the work to be performed thereunder shall affect its obligations hereunder and waives notice as to such matters, except the total contract price cannot be increased by more than 10% without approval of Surety.

THIS BOND is executed as of _____.

By _____

By _____

By _____

Type Name _____

Its Attorney in Fact
"Surety"

Title _____

"Contractor"

(Corporate Seal)

(Corporate Seal)

NOTE: This Bond must be executed by both parties with corporate seal affixed. All signatures must be acknowledged. (Attach acknowledgements).

Payment Bond

(Public Works - Civil Code §9550 et seq.)

The makers of this Bond are Matich Corporation, as Principal and Original Contractor and _____, a corporation, authorized to issue Surety Bonds in California, as Surety, and this Bond is issued in conjunction with that certain public works contract to be executed between Principal and COUNTY OF RIVERSIDE a public entity, as Owner, for \$1,500,000.00 (One million five hundred thousand dollars and zero cents), the total amount payable. The amount of this bond is one hundred percent (100%) of said sum. Said contract is for public work generally consisting of Emergency Storm Damage Repair Work, Whitewater Canyon Road, Culvert Crossing and Washout, North of City of Palm Springs, Project No. 45-19180101.

The beneficiaries of this Bond are as is stated in 9554 of the Civil Code and requirements and conditions of this Bond are as is set forth in 9554, 9558, 9560 and 9564 of said code. Without notice, Surety consents to extension of time for performance, change in requirements, amount of compensation, or prepayment under said contract.

Dated: _____

_____ Original Contractor – Principal

_____ Surety

By _____

By _____

Title _____

Its Attorney In Fact

(If corporation, affix seal)

(Corporate Seal)

(Corporate Seal)

STATE
OF _____
COUNTY
OF _____

} ss. SURETY'S ACKNOWLEDGEMENT

On _____ before me, _____ personally appeared, _____, known to me, or proved to me on the basis of satisfactory evidence, to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacities, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary Public

Notary Public (Seal)

NOTE: This Bond must be executed by both parties with corporate seal affixed. All signatures must be acknowledged. (Attach acknowledgements).

General Conditions

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General Conditions

1. Definitions and Terms

Whenever in the Standard Specifications the following terms are used, they shall be understood to mean and refer to the following:

- A. "Department", "Department of Transportation", "State", and "State of California" means the County of Riverside.
- B. "Engineer", and "Director" means the Director of Transportation and Land Management Agency (TLMA) for the County of Riverside, and includes his authorized representatives.
- C. "Laboratory" means the established laboratory of the County of Riverside.
- D. "Plans" means the portion of the Contract Documents consisting of all drawings prepared for the direction and characteristics of the work. A schedule of said drawings which constitutes the plans as of the execution of the Contract is set forth in the Special Provisions and are supplemented by the Standard Plans referred to in the Special Provisions.

Other terms appearing in the Specifications and Contract Documents, including the Special Provisions, shall have the intent and meaning specified in Section 1-1.07, "Definitions" of the Standard Specifications. The following are additional terms appearing in the Contract Documents:

- "County", "Contractor" and "Contract Documents" are identified in the Contract. "County" and "Contractor" includes their authorized representatives are treated throughout as if each were singular in number. "Contractor" includes its surety.
- "Contract Documents" are identified in the Contract.
- "Business Day" is defined as 7:30 a.m. to 5:30 p.m. Monday through Friday, excepting therefrom when County is closed for holidays as set forth in County Ordinance 358, Section 1, items c. through q.
- "You" and "Your" means the Bidder and/or Contractor.
- "Specifications and Contract Documents" means the County's Bid Book comprised of the forms, drawings, table of contents, specifications and contract documents for the construction of the County's transportation, Emergency Repair Work or road project.

2. Standard Specifications

The Standard Specifications of the State of California Department of Transportation, edition of 2010 hereafter called "Standard Specifications", including amendments and revisions to the Standard Specifications, are incorporated herein as modified in these General Conditions, the Instructions to Contractors, the Special Provisions and the Plans.

General Conditions govern over all the Contract Documents except the Special Provisions, the Contract, and Bonds.

The following subsections of the Standard Specifications are deleted:

- 2-1.15C(2), DVBE Incentive
- 3-1.08, Small Business Participation Report
- 3-1.11, Payee Data Record
- 8-1.04B, Standard Start
- 12-1.04, Payment (for Flagging Costs)

The Standard Specifications of the State of California Department of Transportation, edition as listed in Special Provision Specifications and Plans General Section 1-1.01, hereafter called "Standard Specifications", are incorporated herein as modified in these Special Provisions and the Plans.

Amendments to the Standard Specifications for this project, **as dated in the Special Provisions**, are incorporated herein. During the advertisement period of this project, this document is available upon request at the office of the County of Riverside Transportation Department and will be available to the awarded Contractor.

Amendments to the Standard Specifications set forth in the Special Provisions shall be considered as part of the Standard Specifications. Whenever either the term "Standard Specifications is amended" or the term "Standard Specifications are amended" is used in the Special Provisions, the text or table following the term shall be considered an amendment to the Standard Specifications.

In case of conflict between such amendments and the Standard Specifications, the amendments shall take precedence over and be used in lieu of the conflicting portions.

In case of conflict between the Standard Specifications and these Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions.

In the event that discrepancies are encountered which are not addressed herein, the option that provides the method, item or material with the greatest strength, utility, performance shall be selected, as directed by the Engineer.

3. Director of Transportation and Land Management Agency (TLMA)

All work shall be done under the supervision of the Director of TLMA who shall determine the amount, quality, acceptability and fitness of all parts of the work, and interpret the Contract Documents. No act or omission of the Director of TLMA relieves Contractor of the duty to proceed with the work in strict conformity with the Contract Documents.

Upon request, Director of TLMA shall reduce to writing any oral order, objection, requirement or determination. Whenever the Director of TLMA's approval is required, it shall be in writing only.

All communications to the County by Contractor shall be via the Director of TLMA, or such individual(s) as may be designated by the Director of TLMA in his discretion.

No work shall be performed on site other than during normal working hours without the knowledge and consent of the Director of TLMA.

When in Director of TLMA's opinion, weather or other conditions are such that attempts to perform a portion of the work will probably result in work not in accordance with the Contract Documents, he shall so advise the Contractor. When Contractor advises the Director of TLMA that he intends to proceed despite such advice, he does so at his peril. The Director of TLMA may then order Contractor, in writing which specifies the portion of the work involved and the conditions warranting the issuance of the order, not to proceed on such portion of the work if: (1) proceeding will, in his judgment, have an adverse effect on Contractor's ability to complete the work within the stipulated time period, or (2) proceeding will, in his judgment, necessitate unusual tests and procedures to ascertain whether said portion of the work is in accordance with the Contract Documents. Contractor shall comply with such orders at its expense.

Nothing herein contained relieves Contractor from the duty to make independent determinations as to weather and other conditions affecting the proper completion of the work.

Failure for any reason of Director of TLMA to advise Contractor as to such matters, or to issue an order as above provided, does not relieve the Contractor from the duty to accomplish the work in accordance with the Contract Documents.

As stated elsewhere, amounts shown in the Contract as to quantities are merely estimates only. From time to time Director of TLMA shall direct Contractor as to the prosecution of the work in such a manner as to increase or decrease such estimates as to the work actually to be done. Contractor shall comply with such instructions and shall be paid only for work actually done based on the unit price set out in the Contract.

4. Insurance and Hold Harmless

Within five (5) working days of the Notice to Proceed and prior to commencement of work, the successful Contractor must submit a certificate of insurance, including required endorsements, which provides evidence that the bidding Contractor has insurance coverage that meets the requirements of this section.

In lieu of the provisions of Standard Specification Section 3-1.07, "Insurance Policies" and Section 7-1.06, "Insurance", the following shall apply:

A. General:

Contractor shall submit to the County a Certificate of Insurance, signed by an authorized representative of the Contractor's insurance provider or agency, which certifies to the County that insurance coverage is provided in accordance with the requirements of this Section.

Certificate Holder information is as follows:

County of Riverside
Transportation Department
Attn: Contracts/Bidding Unit
3525 14th Street
Riverside, CA 92501

Contractor shall not commence work under the Contract until he has obtained the insurance required hereunder and satisfactory proof of said insurance has been submitted to and accepted by the County.

The County may suspend all Contractor project work activities, at the Contractor's expense, for failure to maintain insurance coverage.

B. Workers Compensation:

The Contractor shall maintain statutory Workers' Compensation Insurance (Part 1) as prescribed by the laws of the State of California. Policy shall include Employers' Liability (Part 2) including Occupational Disease with limits not less than \$1,000,000 per person per accident.

This policy shall be endorsed, and signed, to waive subrogation in favor of the County.

This policy shall also name the "County of Riverside, its Agencies, Special Districts and Departments, their respective director, officers, Board of Supervisors, elected and appointed officials, employees, agents, and representatives" as Additional Insureds.

C. Commercial General Liability:

Commercial General Liability insurance coverage includes but not limited to:

1. Premises, operations and mobile equipment liability
2. Products and completed operations liability
3. Broad form property damage, (including completed operations)
4. Explosion, collapse, and underground hazards
5. Personal and advertising injury
6. Unmodified contractual liability
7. Cross liability coverage
8. Covering claims which may arise from or out of Contractor's performance of its obligations hereunder.

Commercial General Liability insurance coverage amounts are not to be less than the following:

- \$2,000,000 each occurrence
- \$2,000,000 general aggregate
- \$2,000,000 products-completed operations aggregate

Higher limits may be required for projects with higher risk exposure, and higher limits, if required, will be included in the Special Provisions.

Where excess liability insurance is used in connection with primary liability insurance, the combination of such coverage sum must allow total limits of liability to be in amounts not less than the specified amounts.

This policy shall name the "County of Riverside, its Agencies, Special Districts and Departments, their respective director, officers, Board of Supervisors, elected and appointed officials, employees, agents, and representatives" as Additional Insureds.

For additional insured endorsement for excess liability insurance, an acceptable alternative to the policies is a letter, signed by an authorized representative of the insurance carrier, confirming in writing that the policy follows form with respect to the primary liability policy.

D. Automobile Liability:

Contractor shall maintain liability insurance for any auto, all owned, non-owned and hired vehicles so used in an amount not less than \$1,000,000 per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to the Contract or be no less than two (2) times the occurrence limit.

Policy shall name the "County of Riverside, its Agencies, Special Districts and Departments, their respective director, officers, Board of Supervisors, elected and appointed officials, employees, agents, and representatives" as Additional Insureds.

E. General Insurance Provisions:

1. **Insurer.** Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of California and have an A M Best rating of not less than A: VIII (A:8) unless such requirements are waived, in writing, by the County Risk Manager. If the County's Risk Manager waives a requirement for a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

Non-admitted/Surplus Line insurance carriers (carriers not licensed in the State of California) may be acceptable to the County under certain conditions. Non-admitted insurance carriers providing any form of insurance coverage must be:

- a. Domiciled or authorized to do business in the United States and/or listed as an approved insurance carrier on the California Department of Insurance's List of Approved Surplus Line Insurers (LASLI) list,
 - b. Have an AM Best rating of not less than A: VIII (A:8), and
 - c. Insurer is authorized to transact in the type of insurance provided.
2. **Self-insured retention (SIR).** The Contractor must declare its insurance self-insured retention for each coverage required herein. If any such self-insured retention exceeds \$500,000 per occurrence, each such retention shall have the prior written consent of the County Risk Manager before the commencement of operations under the Contract. Upon notification of self-insured retention unacceptable to the County, and at the election of the Country's Risk Manager, Contractor's carriers shall either:
 - a. Reduce or eliminate such self-insured retention as respects the Contract with the County, or
 - b. Procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.
 3. **Certificate, policy, endorsements and attachments.** Contractor shall cause Contractor's insurance carrier(s) to furnish the County with:
 - a. A properly executed original Certificate(s) of Insurance and certified original copies of signed endorsements effecting coverage as required herein, and
 - b. All endorsements must include a reference to the policy by type of insurance and policy number that it is endorsing, and

- c. If requested to do so 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.

Further, said Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that thirty (30) days written notice shall be given to the County prior to any material modification, cancellation, expiration or reduction in coverage of such insurance (For nonpayment of premium cause for cancellation, a written notice of at least ten (10) days is allowed per California Insurance Code §662(a)). In the event of a material modification, cancellation, expiration, or reduction in coverage, the Contract shall terminate forthwith, unless the County 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 coverage's set forth herein and the insurance required herein is in full force and effect.

Contractor shall not commence operations until the County has been furnished original Certificate (s) of Insurance and certified original copies of endorsements and if requested, certified original policies of insurance including all endorsements and any and all other attachments as required in this Section. An individual authorized by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and the Certificate of Insurance.

4. **Primary insurance.** It is understood and agreed to by the parties hereto that the Contractor's insurance shall be construed as primary insurance, and the County's insurance and/or deductibles and/or self-insured retention's or self-insured programs shall not be construed as contributory.
5. **Subcontractor(s).** Contractor shall pass down the insurance obligations contained herein to all tiers of subcontractors working under the Contract.
6. **Self-insurance.** The insurance requirements contained in the Contract may be met with a program(s) of self-insurance acceptable to the County.
7. **Claim notification.** Contractor agrees to notify County of any claim by a third party or any incident or event that may give rise to a claim arising from the performance of the Contract.
8. **Certificate Holder.** Certificate address information for this project is as follows:

County of Riverside
Transportation Department
Attn: Contracts/Bidding Unit
3525 14th Street
Riverside, CA 92501

F. Hold Harmless/Indemnification:

Contractor shall indemnify and hold harmless the County of Riverside, its Agencies, Districts, Special Districts and Departments, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents and representatives (individually and collectively hereinafter referred to as Indemnitees) from any liability whatsoever, based or asserted upon any services of Contractor, its officers, employees, subcontractors, agents or representatives arising out of or in any way relating to the Contract, including but not limited to property damage, bodily injury, or death or any other element of any kind or nature whatsoever arising from the performance of Contractor, its officers, employees, subcontractors, agents or representatives Indemnitors from the Contract. Contractor shall defend, at its sole expense, all costs and fees including, but not limited, to attorney fees, cost of investigation, defense and settlements or awards, the Indemnitees in any claim or action based upon such alleged acts or omissions.

With respect to any action or claim subject to indemnification herein by Contractor, Contractor shall, at their sole cost, have the right to use counsel of their own choice and shall have the right to adjust, settle, or compromise any such action or claim without the prior consent of County; provided, however, that any such adjustment, settlement or compromise in no manner whatsoever limits or circumscribes Contractor's indemnification to Indemnitees as set forth herein.

Contractor's obligation hereunder shall be satisfied when Contractor has provided to County the appropriate form of dismissal relieving County from any liability for the action or claim involved.

The specified insurance limits required in the Contract shall in no way limit or circumscribe Contractor's obligations to indemnify and hold harmless the Indemnitees herein from third party claims.

In the event there is conflict between this clause and California Civil Code §2782, this clause shall be interpreted to comply with Civil Code 2782. Such interpretation shall not relieve the Contractor from indemnifying the Indemnitees to the fullest extent allowed by law.

5. Beginning of Work, Time of Completion, and Liquidated Damages

Attention is directed to Instruction to Contractors Section 6, "Hours of Work."

Attention is directed to the Special Provision Section "Prosecution and Progress".

Attention is directed to the Special Provision Section "Time of Completion".

Attention is directed to the Special Provision Section "Liquidated Damages".

6. County's Right to Stop Work or Terminate the Contract

(1) Contractor shall be adjudged bankrupt or make an assignment for the benefit of creditors, or (2) a receiver or liquidator is appointed for Contractor or any of his property, or (3) Contractor shall refuse or fail after Notice of Warning from County by Director of TLMA to supply sufficient properly skilled workmen or suitable materials, or (4) Contractor fails to prosecute the work with such diligence as will insure its completion within the stipulated time period, or (5) Contractor shall fail to make payments to persons supplying labor or materials for the work, or (6) Contractor does not comply with applicable law or instructions of Director of TLMA, or (7) Contractor is otherwise guilty of a substantial violation of any provision of the Contract Documents, then County without prejudice to such other and further right, remedy or relief it may be entitled to, may by ten (10) days notice to Contractor, terminate the employment of Contractor and his right to proceed, either as to the entire work, or at County's option, as to any portion thereof as to which delay shall have occurred or breach or miscompliance relates, and may thereupon take possession of the affected work and complete the work by contract or otherwise, as County deems expedient. In such case, Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance shall exceed the expense of completion, and other damage, expense or loss of County occasioned by Contractor's failure to properly perform, such excess shall be paid by Contractor. If such expense and damage exceeds the unpaid balance, Contractor is liable to County for the excess. If County elects to proceed under this Section, it may take possession of and utilize in completing the work such materials, supplies, plant and equipment on site which may be necessary or convenient for the purpose of completing the work, County is expressly granted the right - acting via Director of TLMA, an Engineer or otherwise - to operate equipment and machinery on site for the purpose of determining whether it has a basis for proceeding under this Section.

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 (Public Contract Code §7105(a)), provided that the work damaged is built in accordance with applicable building standards and the plans and specifications, then the Owner, upon certification by the Engineer, may, without prejudice to any other right of remedy, terminate the contract.

Decision by County not to proceed under this Section does not constitute a waiver by County of any right it might from time to time have against Contractor under the Contract Documents.

7. General Prevailing Wage:

Attention is directed to General Conditions Section 8, "Labor Code".

Attention is also directed to Section 7-1.02K(2), "Wages" of the Standard Specifications.

Pursuant to §1773 of the Labor Code, the general prevailing wage rates, including the per diem wages applicable to the work, and for holiday and overtime work, including employer

payments for health and welfare, pension, vacation, and similar purposes, in the county in which the work is to be done have been determined by the Director of the California Department of Industrial Relations (DIR). These wages are set forth in the General Prevailing Wage Rates for this project and are available from the DIR's web site at: <http://www.dir.ca.gov>

Pursuant to §1774 of the Labor Code, contractor and subcontractors shall pay not less than the specified prevailing rates of wages to all workmen employed in the Contract.

General prevailing wage determinations are on file at Transportation Department Washington Street Yard's Contraction/Inspection office and are available to any interested party upon written request.

General prevailing wage determinations are also made by the DIR Pursuant to California Labor Code Part 7, Chapter 1, Article 2, Sections 1770, 1773, and 1773.1 may also be obtained at the following URL:

www.dir.ca.gov/DLSR/PWD/index.htm

The Contractor must post a copy of the determination of the DIR prevailing rate of per diem wages at each job site.

8. Labor Code

Reference is made to Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with §1720). By this reference said Chapter 1 is incorporated herein with like effect as if it were here set forth in full. The parties recognize that said Chapter 1 deals, among other requirements with discrimination, penalties and forfeitures, their disposition and enforcement, wages, working hours, overtime, apprentices, securing worker's compensation insurance, payroll records, registration with the DIR, and directly affect the method of prosecution of the work by Contractor and subject it under certain conditions to penalties and forfeitures. Execution of the Contract by the parties constitutes their agreement to abide by said Chapter 1, their stipulation as to all matters which they are required to stipulate as to by the provisions of said Chapter 1, constitutes Contractor's certification that he is aware of the provisions of said Chapter 1 and will comply with them and further constitutes Contractor's certification as follows: "I am aware of the provisions of §3700 of the California Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this contract."

Contractor and his subcontractors shall comply with the provisions of §1725.5 of the Labor Code regarding registration with the DIR. Registration with the DIR Division of Labor Standards Enforcement can be done online using the following URL:

<https://efiling.dir.ca.gov/PWCR/>

Contractor and his subcontractors shall comply with the provisions of §1776 of the Labor Code regarding payroll records.

Contractor and his subcontractors shall comply with the provisions of §1777.5 of the Labor Code regarding apprentices.

Contractor shall post at each job site, during the course of the work, notices and a copy of County's "Determination of Prevailing Wage Rates". Copies of said Determination are available at Transportation Department Washington Street Yard's Construction/Inspection office for this purpose.

9. Labor Nondiscrimination

Contractor's attention is called to the "Nondiscrimination Clause", set forth in Section 7-1.02I(2), "Nondiscrimination", of the Standard Specifications, which is applicable to all nonexempt state contracts and subcontracts, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The Specifications are applicable to all nonexempt state construction contracts and subcontracts of \$5,000 or more.

10. Title VI Nondiscrimination

Contractor shall comply with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d-42 U.S.C. 2000d-4 (ACT), and all requirements imposed by or pursuant to 49 CFR, Subtitle A, Part 21, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964" (REGULATIONS), the Federal-aid Highway Act of 1973, and other pertinent directives, to the end that in accordance with the ACT, REGULATIONS, and other pertinent directives, no person in the United States shall, on the grounds of race, color, sex, national origin, religion, age or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under this construction contract.

Construction contract includes the administration, award and performance of any State and/or Federal funded contract or the requirements of 49 CFR Part 26.

Contractor must refer to Caltrans Local Assistance Procedures Manual, Exhibit 4-C, Master Agreement, Administering Agency-State Agreement for Federal-Aid Projects to obtain current Nondiscrimination Assurances requirements to include in all subcontracts signed by the Contractor. This Exhibit 4-C can be obtained from the following website:

<http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapmforms.htm>
(Refer to Exhibit 4-C, Appendix A to Exhibit B, Nondiscrimination Assurances)

Title VI Assurances requirements are also incorporated in Caltrans Exhibit 12G Section 13 (July 2019 update).

Attention is also directed to these General Conditions' Section 30, "Documents of Contractor." Contractor shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the County, State or Federal Highway Administration to be pertinent to ascertain compliance with 49 CFR, Subtitle A, Part 21.

In the event of noncompliance with the nondiscrimination provisions, the County shall impose sanctions, as maybe determined deemed appropriate and/or as directed by Federal funding source determination, including but not limited to: withholding of payments within a reasonable period of time, not to exceed 90 days; and/or cancellation, termination or suspension of the Contract, in whole or in part.

For Title VI nondiscrimination complaints related to this project please contact:

Francis Segovia
Title VI Coordinator

County of Riverside
Transportation Department
3525 14th Street
Riverside, CA 92501

Facsimile: (951) 955-3164
Office: (951) 955-1646
Electronic mail: fsegovia@rivco.org

11. Equal Employment Opportunity

A. General

Contractor shall not discriminate in its recruiting, hiring, promotion, demotion or termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age or physical handicap in the performance of this Contract shall comply with the provisions of the California Fair Employment Practice Act (commencing with SS 1410 of the Labor Code), the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, Executive Order No. 11246 (30 Federal Register 12319), as amended, and all administrative rules and regulations issued pursuant to said Acts and Order. See particularly 41 Code of Federal Regulation (CFR) Chapter 60.

Contractor shall require each of its subcontractors to comply with the preceding paragraph and shall include in each subcontract language similar to the preceding paragraph.

Contractor shall permit access to its records of employment, employment advertisement, application forms and other pertinent data and records by Owner and any State or Federal

agency having jurisdiction for the purpose of investigation to ascertain compliance with this Section.

Owner may assign an affirmative action representative to monitor Contractor and its subcontractor(s) conduct required by this Section, including the right of entry to the construction site for the purpose of obtaining information from persons performing work on the project providing such inspection does not interfere with the progress of the work.

Elsewhere in the Contract Documents specific requirements may be contained covering the same subject matter of this Section. If so, such specific requirements prevail over this Section in case of conflict.

B. Transactions of \$10,000 or Under

Contracts and subcontracts not exceeding \$10,000 are exempt from the requirements of this Section. No Contractor or subcontractor shall procure supplies and/or services in less than usual quantities to avoid applicability of this Section. With respect to contracts and subcontracts for indefinite quantities, this Section applies unless the amount required in any one year under such contract will reasonably be expected not to exceed \$10,000.

C. Transactions in Excess of \$10,000, but Less Than \$50,000

At Owner's request, Contractor shall certify that it has in effect an affirmative action plan and agrees to comply with all State and Federal laws and regulations regarding Fair Employment Practices. Contractor shall maintain a written copy of its affirmative action plan and furnish Owner a copy of the plan upon request. Owner may require Contractor to complete an Affirmative Action Compliance Report, on a form furnished by Owner, setting forth definite goals during the term of the Contract.

D. Transactions of \$50,000 or More

If Contractor has fifty or more employees and a Contract for \$50,000 or more, it shall develop and submit to Owner, within thirty days after award, a written affirmative action compliance program providing in detail specific steps to guarantee equal employment opportunity. Contractor shall include in its affirmative action program a table of job classifications, which table shall include but need not be limited to job titles, duties, and rates of pay.

Contractor shall in each subcontract let to do a portion of the work covered hereunder, where the subcontractor involved has fifty or more employees and the subcontract is for \$50,000 or more, impose in the subcontract the above requirements.

For the purpose of determining the number of employees, the average of the Contractor's or its subcontractor's employees for the twelve month period immediately prior to award, or the total number of employees the Contractor or its subcontractor will have when performing this contract, whichever is higher, shall be used.

E. Federal Assisted Construction

If this project is a Federally assisted construction project, then the contract provisions contained in 41 CFR SS 60-1.04 (b) are incorporated herein and the Contractor shall likewise incorporate said provisions in each subcontract entered by Contractor to perform the work. Federally assisted construction is identified as such in the Specifications and Contract Documents .

12. Subcontracting

Attention is directed to:

- Standard Specification Section 5-1.13, "Subcontracting", and
- Instructions to Contractors Section 3, "Contract Participation".
- Instructions to Contractors Section 4, "Subletting, Subcontracting, and Subcontractor List".

Contractor responsibility

No subcontract releases the Contractor from the contract or relieves the Contractor of their responsibility for a subcontractor's work.

Violations and remedies

If the Contractor violates Public Contract Code § 4100 et seq., the County may exercise the remedies provided under Public Contract Code § 4110. The County may refer the violation to the Contractors State License Board as provided under Public Contract Code § 4111.

50% Minimum work performance

The Contractor shall perform work equaling at least 50 percent of the value of the original total agreed cost for emergency repair work Contract with the Contractor's own employees and equipment, owned or rented, with or without operators. The Standard Specification Subcontracting Section 5-1.13A, "General" fifth paragraph is deleted.

Subcontractor compliance

Each subcontractor must comply with the contract.

Active license

Each subcontractor must have an active and valid State contractor's license with a classification appropriate for the work to be performed (Business & Professional Code, § 7000 et seq.).

Submittal of subcontracts

Contractor must submit copies of subcontracts upon request by the Engineer.

Submittal of subcontractor request form

Before subcontracted work starts, Contractor must submit a Subcontracting Request form (Caltrans LAPM, Exhibit 16-B).

Debarred contractors

The County will not award a contract to a debarred Contractor. Contractor must not use a debarred subcontractor. Pursuant to the provisions in §1777.1 of the Labor Code, the Labor Commissioner publishes and distributes a current list of contractors ineligible to perform work on a public works project. This list of debarred contractors is available from the DIR web address at:

<http://www.dir.ca.gov/dlse/debar.html>

Termination of unsatisfactory subcontractors

Upon request by the Engineer, Contractor must immediately remove and not again use a subcontractor who fails to prosecute the work satisfactorily (Public Contract Code §4107(a)(7)).

Substitutions

Subcontractor substitutions will be processed as required by Public Contract Code § 4107 et seq. A subcontractor not registered with the DIR is an additional condition to the listed qualifications for substitutions (Public Contract Code 1771.1(d)).

13. Monthly Progress Estimates and Payments

Attention is directed to Section 9-1.16, "Progress Payments" and 9-1.17, "Payment After Contract Acceptance" of the Standard Specifications and these Special Provisions.

For the purpose of timely payment, the "receipt of payment request" date, as described in Public Contract Code 20104.50 and as referred to herein, shall be considered to be the fifth working day following the 25th day of each month.

Within five (5) working days of the 25th day of each month the County shall:

- A. Calculate and prepare the certificate ("progress pay estimate") stating the value of the work completed for the billing month, for the purpose of determining the proper progress payment amount.
- B. If a progress pay estimate has been prepared by the County but has been contested by the Contractor as of the "receipt of payment request" date, as defined above, the County shall submit to the Contractor a document setting forth in writing a description of the dispute pertaining to the progress billing, and the County's reason for its position. Said document shall be submitted to the Contractor as soon as practicable, but not later than seven (7) calendar days after the "receipt of payment request" date.

Any progress pay estimate which is undisputed and remains unpaid for thirty (30) calendar days, after the "receipt of payment request date" shall accrue interest to the Contractor equivalent to the legal rate set forth in subdivision (a) of §685.010 of the California Code of Civil Procedure. The number of days available to the County to make a payment without incurring interest pursuant to this Section shall be reduced by the number of days by which the County exceeds the seven-day submittal requirement set forth in the paragraph above.

Pursuant to Public Contract Code §20104.50, subsection (e), the progress payment date is the date that funds are encumbered and the payment warrant is issued.

The partial payments made as the work progresses will be payment on account on work performed as of the 25th of the month and shall in no way be considered as an acceptance of any part of the work or material of the contract, nor shall they in any way govern the final estimate.

No estimate or payment shall be made when, in the judgment of the Director of TLMA, the total value of the work done since the previous estimate amounts to less than \$300.

14. Deposit of Securities

In accordance with Public Contract Code §22300 and other applicable law, the Contractor may substitute securities for any moneys withheld to ensure performance under the contract.

15. Payment Retention

Director of TLMA, once each month, after said work is commenced and until after the completion and acceptance thereof, shall make and deliver to Contractor duplicate certificates stating the value of work then completed according to the contract, estimated according to the standard of the unit contract price, and thereupon Contractor shall be paid an amount sufficient with all previous payments to make the aggregate ninety five percent (95%) of the amount earned as certified. Maximum value of progress payment retention, as set forth by Public Contract Code §7201 and any other referenced text, shall be five (5%).

16. Payment for Extra Work (Force Account Basis)

Extra work to be paid for on a force account basis as directed by the Engineer will be paid for as set forth in Section 9-1.04 "Force Account" of the Standard Specifications. The labor surcharge, equipment rental rates, and the right of way delay factors for each classification of equipment are listed in the Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates". A copy of which is on file at the Office of the Director of TLMA and is hereby incorporated herein in its entirety.

17. Change Orders – Detail Drawings and Instructions

Reference is made to Section 4-1.05, “Changes and Extra Work” of the Standard Specifications regarding change orders.

Each approved change order shall be considered as an amendment to the Contract Documents and will not be considered approved until executed by the Board of Supervisors, except when Director of TLMA can approve certain change orders, without the necessity of approval by the Board, as provided in a Resolution of the Board adopted January 11, 2011, Resolution 2011-015.

The above does not limit the ability of Director of TLMA to issue further detail drawings, explanations, and instructions which are customarily given by an Engineer during the course of similar work. Director of TLMA will furnish Contractor, in reasonable promptness, with further detailed explanations, instructions and drawings as may be necessary for the proper execution of the work, and Contractor shall conform to same provided they are consistent with the intent of the Contract Documents. In giving such additional instructions, explanations and drawings Director of TLMA has authority to make minor changes in the work which do not involve extra cost and are not inconsistent with the Contract Documents.

Contractor's acting on such instructions, explanations and drawings of Director of TLMA means that Contractor agrees that such explanations, instructions and drawings are within the scope of the work in accordance with the intent of the Contract Documents and do not constitute a basis for modification of the Contract Documents as to price or time.

18. Final Payment

Within thirty (30) days after the completion of the work and its acceptance by the Board of Supervisors, Director of TLMA will make a proposed final estimate in writing of the quantities of work done under the contract and the value of such work and will submit such estimate to Contractor. Within thirty (30) days thereafter Contractor shall submit to Director of TLMA his written approval of said proposed final estimate or a written statement of all claims which he has for additional compensation claimed to be due under the contract.

On Contractor's approval or if he files no claims within said period of thirty (30) days, Director of TLMA will issue a final written estimate as submitted to Contractor and County shall pay the entire sum so found to be due after deducting there from all previous payments and all amounts to be kept and all amounts to be retained under the provisions of the contract.

If Contractor files claim(s) prior to or within said period of thirty (30) days, Director of TLMA will issue as a semi-final estimate the proposed estimate submitted to Contractor and the County will within thirty (30) days pay the sum found due thereon after deducting all prior payments and all amounts to be kept and retained under the provisions of the contract, Director of TLMA shall then consider and investigate Contractor's claims and shall make such revisions

in the said estimate as he may find to be due, and shall then make and issue his final written estimate. County will pay the amount so found due after deducting all previous payments and amount to be retained under the contract.

All prior or partial estimates and payments shall be subjected to correction in the final estimate and payment.

The final estimate shall be conclusive and binding against both parties to the contract on all questions relating to the performance of the contract and the amount of work done there under and compensation therefore, except in the case of gross error. Acceptance of final payment constitutes a release of County by Contractor of all claims relating to the work except those timely filed pursuant to Section 21 herein prior to final payment.

19. Assignment of Claims

In signing the Contract on this public works project, 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 to the Owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 (commencing with §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 payment to the Contractor, without further acknowledgement by the parties.

20. Arbitrations

Section 9-1.22, "Arbitration" of the Standard Specifications is deleted.

21. Claims Resolution

It is the intent of this Section that differences between the parties arising under and by virtue of this Contract be brought to the attention of the Engineer at the earliest possible time in order that such matters may be promptly settled if possible, or other appropriate action or investigation may be promptly undertaken. Claims must be filed on or before the date of final payment as required in Public Contract Code Section 20104.2. The following statutory procedure shall be adhered to for resolving any claims by a Contractor filed in connection with this contract:

A. Definition of a Claim

A Claim means a separate demand by a Contractor for one or more of the following:

- 1) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by the County under the contract.
- 2) Payment by the County of money or damages arising from work done by, or on behalf of, the Contractor pursuant to the contract and payment for which is not otherwise expressly provided or to which the Contractor is not otherwise entitled.
- 3) Payment of an amount that is disputed by the County.

B. Form and Contents of Claim(s)

The Contractor shall furnish reasonable documentation to support the Claim, which shall be sent by registered mail or certified mail with return receipt requested to the County at the address provided herein this Section 21. The Contractor's written Claim must include, but not limited to, the following:

- 1) A statement to identify that it is a Claim under this Section 21, on a company letterhead, and a request for a decision on the Claim;
- 2) A detailed description or narrative of pertinent events, act, error, omission, unforeseen condition, event or other circumstance giving rise to the Claim;
- 3) Citation to contract provisions;
- 4) Theory of entitlement that provides a detailed justification for any remedy or relief sought by the Claim. This includes, but not limited to: a detailed cost breakdown, invoices, material tickets, staff logged time, summary of quantities, other cost records and total cost calculations;
- 5) Complete pricing of all cost impacts;
- 6) A time impact analysis of all time delays that shows actual time impact on the critical path; and
- 7) Documentation, County letters, notifications, related drawings and photos supporting items (1) through (6).

The Claim must be verified under penalty of perjury by Contractor's project superintendent as to the Claim's accuracy, and shall be priced like a Change Order, and must be updated at regular intervals as to cost and entitlement if a continuing Claim. Routine contract materials, for example, correspondence, RFI, Change Order requests, or payment requests shall not constitute a Claim. Contractor shall bear all costs incurred in the preparation and submission of a Claim.

Claims and support documentation related must be sent to:

County of Riverside, TLMA
Transportation Department
Construction Inspection Office
2950 Washington Street
Riverside, CA 92504
Attention: Cindi Wachi, Construction Engineering Division Manager

C. Claims Procedure

- 1) Upon receipt of a Claim and the supporting documentation, the County shall conduct a reasonable review of the Claim and within forty-five (45) days, or an extended period as may be set by mutual agreement of the County and Contractor, provide the Contractor with a written statement identifying what portion of the Claim is still disputed and what portion is undisputed.
- 2) Notwithstanding the time period set forth in C. 1) above, if the County needs approval from the Board of Supervisors to provide the Contractor with a written statement identifying the disputed portion and the undisputed portion of the Claim, and the Board of Supervisors does not meet within the forty-five (45) days or within the mutually agreed to extension of time following receipt of the Claim, the County shall have up to three (3) days following the next duly publicly noticed meeting of the Board of Supervisors after the forty-five (45) day period, or extension, expires to provide Contractor a written statement identifying the disputed portion and the undisputed portion of the Claim.
- 3) Any payment due on the undisputed portion of the Claim under this section shall be processed and made within sixty (60) days after the County issues its written statement. Amounts not paid in a timely manner as required by this Section 21 shall bear interest at 7 percent per annum. If the County fails to issue a written statement, the Claim shall be deemed rejected in its entirety. Failure by the County to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A Claim that is denied by reason of the County's failure to have responded to the Claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the Claim or the responsibility or qualifications of the Contractor.
- 4) If the Contractor disputes the County's written response, or if the County fails to respond within the time prescribed, the Contractor may demand in writing, sent by registered mail or certified mail return receipt requested, an informal meet and confer conference for settlement of the portion of the Claim in dispute. Upon receipt of the demand, the County shall schedule a meet and confer conference within thirty (30) days.
- 5) Within ten (10) business days following the conclusion of the meet and confer conference, if the Claim or any portion thereof remains in dispute, the County shall provide the Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion shall be processed and made within sixty (60) days after the County issues its written statement. Any disputed portion of the Claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the County and Contractor sharing the associated costs equally. The County and Contractor shall mutually agree to a mediator within ten (10) business days after the disputed portion of

the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

- 6) For purposes of this section, mediation includes any nonbinding process, including but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute with resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section. Unless otherwise agreed to by the County and the Contractor in writing, the mediation conducted pursuant to this Section 21 shall excuse any further obligation under Section 20104.4 of the Public Contract Code to mediate after litigation has been commenced.
- 7) If mediation is unsuccessful to resolve all issues, the parts of the Claim remaining in dispute shall be subject to applicable procedures outside of this section and the requirements of Public Contract Code § 9204. The Claim resolution procedures in this Section do not preclude the County from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this Article does not resolve the parties' dispute.
- 8) Following the procedures set forth in this Section 21, including the mediation, if the Claim or any portion of it remains in dispute, the Contractor may file a Claim as provided in Chapter 1 (commencing with § 900) and Chapter 2 (commencing with § 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.
- 9) If the Government Code claim is denied, Contractor may file an action in court. If a civil action is filed to resolve any claim, such action shall be subject to the provisions of Public Contract Code Sections 9204 or 20104.4 and shall be followed, providing for non-binding mediation and judicial arbitration. This Section applies only to claims subject to Public Contract Code Sections 9204 or 20104. If a claim is not subject to Public Contract Code Sections 9204 or 20104, the Contractor's right to file a civil action shall be as otherwise provided by law.

D. Subcontractor Claim(s)

If a subcontractor or a lower tier subcontractor has a Claim, the Contractor may present to the County a Claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the Contractor present a Claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the Claim be presented to the County shall furnish reasonable documentation as set forth in Section 21 to support the Claim. Within forty-five (45) days of receipt of this written request, the Contractor shall notify the subcontractor in writing as to whether the Contractor presented

the Claim to the County, and if the Contractor did not present the Claim, provide the subcontractor with a statement of the reasons for not having done so.

E. Consistency with Public Contract Code Sections 9204 and 20104

If any Claim(s) arising under this Contract is subject to the provisions of Public Contract Code Sections 9204 or 20104 et seq. (Div. 2, Part 3, Chapter 1, Article 1.5), and if provisions of those statutory sections require a procedure or procedural element different from that established in this Contract, then the provisions of those statutory sections shall apply in place of the conflicting procedure or procedural element established herein.

22. Brand or Trade Name – Substitute of Equals

Attention is directed to Standard Specifications Section 6-1.05, "Specific Brand or Trade Name and Substitution".

Reference is made to §3400 of the Public Contracts Code, which is by this reference incorporated herein with like effect as if here set forth in full.

If a Contractor believes he knows of an equal to a specified brand or trade name which is not mentioned in the Contract Documents, then such potential Contractor may so advise Director of TLMA of such fact, giving all relevant information.

Unless the subject article or product is expressly designated for matching others in use in a particular public improvement either completed or in the course of completion, any Contractor may, as part of its bid proposal, include a request for substitution of an item equal to any specified by brand or trade name.

Within 15 calendar days after award of the contract, Contractor may submit to Director of TLMA data substantiating such a request, and the difference, if any, in cost. Director of TLMA shall promptly investigate the request and make a recommendation to County as to equality. The governing body of County shall promptly determine whether the substitute is equal in every respect to the item specified, and approve or deny the request accordingly, and shall notify Director of TLMA of the determination made, who shall advise Contractor in writing of the decision. Unless the request is granted, substitution will not be permitted.

Nothing herein shall authorize a change in the contract price or prevent the use of change orders in the manner provided elsewhere in the Contract Documents.

23. Site Inspection – Effect of Other Improvements Shown and Contractor Procedure

Elsewhere in the Contract Documents reference may be made graphically, descriptively, or both, to the existence or possible existence of other improvements affecting the site and the prosecution of the work such as surface and subsurface utilities, drainage ditches and courses,

buildings, fencing, retaining walls, roadways, curbs, trees, shrubs, and similar matters. Such matters are included to be used by Contractor to the extent he deems appropriate. However, it is expressly understood and agreed:

- A. Showing or describing such items does not mean that it is an exhaustive and complete presentation and that as to matters shown or described that they necessarily exist.
- B. All graphic presentations are schematic only unless the contrary is clearly set out elsewhere as to a particular matter.
- C. Whenever in the plans survey markers are shown, boundaries of the site are shown or contour lines are shown, Contractor may assume that such matters are shown in accordance with acceptable standards.

All improvements of the nature described above, whether elsewhere shown or described or not, shall, unless the contrary is elsewhere specifically directed, remain in place, undisturbed and suitably protected during the course of the work.

Whenever, during the course of the work, a subsurface improvement is discovered, which Contractor believes is unknown to County, he shall immediately inform Director of TLMA. Except as elsewhere provided, whenever in the course of the work it becomes apparent that the work cannot proceed without the destruction or relocation of any improvement, whether shown or described or not, Contractor shall immediately cease work affecting such improvements, notify Director of TLMA as to such circumstance, and await instructions as to how to proceed.

- D. The Contractor shall be required to cooperate fully with all utility forces or forces of other public agencies engaged in relocation, lowering, altering or otherwise rearranging any facilities interfering with the progress of work or installing any facilities thereon.

The Contractor will also be required to cooperate fully with any County or State forces working on or near the project, or requiring access to the work in the performance of their duties.

24. Public Safety

The Contractor shall provide for the safety of traffic and the public in conformance with the provisions in Section 7-1.04, "Public Safety" of the Standard Specifications and these Special Provisions.

The Contractor shall install Type K temporary railing between a lane open to public traffic and an excavation, obstacle or storage area when the following conditions exist:

A. Excavations

The near edge of the excavation is 12 feet or less from the edge of the lane, except:

1. Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
2. Excavations less than 1 foot deep.
3. Trenches less than 1 foot wide for irrigation pipe or electrical conduit, or excavations less than 1 foot in diameter.
4. Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
5. Excavations in side slopes, where the slope is steeper than 1:4 (vertical: horizontal).
6. Excavations protected by existing barrier or railing.

B. Temporarily Unprotected Permanent Obstacles

The work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and the Contractor elects to install the obstacle prior to installing the protective system; or the Contractor, for the Contractor's convenience and with permission of the Engineer, removes a portion of an existing protective railing at an obstacle and does not replace such railing complete in place during the same day.

C. Storage Areas

Material or equipment is stored within 12 feet of the lane and the storage is not otherwise prohibited by the provisions of the Standard Specifications and these Special Provisions.

The approach end of Type K temporary railing installed in conformance with the provisions in this Special Provision section "Public Safety" and in Section 7-1.04, "Public Safety" of the Standard Specifications, shall be offset a minimum of 15 feet from the edge of the traffic lane open to public traffic. The temporary railing shall be installed on a skew toward the edge of the traffic lane of not more than 1 foot transversely to 10 feet longitudinally with respect to the edge of the traffic lane. If the 15 feet minimum offset cannot be achieved, the temporary railing shall be installed on the 10 to 1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing.

Type K Temporary railing shall conform to the provisions in Section 12-3.20, "Type K Temporary Railing" of the Standard Specifications. Type K Temporary Railing, conforming to the details shown on 2010 Standard Plan T3A and T3B, may be used. Type K Temporary Railing fabricated prior to January 1, 1993, and conforming to 1988 Standard Plan B11-30 may be used, provided the fabrication date is printed on the required Certificate of Compliance.

Temporary crash cushion modules shall conform to the provisions in "Temporary Crash Cushion Module" of these Special Provisions, if applicable.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas, the Contractor shall close the

adjacent traffic lane unless otherwise provided in the Standard Specifications and these Special Provisions:

Approach Speed of Public Traffic Posted Limit	Work Areas
Over 45 Miles Per Hour	Within 6 feet of a traffic lane but not on a traffic lane
35 to 45 Miles Per Hour	Within 3 feet of a traffic lane but not on a traffic lane

The lane closure provisions of this Section shall not apply if the work area is protected by permanent or temporary railing or barrier.

When traffic cones or delineators are used to delineate a temporary edge of a traffic lane, the line of cones or delineators shall be considered to be the edge of the traffic lane, however, the Contractor shall not reduce the width of an existing lane to less than 10 feet without written approval from the Engineer.

When work is not in progress on a trench or other excavation that required closure of an adjacent lane, the traffic cones or portable delineators used for the lane closure shall be placed off of and adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be not more than the spacing used for the lane closure.

Suspended loads or equipment shall not be moved nor positioned over public traffic or pedestrians.

Payment

Full compensation for conforming to the provisions in this Section, Public Safety, including furnishing and installing temporary railing (Type K) and temporary crash cushion modules, shall be considered as included in the estimated cost for emergency repair work Contract and no additional compensation will be allowed therefor.

25. Extra Work

Section 4-1.05, "Changes and Extra Work" of the Standard Specifications is amended by adding the following:

If, in the opinion of the Engineer, such work cannot reasonably be performed concurrently with other items of work, and if a controlling item of work is delayed thereby, an adjustment of contract time of completion will be made.

26. Noise Control

Noise control shall conform to the provisions in Section 14-8.02, "Noise Control" of the Standard Specifications and these Special Provisions.

Section 14-8.02, "Noise Control", second paragraph, is deleted and replaced with the following:

The noise level from the Contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 dBA LMax at a distance of 50 feet. This requirement in no way relieves the Contractor from responsibility for complying with local ordinances regulating noise level.

Said noise level requirement shall apply to all equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals must be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

Payment

Full compensation for conforming to the requirements of this Section, Noise Control, shall be considered as included in the estimated cost for emergency repair work Contract and no additional compensation will be allowed therefor.

27. Use, Care and Protection of Premises

Attention is directed to Section 5-1.36, "Property and Facility Preservation" of the Standard Specifications.

At his expense Contractor shall:

- A. Take every precaution against injuries to persons or damage to property.
- B. Comply with regulations governing the use of the property.
- C. Store and suitably protect his apparatus, equipment, materials and supplies in an orderly fashion on site.
- D. Place on the work only such loads as are consistent with the safety of the work.
- E. Effect all cutting, fitting, or patching of his work required to make it conform to the plans and specifications and interrelate with other improvements or except with the consent of Director of TLMA, cut or otherwise alter existing improvements.

- F. Protect and preserve established bench marks and monuments, make no changes in the location of such without the prior written approval of County, replace and relocate any of them which may be lost or destroyed, or which require shifting because of necessary changes in grades or locations. All replacement and relocation work shall be accomplished only after approval of County and under the direct supervision and instruction of Director of TLMA.
- G. Before final payment remove all surplus materials, false work, temporary structures, debris, and similar matter resulting from his operations from the site and to put the site in an orderly condition.
- H. Construct, operate and maintain all passageways, guard fences, lights, barricades and other facilities required for protection by State or municipal laws and regulations and local conditions during the course of the work.
- I. Guard County's property from injury or loss.
- J. Take all reasonable precautions for dust and noise control and generally conduct operations so as not to constitute a nuisance.
- K. The Contractor shall be responsible for the protection of existing signs, fences, concrete curb and gutter and other highway facilities which may be encountered in the roadway. The replacement or repair of any facilities which the County deems necessary as a result of the Contractor's operations shall be done by the Contractor at his own expense and to the satisfaction of the County Transportation Department.

Payment

Full compensation for conforming to the requirements of this Section, Use, Care and Protection of Premises, shall be considered as included in the estimated cost for emergency repair work Contract and no additional compensation will be allowed therefor.

28. Obstructions

Attention is directed to Section 5-1.36D, "Nonhighway Facilities", Section 15, "Existing Facilities" and 51-1.03E(9), "Utility Facilities", of the Standard Specifications and these Special Provisions.

In the event that the utility facilities mentioned within the referenced Standard Specifications and/or Special Provisions are not removed or relocated by the times specified and, if in the opinion of the Engineer, the Contractor's operations are delayed or interfered with by reason of the utility facilities not being removed or relocated by said times, the County will compensate the Contractor for such delays to the extent provided in Section 8-1.07, "Delays" of the Standard Specifications, except as provided in the previous paragraph referenced sections of the Standard Specifications.

29. Removal of Asbestos and Hazardous Substances

When the presence of asbestos or hazardous substances are not shown on the plans or indicated in the specifications and the Contractor encounters materials which the Contractor reasonably believes to be asbestos or a hazardous substance as defined in Section 25914.1 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed to be safe. The Contractor shall immediately cease work in the affected area and report the condition to the Engineer in writing.

In conformance with §25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed as Extra Work.

If delay of work in the area delays the current controlling operation, the Contractor will be compensated for the delay in conformance with the provisions in Section 8-1.07, "Delays" of the Standard Specifications.

30. Documents of Contractor

Upon demand, Contractor shall make available to County all documents, information and reports in its possession relevant to the work accomplished or to be accomplished or any demand or claim of Contractor as to County. This includes copies of documents sent by Contractor or others in its possession. Contractor shall further make available to County conformed copies of all documents submitted to the sureties who executed the ~~Bid Bond~~, Performance Bond, or Payment Bond for the purpose of obtaining the sureties' signature, including any guarantee or indemnification made to such surety by others for such purpose. Contractor shall maintain in his possession all documents relative to the work for three years after Notice of Completion.

31. Responsibility of Contractor to Act in an Emergency

In case of an emergency which threatens loss or injury to property or life, Contractor shall act without previous instructions as the situation may warrant. Contractor shall notify Director of TLMA immediately thereafter. Any compensation claimed by Contractor, together with substantiating documentation shall be submitted to County via Director of TLMA.

32. Final Inspection – Notice of Completion

When the work is ready for final inspection, County shall cause the work to be inspected and subjected to such tests as seem to it to be required for the purpose of determining if the work is complete in every respect.

At a meeting of the governing body of County held within ten (10) days after final inspection, the governing body shall consider the facts developed at the inspection. If it is found that the work is apparently complete in every respect, County will accept the work and a Notice of Completion will be recorded.

As between the parties, the recordation of the Notice of Completion, unless recorded because of a cessation of labor, means only that the time for final payment and the commencement of the guarantee period commences to run.

33. Dust Abatement

Dust control shall conform to Section 10-5, "Dust Control", Section 14-9.02, "Air Pollution Control", Section 10-6, "Watering", and Section 18, "Dust Palliative" of the 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" (if project location is within the Coachella Valley), all other applicable Federal and State laws, and the requirements set forth herein.

The Contractor is cautioned that failure to control fugitive dust may result in fines being levied by the South Coast Air Quality Management District to both the Contractor and the County, as Owner. The Contractor shall be fully responsible for payment of all fines pertaining to air pollution control violations, resulting from Contractor's operations related to the construction contract, which may be levied against both the Contractor and the County by the AQMD or other regulatory agencies. The Contractor's attention is directed to Section 7-1.02, "Laws" and Section 7-1.02A of the Standard Specifications. The cost of all fines levied against the County will be deducted from any moneys due or which may become due to the Contractor, unless other payment arrangements are made by the Contractor.

Dust control of all of the Contractor's operations is required 24 hours per day, 7 days a week for the duration of the contract, and until the disturbed soil is permanently stabilized. The Contractor shall take every precaution to prevent emissions of fugitive dust from the project site, from locations of stockpiled materials, from unpaved driving surfaces, from haul vehicles, from inactive construction areas, and from all other operations of the Contractor. The Contractor shall plan for and carry out proper and efficient measures to prevent their operations from producing dust in amounts damaging to property or which constitute a public nuisance, or which cause harm to persons living or working in the vicinity of the work. Particular concern of emissions is PM10 particles. PM10 particles are fine particulate matter of 10 microns or less which are associated with sickness and death from respiratory disease.

The Contractor shall furnish and post dust mitigation signs, which shall be, at a minimum, in accordance with the "AQMD Recommendations", attached hereto (See Appendix). Additional copies are available upon request from the Engineer. The sign shall include the Contractor's phone number which shall be maintained on a 24 hour basis. The sign message, size and design, including any deviations from the signage recommendations, shall be approved by the Engineer prior to fabrication.

The Contractor shall respond to complaints by mobilizing equipment and personnel at the construction site within 2 hours of each complaint to control fugitive dust.

Attention is directed to AQMD Rule 403.1, which applies to all contracts within the Coachella Valley Area of Riverside County. That AQMD Rule requires the Contractor to take specified dust control actions when prevailing wind speeds exceed 25 miles per hour. Wind forecasts, AQMD Rules and other related information are provided by AQMD at 1-800-CUT-SMOG and at www.aqmd.gov.

Any days on which the Contractor is prevented from working, due to the requirements of AQMD Rules, will be considered as non-working days, in accordance with Section 8-1.05, "Time" of the Standard Specifications.

The Contractor shall utilize the "Best Available Control Measures" of controlling fugitive dust, as prepared by the AQMD. For projects within the Coachella Valley, the "Reasonably Available Control Measures" may be employed, if effective within the context of the AQMD rules. However, if fugitive dust crosses the project boundary, more effective control measures, including the "Best Available Control Measures" shall be implemented.

A site-specific fugitive dust control plan shall be submitted to the Engineer for review and approval at least 10 days prior to the start of construction. Additionally, for projects outside of the Coachella Valley which meet the criteria for AQMD plan approval, the Contractor shall submit the dust control plan to AQMD for approval. AQMD plan submittal criteria is defined in AQMD Rule 403 as being for projects that will have disturbed surface area in excess of 100 acres, or for projects with a scope of work which requires the movement of more than 10,000 cubic yards of soil on each of any three working days.

A sample plan and other pertinent information is attached, and additional copies are available from the Engineer upon request. The fugitive dust control plan shall include the "Reasonably Available Control Measures" and "Best Available Control Measures" of controlling fugitive dust, as may be appropriate and necessary, including but not limited to watering, application of chemical dust suppressants, wind fencing, covering of haul vehicles, haul vehicle bed-liners, covering or chemically stabilizing stored materials, phased grading, planting of vegetation, the use of a 24 hour environmental observer, and track-out controls at locations where unpaved construction accesses intersect with paved roads. The use of chemical stabilizers, which are approved by all environmental regulatory agencies, and the use of reclaimed water is encouraged. If water is intended as a primary dust control tool, the dust control plan shall provide for at least one 2,000 gallon water truck for every 4 acres of disturbed soil, unless otherwise approved by the Engineer.

If the Construction Engineer determines that the project scope and the forecasted weather conditions are such that the Contractor's work is unlikely to be a source of dust emissions, the Construction Engineer has the authority to waive the requirements for submittal of a dust control plan and for placement of the dust control signs described herein. However, the Contractor's responsibilities for the control of fugitive dust and the other requirements of this Section may not be waived.

A completion notice will not be filed, and the final payment will not be made to the Contractor until the areas of disturbed soil on the construction site, including roadway shoulders, are suitably stabilized for long term control of fugitive dust.

The successful Contractor shall attend an AQMD PM10 Dust Control Program training session, and furnish evidence of attendance to the Engineer. Attendance at AQMD training seminars can be scheduled through AQMD at 1-866-861-DUST (1-866-861-3878) or by email to dustcontrol@aqmd.gov. Current AQMD certification of previous attendance will be accepted.

At that training session, the successful Contractor will be furnished with the AQMD prepared Rule 403 and Rule 403.1 implementation handbooks, which include the "Best Available Control Measures" and "Reasonably Available Control Measures", and other associated information, including a listing of suggested dust control related devices, materials and chemicals.

The signature of the Contractor on the Contract constitutes acknowledgement by the Contractor of the dust control requirements established by law and described herein, and the enforceability of those requirements.

Payment

When the contract includes a work item for Dust Abatement, full compensation for conformance with these dust abatement requirements, including labor, equipment, materials, developing water supply and incidentals, shall be paid at the lump sum price for Dust Abatement, and no additional compensation will be allowed therefor.

When the contract does not include a work item for Dust Abatement, full compensation for conformance with these dust abatement requirements, including labor, equipment, materials, developing water supply and incidentals, shall be considered as included in the agreed cost for emergency repair work Contract and no additional compensation will be allowed therefor.

SPECIAL PROVISIONS

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DIVISION 0 COUNTY PROVISIONS

00 COUNTY MISCELLANEOUS

00-1.01 PROJECT DESCRIPTION:

**Emergency Storm Damage Repair Work
Whitewater Canyon Road
Culvert Crossing and Washout
North of City of Palm Springs
Project No. 45-19180101**

Attention is directed to Section 4 "SCOPE OF WORK" of the Standard Specifications.

Work performed will be paid as force account work, as described in Section 9-1.04 of the Caltrans Standard Specifications. The contract and procedures will be in accordance with the County of Riverside's emergency contract procedures, as directed in County Resolution 2019-035.

Whitewater Canyon Road is a rural paved road approximately 5 miles long by 22-30 feet wide situated between Interstate 10 (I-10) and the Wildland Conservancy in the County of Riverside. It serves as an access road from I-10 freeway, heading north to Bonnie Bell community and terminates at the Whitewater preserve. Recent storm events has eroded and washed-out portions of the roadway within the canyon, deposited sediments atop the paved road and buried or washed out existing culverts. The proposed reconstruction will repair and re-establish those segments of the roadway that have been completely washed-out.

Emergency work shall include any or all of the following listed types of work, as directed by the Engineer:

1. Emergency work assessment and coordination meeting at project location,
2. Prepare and implement Stormwater Pollution Prevention Program (SWPPP),
3. Mobilization and equipment staging,
4. Earthwork and channel restoration,
5. Grading and repairs to existing roadway,
6. Roadway subgrade section replacement,
7. Hot mix asphalt (HMA) paving,
8. Remove, replace and repair drainage systems including culvert crossing,
9. Disposal of excess excavation or unusable materials,
10. Striping and signage,
11. Whitewater channel is to be restored and re-established to pre-event natural course conditions,
12. Additional work shall be performed as necessary, as directed by the Engineer.

00-1.02 SPECIFICATIONS

This project shall conform to the requirements of the **2015** edition of the Standard Specifications and Standard Plans as issued by the State of California Department of Transportation.

00-1.03 TIME OF COMPLETION:

The Contractor shall diligently prosecute the work to completion before the expiration of **40 Working Days** from the date stated in the "Notice to Proceed".

00-1.04 LIQUIDATED DAMAGES:

There are no liquidated damaged assigned to this project.

00-1.05 PROSECUTION AND PROGRESS:

Attention is directed to the provisions in Section 8-1.04, "Start of Job Site Activities", Section 8-1.05 "Time" of the Standard Specifications and these Special Provisions.

Standard Specification Section 8-1.04B, "Standard Start" is modified to read as follows:

The Contractor shall begin work within the calendar days stated within the written "Notice to Proceed".

The Contractor shall notify the Engineer, in writing, of the Contractor's intent to begin work at least 24 hours before work is begun. If the project has more than one (1) location of work, Contractor shall submit a separate notice for each location. The notice shall be delivered to the Transportation Department's Resident Engineer and shall specify the date the Contractor intends to start at said location.

Should the Contractor begin work in advance of receiving a written "Notice to Proceed", any work performed by the Contractor in advance of the date stated in the "Notice to Proceed" shall be considered as having been done by the Contractor at his own risk and as a volunteer and subject to the following:

- A. The Contractor shall, on commencing operations, take all precautions required for public safety and shall observe all the provisions in the Specifications and the Special Provisions.
- B. All work done according to the Contract, prior to the issuance of the "Notice to Proceed", will be considered authorized work and will be paid for as provided in the contract.
- C. The Contractor shall not be entitled to any additional compensation or an extension of time for any delay, hindrance or interference caused by or attributable to commencement of work prior to the issuance of the "Notice to Proceed".

00-1.06 DISPOSAL OF EXCESS EXCAVATION OR MATERIALS:

Attention is directed to Section 17-2.03D, "Disposal of Materials", of the Standard Specifications and these Special Provisions.

Excess earth excavation, pavement grindings and other excess materials resulting from construction operations shall be disposed of by the Contractor outside of the highway right of way.

When any material is to be disposed of outside the highway right of way, and the County has not made arrangements for the disposal of such material, the Contractor shall first obtain written authorization from the property owner on whose property the disposal is to be made, and obtain all required permits from the jurisdictional agency(s) for said work, and Contractor shall file with the Engineer said authorization or a certified copy thereof together with a written release from the property owner absolving the County from any and all responsibility in connection with the disposal of material on said property. If the disposal of materials is to be made at an established disposal facility that is available for public use, the Contractor shall retain all authorizations and receipts from said disposal facility and shall provide copies to the Engineer upon request.

Payment

Full compensation for all costs involved in disposing of materials as specified in this section, including all costs of hauling, shall be considered as included in the estimated cost for emergency repair work Contract and no additional compensation will be allowed therefor.

00-1.07 PROJECT APPEARANCE:

Attention is directed to General Condition 27, "Use, Care and Protection of Premises."

The Contractor shall maintain a neat appearance to the worksite. The parkway between the pavement and property line is generally maintained free of trash and debris by the adjacent property owners. The Contractor shall inform all workers to be respectful of the property owners and maintaining the parkways and street adjacent to their homes.

The Contractor must maintain a neat appearance to the work.

In areas visible to the public, the following shall apply:

- A. When practicable, broken concrete and debris developed during clearing and grubbing shall be disposed of concurrently with its removal. If stockpiling is necessary, the material shall be removed or disposed of weekly.
- B. Trash bins shall be furnished for debris from structure construction. Debris shall be placed in trash bins daily.
- C. Forms or falsework that are to be re-used shall be stacked neatly concurrently with their removal. Forms and falsework that are not to be re-used shall be disposed of concurrently with their removal.

Prior to the leaving the project site daily, the Contractor shall collect and dispose of any trash or debris within the project area.

See "Liquidated Damages" Special Provisions for penalties associated with non-compliance.

Payment

Full compensation for conforming to the requirements of this section, Project Appearance, shall be considered as included in the estimated cost for emergency repair work Contract and no additional compensation will be allowed therefor.

00-1.08 MISCELLANEOUS WORK AS DIRECTED:

Miscellaneous directed work shall consist of necessary work that is not included in other contract bid items, as determined by the Engineer. Miscellaneous directed work shall be performed as directed by the Engineer and in accordance with the applicable standards and specifications.

Payment:

Payment for implementing miscellaneous directed work will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, up to the fixed bid price, for the work performed.

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DIVISION I GENERAL PROVISIONS

2 BIDDING

Add to Section 2-1.06A:

Amendments to the 2015 Standard Specifications (Revised Standard Specifications) for this project, dated **April 20, 2018**, are incorporated herein. This document is available upon request at the office of the Department.

5 CONTROL OF WORK

Replace section 5-1.26 Construction Survey with the following:

5-1.26 Construction Survey

5-1.26A General

County surveyors will establish external primary survey control monuments and/or marks to be used throughout the construction period. These control monuments and marks are to be protected by Contractor and will be used to set construction stakes and/or marks. The control marks will also be used to make verification surveys at various stages of work.

Survey monuments, stakes and marks are set per the County's Survey Manual.

Contractor must submit a written request for County furnished construction staking before, or immediately after, area to receive staking is ready for the installation of the construction stakes.

5-1.26B Survey Request

The County will provide Contractor with a survey request form. Survey staking requests must be received from Contractor a minimum of two (2) Business Days prior to the installation of the requested construction staking. The County shall receive written survey request on operating Business Day, Monday through Thursday, and prior to 4:00 p.m. Requests received after 4:00 p.m. or on any other day, shall be considered as submitted at 7:30 a.m. the next Business Day.

5-1.26C Preserve Survey Stakes and Marks

Contractor must preserve primary survey control monuments and marks, construction stakes and construction marks placed by the County. Survey costs are incurred by the County; however, if the Contractor fails to protect and/or destroys these survey items, the County shall replace them at the County's earliest convenience and deduct the cost of replacement from payment due to the Contractor.

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DIVISION II GENERAL CONSTRUCTION

10 GENERAL

Add to Section 10-6, Watering:

10-6.01 Develop Water Supply

Develop water supply shall conform to the provisions of Section 10-6 of the Standard Specifications and these Special Provisions.

Attention is directed to the requirements of Section 10-5 "Dust Control" of Standard Specifications, and appendix A of these Special Provisions.

10-6.02 Payment:

Full compensation for compliance with the requirements of this Section will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, for the work performed.

12 TEMPORARY TRAFFIC CONTROL

12-4 MAINTAINING TRAFFIC

Add to Section 12-4.01 General:

MAINTAINING TRAFFIC:

Contractor will have forty (40) Working Days to complete this project. Whitewater Canyon Road will remain open for the duration of the project.

Daily working hours shall be between the hours of 6:00 a.m. and 6:00 p.m., Sunday through Saturday, including legal holidays, as approved by the Engineer. Exceptions and specific work schedules shall be submitted to the Engineer for consideration.

If necessary, maintaining traffic shall conform to the provisions in Section 7-1.03, "Public Convenience", Section 7-1.04, "Public Safety" and Section 12, "Temporary Traffic Control" of the Standard Specifications and "Public Safety" of these Special Provisions.

Designated County legal holidays are January 1st, the third Monday in January, February 12th, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, the second Monday in October, November 11th, Thanksgiving Day, the Friday following Thanksgiving Day, December 24th and 31st when they fall on Monday, December 25th, December 26th and January 2nd when they fall on Friday, When a designated legal holiday falls on a Sunday, the following Monday shall be a designated legal holiday. When January 1st, February 12th, July 4th, November 11th, or December 25th fall on a Saturday, the preceding Friday shall be a designated legal holiday.

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13 WATER POLLUTION CONTROL

Replace section 13 Water Pollution Control with:

13-1.01 Water Pollution Control
13-1.01(A) General

WATER POLLUTION CONTROL (COLORADO RIVER BASIN REGION):

Throughout the term of this contract, the total land disturbance area of the project site is more than 1 acre.

After receiving an electronic copy of the approved SWPPP, the County will submit a Notice of Intent (NOI) to the State Water Resources Control Board for compliance with the General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (hereafter referred to as the Construction General Permit), which is available at:

(http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml).

The NOI will not be processed and approved by the State Water Resources Control Board until the fee for stormwater permit coverage is paid. The contractor shall issue a check in the amount shown on the Fee Statement provided by the Department to the State Water Quality Board. The Fee Statement will be generated after the approved SWPPP is uploaded and the NOI is ready to be submitted to the State Water Quality Control Board. Once the NOI is approved, the State Water Resources Control Board will issue a Waste Discharge Identification Number (WDID) for the project. The Storm Water Construction Annual Fee by Acre can be found on the State Water Resources Control Board website.

The Area-Wide Municipal Stormwater Permit NPDES No. CAS617002, hereafter referred to in this section as the "Municipal Permit", issued by the California Regional Water Quality Control Board (CRWQCB) – Colorado River Basin Region. This permit regulates both stormwater and non-stormwater discharges associated with Contractor's construction activities. A copy of the Permit may be obtained at the office of the County of Riverside Transportation Department, 14th Street Transportation Annex, 3525 14th Street, Riverside, California, (951) 955-6780, or may be obtained on the internet at: <http://www.swrcb.ca.gov/rwqcb7>

The Contractor shall comply with the requirements of the Construction General Permit (NPDES No. CAS000002), the Municipal Permit, and the De Minimus Permit (NPDES No. CAG998001).

Contractor's Stormwater Pollution Prevention Plan and Monitoring Program (SWPPP/MP) shall be prepared by a Qualified SWPPP Developer in accordance with the Construction General Permit Section I.M.77.

You must use the most current Caltran's Stormwater Pollution Prevention Program (SWPPP) template. An electronic template prepared to assist construction contractors in their preparation of a Stormwater Pollution Prevention Plan (SWPPP) is available at:

<http://www.dot.ca.gov/hq/construc/stormwater/>

This project is a Risk Level Level 1 project under the Construction General Permit. Therefore, Contractor's SWPPP/MP shall also conform to Attachment C, Risk Level 1 Requirements of the Construction General Permit.

13-1.01(B) WATER POLLUTION CONTROL MEASURES

- A. The contractor cannot start work, including equipment and material mobilization, stockpiling, clearing and grubbing or any other ground disturbance, without an approved SWPPP and the issuance of the WDID by the State Water Resources Control Board. **The Engineer's review and approval of the Contractor's SWPPP/MP shall not waive any contractual requirements and shall not relieve the Contractor from achieving and maintaining compliance with all federal, state, and local laws, ordinances, statutes, rules, and regulations.** A copy of Contractor's SWPPP/MP shall be maintained onsite. When the

SWPPP/MP or access to the construction site is requested by a representative of a federal, state, or local regulatory agency, Contractor shall make the SWPPP/MP available and Contractor shall immediately contact the Engineer. Requests from the public for the Contractor's SWPPP/MP shall be directed to the Engineer.

- B. Contractor's SWPPP/MP shall describe the Contractor's plan for managing run-on and runoff during each construction phase. Contractor's SWPPP/MP shall describe the Best Management Practices (BMPs) that will be implemented to control erosion, sediment, tracking, construction materials, construction wastes, and non-stormwater flows. BMP details shall be based upon California Stormwater Quality Association's (CASQA) California Stormwater Quality BMP Handbook Subscription Portal (<http://www.cabmphandbooks.com>) or the Caltrans Construction Site BMP Manual (<http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm>). Contractor's SWPPP/MP shall describe installation, operation, inspection, maintenance, and monitoring activities that will be implemented for compliance with the Construction General Permit and all applicable federal, state, and local laws, ordinances, statutes, rules, and regulations related to the protection of water quality.
- C. Preparer of Contractor's SWPPP/MP shall have one of the following credentials:
1. A California registered professional civil engineer;
 2. A California registered professional geologist or engineering geologist;
 3. A California registered landscape architect;
 4. A professional hydrologist registered through the American Institute of Hydrology;
 5. A Certified Professional in Erosion and Sediment Control™ (CPESC®) registered through EnviroCert International, Inc.; or
 6. A Certified Professional in Storm Water Quality™ (CPSWQ®) registered through EnviroCert International, Inc.

Additionally, the preparer of the Contractor's SWPPP/MP shall have a Qualified SWPPP Developer (QSD) certificate in conformance with the Construction General Permit.

- D. Contractor shall designate a Water Pollution Control Manager that shall have one of the certifications in the immediately preceding subsection D or one of the following certifications:
1. A certified erosion, sediment and storm water inspector (CESSWI) registered through EnviroCert International, Inc.; or
 2. A certified inspector of sediment and erosion control (CISEC) registered through Certified Inspector of Sediment and Erosion Control, Inc.

Additionally, the Contractor's Water Pollution Control Manager shall have a QSD certificate or a Qualified SWPPP Practitioner (QSP) certificate in conformance with the Construction General Permit. The responsibilities of the Water Pollution Control Manager shall not be delegated to anyone that does not possess a valid QSD or QSP certificate. The Water Pollution Control Manager shall be a QSP or QSD that has completed the CASQA training. The QSP/QSD cannot be solely registered through the SMARTS System (for more details see the State Board website, http://www.swrcb.ca.gov/water_issues/programs/stormwater/docs/training/cbpelsg_fs.pdf).

- E. Contractor's Water Pollution Control Manager shall:
1. Be responsible for all water pollution control work.
 2. Be the Engineer's primary contact for all water pollution control work.
 3. Oversee the maintenance of WPC practices.
 4. Oversee and enforce hazardous waste management practices
 5. Ensure that all employees have current water pollution control training
 6. Implement the approved SWPPP and amend the SWPPP when required
 7. Have the authority to mobilize resources (crews, supplies, equipment, etc.) to make immediate repairs of water pollution control measures or to supplement water pollution control measures to maintain compliance with all federal, state, and local laws, ordinances, and regulations related to the protection of water quality, including the General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities.
 8. Be responsible for the inspection of WPC practices identified in the SWPPP
 9. Be responsible for the inspections and reports for all monitoring
 10. Be responsible for the preparation and implementation of REAPs
 11. Be responsible for sampling and analysis

12. Be responsible for the preparation and submittal of all SWPPP documentation including inspection reports, weather monitoring reports, NAL exceedance reports, SWPPP Annual Certification, Annual Reports, and Notice of Termination, etc.

F. Water Pollution Control Training: Contractor shall provide water pollution control training to Contractor's employees and subcontractors prior to their performing work on the work site. The water pollution control training shall be appropriate to the employee or subcontractor function and area of responsibility and shall address (as applicable):

1. Erosion Control (water and wind)
2. Sediment Control
3. Tracking Control
4. Materials & Waste Management
5. Non-Stormwater Discharge Management
6. Run-on and Run-off Control

G. Monitoring and Reporting: An adequate sampling kit is required to be onsite, and maintained by the QSP, at all times for the sampling and testing of non-visible pollutants, whether or not non-visible pollutants are onsite. Observations and inspections conducted by the Contractor's Water Pollution Control Manager shall be documented on the Construction Site Inspection Checklist included in Contractor's SWPPP/MP. A copy of each completed Construction Site Inspection Checklist shall be submitted to the Engineer within 24 hours of conducting the inspection.

13-1.01(C) General Requirements

In the event the County incurs any Administrative Civil Liability (fine) imposed by the California Regional Water Quality Control Board – Santa Ana River Basin Region, the State Water Resources Control Board, or EPA, as a result of Contractor's failure to fully implement the provisions of "Stormwater and Non-Stormwater Pollution Control", the Engineer, may, in the exercise of his sole judgment and discretion, withhold from payments otherwise due to Contractor a sufficient amount to cover the Administrative Civil Liability including County staff time, legal counsel, consultant support costs and all other associated cost.

The Contractor shall be held solely responsible for all costs and for any liability imposed by law as a result of the Contractor's failure to comply with the requirements set forth in "Water Pollution Control", including but not limited to, compliance with the applicable provisions of the Caltrans Handbooks, Construction General Permit, Federal, State, and local regulations. For the purpose of this paragraph, costs and liabilities include, but not limited to, fines, penalties, damages, and costs associated with defending against enforcement actions whether taken against the County or the Contractor, including those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Act.

13-1.01(D) Submittals

Within fifteen (15) working days after the award of the contract, the Contractor shall submit two (2) copies and one (1) pdf. file of the SWPPP/CSMP to the Engineer for review and approval. The Contractor shall allow five (5) working days for the Engineer to review the SWPPP/MP. If revisions are required as determined by the Engineer, the Contractor shall revise and resubmit the SWPPP/MP within three (3) working days of receipt of the Engineer's comments and shall allow five (5) working days for the Engineer to review the revisions. The Contractor shall submit four (4) copies and one (1) pdf. file of the approved SWPPP/MP to the Engineer prior to notice to proceed. The Contractor must have an approved SWPPP/MP and a WDID prior to the notice to proceed. The contractor cannot start work, including equipment and material mobilization, stockpiling, clearing and grubbing or any other ground disturbance, without an approved SWPPP and the issuance of the WDID by the State Water Resources Control Board.

The Contractor's SWPPP/MP shall contain all required and applicable certifications and evidence of training for the Water Pollution Control Manager, QSP, QSD, and all other employees working on the project receiving formal training or certification.

Unless otherwise directed by the Engineer or specified in these Special Provisions, the Contractor's responsibility for SWPPP/MP implementation shall continue throughout any temporary suspension of work ordered in accordance with Section 8-1.06, "Suspensions", of the Standard Specifications.

The Engineer may withhold progress payments or order the suspension of construction operations without an extension of the contract time, if the Contractor fails to comply with the requirements of "Water Pollution Control" as determined by the Engineer.

All BMP repairs shall be implemented by the Contractor within 72 hrs. of being damaged or needing repair or maintenance. All BMP repairs shall also be implemented by the Contractor prior to a qualifying storm event, as defined in the Construction General Permit.

The Contractor shall be responsible for all the "Risk Level 1 Monitoring and Reporting Requirements" described in the General Construction Permit, which includes (but not limited to):

- a. Visual Monitoring (Inspection) Requirements for Qualifying Rain Events
- b. Monitoring Methods
- c. Non-Storm Water Discharge Monitoring Requirements
- d. Non-Visible Pollutant Monitoring Requirements
- e. Records
- f. Water Quality Sampling Analysis
- g. Storm Water Discharge Water Quality Sampling locations
- h. Storm Water Sample Collection and Handling Instructions
- i. Analytical Methods
- j. Watershed Monitoring Option
- k. Particle Size Analysis for Project Risk Justification
- l. NAL Exceedance Report
- m. Bioassessment

The Contractor shall be responsible for all of the inspection required by the General Construction Permit (weekly, pre and post storm, quarterly non-stormwater, etc). The Contractor shall be responsible for providing a signed annual certification and summary provided on the Department's latest form and all information for annual reporting purposes in electronic format, including inspection reports, photos, NOI, sampling and analysis reports, etc.

The contractor shall submit the Annual Report to the Engineer prior to July 15th. The Department will upload documentation to SMARTS.

Dewatering

The Contractor shall be responsible for obtaining coverage under latest adopted version of the De Minimus Permit for non-stormwater discharges, and provide notification prior to a regulated discharge. Compliance with the De Minimus Permit is required by the Municipal Permit. Failure to comply with this Order, may subject the discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, State, or federal law enforcement entities. This permit regulates non-stormwater discharges to surface waters of various types of wastes that pose an insignificant threat to water quality and includes monitoring and reporting requirements. At least 45 days before the start of a new (De Minimus Permit) discharge, the contractor shall submit an application and obtain the authorization letter from the (the Regional Board's) Executive Officer to discharge wastewater to surface waters. The types of wastewater discharges regulated under this Permit include the following discharges:

- a. Construction dewatering wastes;
- b. Wastes associated with well installation, development, test pumping and purging;
- c. Aquifer testing wastes;
- d. Dewatering wastes from subterranean seepage, except for discharges from utility vaults;
- e. Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
- f. Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
- g. Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
- h. Discharges from potable water supply systems resulting from initial system startup, routine startup, sampling of influent flow, system failures, pressure releases, etc.;
- i. Discharges from fire hydrant testing or flushing;

- j. Air conditioning condensate;
- k. Swimming pool discharge;
- l. Discharges resulting from diverted stream flows;
- m. Decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities; and
- n. Other similar types of wastes as determined by the Regional Water Board Executive Officer, which pose a de minimus threat to water quality yet must be regulated under waste discharge requirements.

In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, discharge limitation (e.g., maximum daily effluent limitation), or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (951) 782-4130 within 24 hours of having knowledge of such noncompliance that may endanger public health or the environment, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

The Contractor is responsible and shall all conduct monitoring, sampling and analysis, and report preparation for conformance with the Construction Permit, Municipal Permit, and De Minimus Permit. The Contractor will not be compensated for sampling and analysis work due to the Contractor's failure to properly implement, inspect, maintain, and repair BMPs in conformance with the approved SWPPP/MP and any amendments thereto, or for failing to store construction materials or wastes in watertight conditions.

Each proposal shall have listed therein the name and address of a local certified laboratory within 50 miles of the project site to whom the Contractor proposes to subcontract all laboratory sampling and analysis, monitoring and report preparation necessary to comply with the Construction General Permit, De Minimus and the Municipal Permit, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The Contractor's attention is invited to other provisions of the Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions. The certified laboratory shall have experience with monitoring, sampling and analysis, and report preparation for the Construction General Permit and/or the De Minimus Permit and shall be certified by the State. A list of certified laboratories by the State can be found at:

<http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls>

13-1.01(E) Notice of Termination

Contractor shall perform all work specified within this specification and within the project SWPPP and shall remain responsible for Construction General Permit Compliance until such time the Notice of Termination (NOT) is filed and approved by the California Regional Water Quality Control Board. Within 30 days of completion of construction, the Contractor shall be responsible to collect, compile, and furnish to the County Engineer all necessary backup documentation required to submit for NOT. This documentation shall include at a minimum:

- a. Final Site Map
- b. Final Site Photos
- c. Documents demonstrating achievement of "final stabilization".
- d. Signed certification that all construction materials and wastes have been properly disposed.
- e. Signed certification that all construction equipment and temporary BMPs have been removed from the site.
- f. Documents indicating that all permanent BMPs (required by the MS4 Permit) have been constructed and are properly functioning. Documentation shall also indicate that a mechanism for long term maintenance of these BMPs is in place.
- g. Other documentation as necessary to demonstrate that no potential exists for discharge of construction related pollutants within stormwater.
- h. Electronic copies of all water quality related documentation.
- i. A signed summary of water quality related activities provided on the Department's latest form.

County Engineer or NPDES Coordinator will upload documentation and file the NOT in SMARTS.

13-1.01(F) ~~Additional Liquidated Damages: (NOT USED)~~

13-1.01(G) Payment

Full compensation for compliance with the requirements of this Section will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, for the work performed; including obtaining Permit coverage, issuing a check to the State Water Quality Board for Permit coverage, developing, preparing, revising, obtaining approval of, and amending the SWPPP/MP, implementing, installing, constructing, operating, maintaining, and removing and disposing of temporary BMPs, performing the observations, inspections, sampling, analysis, reporting, and street sweeping, achieving NOT approval and as specified in the Caltrans Handbooks, Construction General Permit, De Minimus Permit, Municipal Permit and these Special Provisions, and as directed by the Engineer.

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14 ENVIRONMENTAL STEWARDSHIP

14-2 CULTURAL RESOURCES

Add to Section 14-2.01, Cultural Resources:

14-2.01 General

Section 14-2.03, "Archeological Resources" applies if cultural resources are discovered at the job site. Do not disturb the resources and immediately:

1. Stop all work within a 100-foot radius of the discovery.
2. Protect the discovery area
3. Notify the Engineer.

The Department will investigate. Do not move cultural resources or take them from the job site. Do not resume work within the discovery area until authorized.

If ordered, furnish resources to assist in the investigation or recovery of cultural resources.

The California Public Resources Code Chapter 1.7, Section 5097.5 makes it a misdemeanor for anyone to knowingly disturb an archeological or historical feature. California Public Resources Code Sections 5097.98 and 5097.99 require protection of Native American remains which may be found and outlines procedures for handling any burials found.

In the event that any damage occurs to any cultural resource, the Contractor shall bear the full cost of resource damage evaluation and restoration, and such payment shall not relieve Contractor from civil or criminal remedies otherwise provided by law.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification

by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

14-6 BIOLOGICAL RESOURCES

Add to Section 14-6.03B Bird Protection:

14-6.03 BIRD PROTECTION

14-6.03B(1) General

Bird Protection shall conform to Section 14-6.03 "Bird Protection" of Standard Specifications, these Special Provisions and as directed.

Regulatory Requirements

Attention is directed to the Federal Migratory Bird Treaty Act (15 USC 703-711) 50 CFR Part 21 and 50 CFR Part 10, and the California Department of Fish and Game Code Sections 3503, 3513 and 3800, that protect migratory birds, their occupied nests, and their eggs from disturbance or destruction.

Ground disturbance, tree, shrub and/or vegetation removal that occurs between February 15th and September 1st will not commence until a preconstruction survey for nesting birds has verified that no active nests have been located or the Engineer has approved the beginning of work. If an active nest is located, construction within 500 feet of the nest must be avoided until the nest has been vacated and the young are independent of their parents.

The nesting survey, if required, will be provided by Riverside County staff.

Biological Education and Monitoring

Prior to the Contractor's ground-disturbing activities, the Department's biologist will conduct a preconstruction ground sweeping survey of the project site. The Department's biologist will conduct training sessions for Contractor employees prior to construction. All personnel will be required to participate in order to receive the environmental awareness training.

The Department will retain, and have available, the services of a qualified biologist as specified in these special provisions for a pre-construction sweep of the project site, on-site monitoring, if required, and all exit surveys or relocation handling that may be required.

Add following to section 14-6.03D Payment

14-6.03D Payment

Full compensation for Environmental Stewardship shall be considered as included in the prices paid for other force account items of work and no additional compensation will be allowed therefor.

AA

DIVISION III EARTHWORK AND LANDSCAPE

17 GENERAL

17-2 CLEARING AND GRUBBING

Add to section 17-2.01, General, CLEARING AND GRUBBING:

Clearing and grubbing activities shall include but not be limited to **removing and disposing of weeds, grasses, shrubs, roots, and grading areas adjacent to the road within the footprint of the project.**

Trees and bushes including tree stumps and roots shall be removed as shown on the plans and as directed by the Engineer.

Removed trees, trimmings, vegetation, and debris shall be the property of the Contractor and shall be disposed of by the Contractor, as provided in Section 17-2.03D, "Disposal of Materials" of the Standard Specifications and Section 00-1.14, Disposal of Excess Excavation or Materials, of these Special Provisions.

Any tree or bush removal or trimming between February 15th and September 1st will require a preconstruction survey for nesting birds. The Contractor shall schedule accordingly.

The nesting survey, if required, will be provided by Riverside County staff.

Regulatory Requirements

Attention is directed to the Federal Migratory Bird Treaty Act (15 USC 703-711) 50 CFR Part 21 and 50 CFR Part 10, and the California Department of Fish and Game Code Sections 3503, 3513 and 3800, that protect migratory birds, their occupied nests, and their eggs from disturbance or destruction.

Construction

Ground disturbance, tree, shrub and/or vegetation removal that occurs between February 15th and September 1st will not commence until a preconstruction survey for nesting birds has verified that no active nests have been located or the Engineer has approved the beginning of work. If an active nest is located, construction within 500 feet of the nest must be avoided until the nest has been vacated and the young are independent of their parents.

Between February 15th and September 1st, the Contractor shall notify the Engineer 15 working days prior to beginning work disturbing structures, the ground or vegetation. The Engineer will approve the beginning of work disturbing the ground or vegetation between February 15th and September 1st.

The Contractor shall use exclusion techniques directed by the Engineer to prevent migratory birds from nesting on the ground, on structures or in trees, shrubs or other vegetation within the project limits.

If evidence of bird nesting is discovered, the Contractor shall not disturb the nesting birds or nests until the birds have naturally left the nests. If evidence of migratory bird nesting is discovered after beginning work, the Contractor shall immediately stop work within 500 feet of the nests and notify the Engineer. Work shall not resume until the Engineer provides a written notification that work may begin at or adjacent areas of the discovered bird nest locations.

Attention is directed to Section 8-1.06, "Suspensions" of the Standard Specifications.

Nothing in this section shall relieve the Contractor from providing for public safety in conformance with the provisions in Section 7-1.04, "Public Safety" of the Standard Specifications.

Activities controlled by the Contractor, except cleanup or other required work, shall be confined within the graded areas of the roadway.

Before final inspection of the work, the Contractor shall clean the highway, material sites and all ground occupied by the contractor in connection with work of all rubbish, excess materials, falsework, temporary structures and equipment. All parts of the work site shall be left in a neat and presentable condition.

Nothing herein, however, shall require the Contractor to remove warning, regulatory and guide signs prior to formal acceptance by the director.

Replace Section 17-2.04 with:

Payment

Full compensation for compliance with the requirements of this Section, including but not limited to **removing and disposing of weeds, grasses, shrubs, roots, and grading areas adjacent to the road within the footprint of the project**, will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, for the work performed.

Add to the section 17-2.03D "Disposal of Material":

Before final inspection of the work, the Contractor shall clean the highway, material sites and all ground occupied by the contractor in connection with work of all rubbish, excess materials, falsework, temporary structures and equipment. All parts of the work shall be left in a neat and presentable condition.

Nothing herein, however, shall require the Contractor to remove warning, regulatory and guide signs prior to formal acceptance by the director.

Nothing in this section shall relieve the Contractor from providing for public safety in conformance with the provisions in Section 7-1.04, "Public Safety" of the Standard Specifications.

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19 EARTHWORK

19-2 ROADWAY EXCAVATION

Add to Section 19-2.01 General:

Roadway Excavation

Roadway Excavation shall conform to the provisions of Section 19 "Earthwork" of the Standard Specifications and these Special Provisions.

Earthwork and Roadway Excavation shall include but not limited to:

- Excavating and salvaging as much of the existing roadway.
- Removal of oversize materials, such as rocks and boulders, chunks of asphalt concrete, organics and other unsuitable materials within the road alignment.
- Disposal of excess material resulting from excavation.
- Restoration of channel tor cross over and through pre-existing low water drainage crossings. Channel widths for restoration vary from 100-400 ft to re-direct channel flow through drainage systems.
- Road Grading to establish the road alignment and expose the existing roadway.

- Moisture condition and compaction of sub-grade, and shoulders to 95%
- Shoulder grading
- Grading of proposed cut and fill slopes to drain to the nearest drainage facilities

Ground asphalt concrete shall not be used at the surface of shoulders.

At road connections and at limits of asphalt paving, existing pavement shall be header cut as directed by the Engineer. Full compensation for furnishing all labor, tools and doing all the work necessary including grinding, and sawcutting shall be considered as included in the contract prices paid per ton for the various asphalt concrete items and no additional compensation will be allowed therefor.

Existing pavement including any base material shall be cut back to neat lines and removed as shown on the plans or as directed by the Engineer. Excess material will become the property of the Contractor and will be disposed of as provided in Section 00-1.17, Disposal of Excess Excavation or Materials, of these Special Provisions.

Pavement and base material removal will be considered as roadway excavation for payment purposes.

Relative Compaction

Relative compaction shall conform to the provisions of Section 19-5.03B, "Relative Compaction (95 Percent)" of the Standard Specifications, these Special Provisions and/or as directed by the Engineer.

Whenever relative compaction is specified to be determined by Test Method No. Calif. 216, the in place density may be determined by Test Method No. Calif. 231. The in place density required by Test Method No. Calif. 312 may be determined by Test Method No. 231. The wet weight or dry weight basis and English Units of Measurement may be used at the option of the Materials Engineer.

Payment:

Payment for Roadway Excavation will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work including all necessary concrete excavation and backfill as specified in the Standard Specifications.

AA

DIVISION V SURFACINGS AND PAVEMENTS

39 ASPHALT CONCRETE

Replace section 39-2 HOT MIX ASPHALT with the following

39-2.01 Hot Mix Asphalt

This work includes producing and placing hot mix asphalt (HMA) Type A . Comply with the specifications for HMA under Section 39, "Asphalt Concrete" of the Standard Specifications and these Special Provisions. All other requirements of Section 39 shall apply unless otherwise modified or replaced in these Special Provisions.

The type of hot mix asphalt will be shown on the plans or specified in the Special Provisions.

39-2.01(1a) Material

39-2.01(1a.1) Prime Coat

Liquid asphalt for prime coat shall be Grade SC-70. Prime coat shall be applied only to those areas designated by the Engineer. The application rate shall be 0.20 gallon per square yard of surface covered. The exact rate and number of applications will be determined by the Engineer.

39-2.01(1a.2) Tack Coat

Asphaltic 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 grade approved by the Engineer. Grade SS1h shall be used if not otherwise specified. Tack coat shall be applied to all vertical surfaces of existing pavement, curbs, gutters, and construction joints in the surfacing against which additional material is to be placed, to a pavement to be surfaced, and to other surfaces designated in the Special Provisions. The application rate shall be from 0.02 to 0.10 gallon per square yard of surface covered. The exact rate and number of applications will be determined by the Engineer. Application of tack coat shall meet the provisions in Section 39-2.01C(3)(f) of the Standard Specifications.

39-2.01(1a.3) Asphalt Binder

Performance grade (PG) asphalt binder shall conform to the provisions of Section 92, "Asphalt Binders" of the Standard Specifications.

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 the State of California Department of Transportation's METS web site.

The grade for asphalt binder shall be **PG 70-10**.

39-2.01(1a.4) Aggregate

Aggregate shall be clean and free from decomposed materials, organic material, and other deleterious substances. The aggregate gradation of the hot mix asphalt shall conform to the following, unless otherwise specified on the plans:

HMA Type	Gradation
Type A	3/4-inch

The aggregate gradation for HMA Type A shall be within the target value (TV) limits for the specified sieve sizes shown in the following tables.

**Aggregate Gradation
(Percentage Passing)**

1-inch HMA Type A

Sieve sizes	TV limits	Allowable tolerance
1"	100	--
3/4"	88-93	TV ± 5
1/2"	72-85	TV ± 6
3/8"	55-70	TV ± 6
No. 4	35-52	TV ± 7
No. 8	22-40	TV ± 5
No. 30	8-24	TV ± 4
No. 50	5-18	TV ± 4
No. 200	3.0-7.0	TV ± 2

3/4-inch HMA Type A

Sieve sizes	TV limits	Allowable tolerance
1"	100	--
3/4"	90-100	TV ± 5
1/2"	70-90	TV ± 6
No. 4	45-55	TV ± 7
No. 8	32-40	TV ± 5
No. 30	12-21	TV ± 4
No. 200	2.0-7.0	TV ± 2

1/2-inch HMA-Type A

Sieve sizes	TV limits	Allowable tolerance
3/4"	100	--
1/2"	95-99	TV ± 6
3/8"	75-95	TV ± 6
No. 4	55-66	TV ± 7
No. 8	38-49	TV ± 5
No. 30	15-27	TV ± 4
No. 200	2.0-8.0	TV ± 2

The aggregate shall conform to the following quality requirements prior to the addition of asphalt binder.

Aggregate Quality Requirements

Quality Characteristic	Test Method	HMA Type	
		A	RHMA-G
Percent of crushed particles ^a	CT 205		
Coarse aggregate (% min.)			
One fractured face		95	--
Two fractured faces		90	90
Fine aggregate (Passing No. 4 sieve and retained on No. 8 sieve.) (% min)	CT 211		
One fractured face		70	70
Los Angeles Rattler (% Max.) ^a			
Loss at 100 rev.		12	12
Loss at 500 rev.		40	40
Sand equivalent ^{a, b} (min.)	CT 217	47	47
Fine aggregate angularity (% min.) ^{a, c}	CT 234	45	45
Flat and elongated particles (% max. by weight @ 5:1.) ^a	CT 235	10	10

Note:

^a Combine aggregate in the JMF proportions.

^b Reported value must be the average of 3 tests from a single sample.

^c The Engineer waives this specification if HMA contains less than 10 percent of nonmanufactured sand by weight of total aggregate. Manufactured sand is fine aggregate produced by crushing rock or gravel.

39-2.01(1a.3) Reclaimed Asphalt Pavement

The use of reclaimed asphalt pavement (RAP) in HMA production may be substituted in a quantity up to 15 percent of the aggregate blend in the base course (bottom layer) only. RAP will not be allowed in the surface course.

39-2.01(1b) Hot Mix Asphalt Mix Design

The HMA mix design shall conform to the provisions of this Section. The mix design process shall consist of performing California Test 367 and laboratory procedures in combinations of aggregate gradations and asphalt binder contents to determine the optimum binder content (OBC) and HMA mixture qualities. The results shall become the proposed job mix formula (JMF).

The Contractor shall submit records of aggregate quality and mix design data. Test data shall be within one year from the last test performed.

The Contractor shall submit the HMA mix design using the "COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT, CONTRACTOR JOB MIX FORMULA PROPOSAL" form to present the JMF. Formats other than the referenced form will not be accepted.

The final JMF shall be signed and stamped by a Civil Engineer registered in the State of California.

If any adjustment is made to the final JMF, a new mix design will be performed and a new JMF will be submitted.

The HMA mix design shall comply with the following requirements:

HMA Mix Design Requirements

Quality characteristic	Test method	HMA Type	
		A	RHMA-G
Air void content (%)	CT 367	4.0 5.0 for 1-inch aggregate	--
Voids in mineral aggregate (% min.)	CT 367		
No. 4 grading		17.0	--
3/8" grading		15.0	--
1/2" grading		14.0	18.0–23.0 ^a
3/4" grading		13.0	18.0–23.0 ^a
1" grading			
with NMAS = 1"		13.0	--
with NMAS = 3/4"		14.0	--
Voids filled with asphalt (%)	CT 367		Note c
No. 4 grading		76.0–80.0	
3/8" grading		73.0–76.0	
1/2" grading		65.0–75.0	
3/4" grading		65.0–75.0	
1" grading		60.0–70.0	
Dust proportion	CT 367		Note c
No. 4 and 3/8" gradings		0.9–2.0	
1/2" and 3/4" gradings		0.6–1.3	
1" grading		0.6–1.2	
Stabilometer value (min.) ^b	CT 366		
No. 4 and 3/8" gradings		30	--
1/2" and 3/4" gradings		37	23
1" grading		37 ^d	--
		(Modified) 35 ^e	

^a Voids in mineral aggregate for RHMA-G must be within this range.

^b California Test 304, Part 2.13.

^c Report this value in the JMF submittal.

^d Comply with California Test 366: 150 tamps at 500 psi tamping pressure and 230 °F compaction temperature; cool specimens to 140 °F; apply 12,600 lb leveling load; and perform stabilometer test at 140 °F.

^e Modify California Test 366: 150 tamps at 500 psi tamping pressure and 230 °F compaction temperature; cool specimens to 140 °F; apply additional 500 tamps at 500 psi; apply 12,600 lb leveling load; and perform stabilometer test at 140 °F.

39-2.01(1c) Certifications

Laboratories testing aggregate and HMA qualities used to prepare the mix design and JMF shall be qualified under the State of California Department of Transportation's Independent Assurance Program.

Before production of HMA, the HMA plant must have a current qualification under the State of California Department of Transportation's Materials Plant Quality Program.

39-2.01(1d) Construction

Construction of HMA shall be in conformance with the provisions of Section 39-2.01C, "Construction" of the Standard Specifications and these Special Provisions.

39-2.01(1d.1) Lift Thickness

Hot mix asphalt shall be spread and compacted in the number of layers of the thicknesses indicated in the following table:

Total Thickness Shown on Plans ^a	Minimum No. of Layers	Top Layer Thickness (ft)		Next Lower Layer Thickness (ft)		All Other Lower Layer Thickness (ft)	
		Min.	Max.	Min.	Max.	Min.	Max.
0.24-foot or less	1	-	-	-	-	-	-
0.25-foot	2 ^b	0.12	0.13	0.12	0.13	-	-
0.26 - 0.46 foot	2	0.12	0.21	0.14	0.25	-	-
0.47-foot or more	3 or more	0.15	0.21	0.15	0.25	0.17	0.25

^a When pavement reinforcing mat is shown to be placed between layers of hot mix asphalt, the thickness of hot mix asphalt above the pavement reinforcing mat shall be considered to be the "Total Thickness Shown on Plans."

^b One layer of 0.25 foot thick may be placed as approved by the Engineer.

39-2.01(1d.2) Sampling

The Contractor or the Contractor's representative 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 24 and 30 inches above the platform. The Contractor shall provide a receptacle for flushing the sampling device.

The sampling device shall include a valve:

1. With a diameter between 1/2 and 3/4 inches;
2. Manufactured in a manner that a one-quart sample may be taken slowly at any time during plant operations;
3. Maintained in good condition.

The Contractor shall replace failed valves.

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

39-2.01(1d.3) Control of Materials

All proposed materials for use in HMA shall be furnished in conformance with the provisions of Section 6, "Control of Materials" of the Standard Specifications and this Section. All materials to be used in producing the hot mix asphalt shall be supplied from a single source for each material unless approved by the Engineer. Materials to be used in HMA will be subject to inspection and tests by the Engineer. The Contractor shall furnish without charge sample of materials as may be required.

The Contractor shall furnish the Engineer a list of the Contractor's sources of materials and the locations at which those materials will be available for inspection. The Contractor shall assure that the Engineer has free access or entry at all times to the material or production of the material to be inspected, sampled, and tested. It is understood that the inspections and tests made at any point shall, in no way, be considered as a guaranty of acceptance of the material nor continued acceptance of the material presumed to be similar to that upon which inspections and tests have been made, and that inspection and testing performed by the Engineer shall not relieve the Contractor of responsibility for quality control.

All materials which the Engineer has determined defective or do not conform to the requirements of the plans and specifications will be rejected whether in place or not. Under the provisions of this Section, the Engineer will have authority to cause the removal and replacement of rejected material and to deduct the cost thereof from any moneys due or to become due the Contractor.

39-2.01(1d.4) Utility Covers

Except as otherwise provided herein, the Contractor shall adjust to finish grade any valve covers encountered within the project limits, as required, for those utility valves that are provided with slip cans and are adjustable without the replacement of part or the removal of concrete collars. In cases where the owning utility company insists upon upgrades in the standards, or when additional parts or the removal of concrete collars are required for the adjustment, said adjustment will be the responsibility of the owning utility company.

The Contractor shall lower manholes and valves when and as necessary for the protection of the traveling public during construction, and shall coordinate all work on said facilities with the owning utility companies. Final adjustment to grade will be the responsibility of the owning utility company, except as provided herein.

39-2.01(1d.5) Placing HMA

Asphalt paving equipment shall be in conformance with the provisions of Section 39-2.01C(2), "Spreading and Compacting Equipment" of the Standard Specifications. Spreading and Compacting shall be in accordance with this Section and the provisions in Section 39-2.01C, "Construction" of the Standard Specifications.

When placing asphalt concrete to the lines and grades established 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. The Contractor shall use a ski device, the minimum length of the ski device shall be 30 feet. 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 feet. 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 0.12 inch 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 39-2.01C, "Construction" 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.

39-2.01(1d.6) Contractor Quality Control

39-2.01(1d.6a) Quality Control Plan

The contractor shall submit a quality control plan with the proposed HMA type and HMA mix design in accordance with Section 39-2.01A(3)(c), "Quality Control Plan" of the Standard Specifications.

39-2.01(1d.6b) HMA Production

The HMA production shall comply with the provisions of Section 39-2.01B(8) of the Standard Specification and the provisions of these Special Provisions.

39-2.01(1d.6c) Quality Control Testing

The Contractor shall perform quality control sampling and testing at the specified frequency for the quality characteristics shown in the following table:

Quality Control Testing Requirements

Quality Characteristic	Test Method	Minimum Sampling and Testing Frequency	HMA Type	
			A	RHMA-G
Aggregate gradation ^a	CT 202	1 per 750 tons and any remaining part	JMF ± Tolerance ^b	JMF ± Tolerance ^b
Sand equivalent (min) ^c	CT 217		47	47
Asphalt binder content (%)	CT 379 or CT 382		JMF ± 0.45	JMF ± 0.50
HMA moisture content (% max)	CT 226 or CT 370	1 per 1,500 tons but not less than 1 per paving day	1.0	1.0
Percent of maximum theoretical density (%) ^{d, e}	QC plan	2 per day's production (min.)	91-97	91-97
Stabilometer value (min) ^{c, f} No. 4 and 3/8" gradings 1/2" and 3/4" gradings 1" grading	CT 366	One per 3,000 tons or 2 per 5 business days, whichever is greater	30 37 37	23 --
Air void content (%) ^{c, g}	CT 367		4 ± 2 5 ± 2 for 1-inch aggregate	TV ± 2
Aggregate moisture content at continuous mixing plants and RAP moisture content at continuous mixing plants and batch mixing plants ^h	CT 226 or CT 370	2 per day during production	--	--
Percent of crushed particles coarse aggregate (% min) One fractured face Two fractured faces Fine aggregate (% min) (Passing no. 4 sieve and retained on no. 8 sieve.) One fractured face	CT 205	As designated in the QC plan. At least once per project.	90 75 (90 for 1-inch aggregate)	-- 90
Los Angeles Rattler (% max) Loss at 100 rev. Loss at 500 rev.	CT 211		70 (90 for 1-inch aggregate)	70
Flat and elongated particles (% max by weight @ 5:1)	CT 235		12 45 (40 for 1-inch aggregate)	12 40
Fine aggregate angularity (% min)	CT 234		Report only (10 for 1-inch aggregate)	Report only
			45	45

Voids filled with asphalt (%) ⁱ No. 4 grading 3/8" grading 1/2" grading 3/4" grading 1" grading	CT 367		76.0–80.0 73.0–76.0 65.0–75.0 65.0–75.0 60.0–70.0	Report only
Voids in mineral aggregate (% min) No. 4 grading 3/8" grading 1/2" grading 3/4" grading 1" grading	CT 367		17.0 15.0 14.0 13.0 13.0	18.0-23.0 ^j 18.0-23.0 ^j
Dust proportion ⁱ No. 4 and 3/8" gradings 1/2" and 3/4" gradings 1" grading	CT 367		0.9–2.0 0.6–1.3 0.6–1.3	Report only
Smoothness	Special Provision 39-2.01 (1c.10)	--	12-foot straight-edge, must grind, and Pl ₀	12-foot straight-edge, must grind, and Pl ₀
Asphalt rubber binder viscosity @ 350 °F, centipoises	Section 39-2.03B(3)	Section 39-2.03A (4)(C)(ii)	--	1,500-4,000
Asphalt modifier	Section 39-2.03B(3)	Section 39-2.03A (4)(C)(ii)	--	Section 39-2.03B(3)
CRM	Section 39-2.03B(3)	Section 39-2.03A (4)(C)(ii)	--	Section 39-2.03B(3)

^a Determine combined aggregate gradation containing RAP under California Test 367.

^b The tolerances must comply with the allowable tolerances in section 39-2.02B(4)(b) for HMA and section 39-2.03B(4)(b) for RHMA.

^c Report the average of 3 tests from a single split sample.

^d Required for HMA Type A and RHMA-G if the specified paved thickness is at least 0.15 foot.

^e Determine maximum theoretical density (California Test 309) at the frequency specified for Test Maximum Density under California Test 375, Part 5.D.

^f California Test 304, Part 2.13.

^g Determine the bulk specific gravity of each lab-compacted briquette under California Test 308, Method A, and theoretical maximum specific gravity under California Test 309.

^h For adjusting the plant controller at the HMA plant.

ⁱ Report only if the adjustment for the asphalt binder content TV is less than or equal to ±0.3 percent from OBC value.

^j Voids in mineral aggregate for RHMA-G must be within this range.

For any single quality characteristic except smoothness, if 2 consecutive quality control test results do not comply with the action limits or specifications:

1. Stop production.
2. Notify the Engineer.
3. Take corrective action.
4. Demonstrate compliance with the specifications before resuming production and placement.

39-2.01(1d.6d) Density Cores

The Engineer shall test density cores to determine the percent of maximum theoretical density of the paved HMA. The Contractor shall take 4- or 6-inch diameter density cores from each 500 tons of HMA produced.

The Engineer shall determine the percent of maximum theoretical density from the average density of 3 density cores taken by the Contractor from every 500 tons of production or part thereof divided by the maximum theoretical density. The location of the density cores shall be randomly selected by the Engineer and shall be performed in the Engineer's presence. Density holes shall be backfilled and compacted with material approved by the Engineer. Density cores shall be marked with the density core's location and layer number and shall be placed in a protective container. If a density core is damaged, it shall be replaced and re-cored within 1 foot longitudinally from the original density core.

39-2.01(1d.6e) Compaction

Contractor shall determine the in-place density and relative compaction of HMA pavement in accordance with the procedures of California Test 375. The Contractor shall use California Test 308, Method A, in determining in-place density of each density core instead of using the nuclear gauge in Part 4, "Determining In-Place Density by the Nuclear Density Device." The Contractor shall use California Test 309 to determine the maximum theoretical density instead of calculating test maximum density in Part 5, "Determining Test Maximum Density" and shall be at the frequency specified for Test Maximum Density under California Test 375, Part 5D. Relative compaction is required for HMA and RHMA, and shall be reported at various pave thicknesses as listed in the following table:

HMA Relative Compaction Requirements

HMA Type	Minimum Pave Thickness (ft)	Relative Compaction (%)
Type A, (3/4-inch)	0.15	91-97

39-2.01(1d.7) Acceptance Criteria

The Engineer shall accept HMA based on compliance with the in place HMA quality requirements shown in the following table:

HMA Acceptance In Place

Quality characteristic				Test method	HMA type	
					A	RHMA-G
Aggregate gradation ^a				CT 202	JMF ± tolerance ^c	JMF ± tolerance ^c
Sieve	3/4"	1/2"	3/8"			
1/2"	X ^b					
3/8"		X				
No. 4			X			
No. 8	X	X	X			
No. 200	X	X	X			
Sand equivalent (min) ^d				CT 217	47	47
Asphalt binder content (%)				CT 379 or 382	JMF ± 0.45	JMF ± 0.50
HMA moisture content (% max)				CT 226 or 370	1.0	1.0
Percent of maximum theoretical density (%) ^{e, f}				CT 375	91-97	91-97
Stabilometer value (min) ^{d, g}				CT 366	30	--
No. 4 and 3/8" gradings						
1/2" and 3/4" gradings						
1" grading					37	23
Air void content (%) ^{d, h}				CT 367	4 ± 2	TV ± 2
Percent of crushed particles				CT 205	90	--
Coarse aggregate (% min)						
One fractured face						
Two fractured faces						
Fine aggregate (% min)				75 (90 for 1-inch aggregate)	90	
(Passing no. 4 sieve and retained on no. 8 sieve.)				70 (90 for 1-inch aggregate)	70	
One fractured face						
Los Angeles Rattler (% max)				CT 211	12	12
Loss at 100 rev.						
Loss at 500 rev.					45 (40 for 1-inch aggregate)	40
Fine aggregate angularity (% min)				CT 234	45	45
Flat and elongated particles (% max by weight @ 5:1)				CT 235	Report only	Report only
Voids filled with asphalt (%) ⁱ				CT 367	76.0-80.0	Report only
No. 4 grading						
3/8" grading						
1/2" grading						
3/4" grading						
1" grading					65.0-75.0	
Voids in mineral aggregate (% min) ⁱ				CT 367	17.0	--
No. 4 grading						
3/8" grading						
1/2" grading						
3/4" grading						
1" grading					15.0	
					14.0	18.0-23.0 ^j
					13.0	18.0-23.0 ^j
					13.0	
Dust proportion ⁱ				CT 367	0.9-2.0	Report only
No. 4 and 3/8" gradings						
1/2" and 3/4" gradings						
1" grading						
					0.6-1.3	
					0.6-1.3	

Smoothness	Special Provision 39-2.01 (1c.10)	12-foot straight-edge, must grind, and PI_0	12-foot straight-edge, must grind, and PI_0
Asphalt binder	Various	Section 92	Section 92
Asphalt rubber binder	Various	--	Section 92-1.01D(2) and Section 39-2.03B(3)
Asphalt modifier	Various	--	Section 39-2.03B(3)
CRM	Various	--	Section 39-2.03B(3)

^a The Engineer determines combined aggregate gradations containing RAP under California Test 367.

^b "X" denotes the sieves the Engineer tests for the specified aggregate gradation.

^c The tolerances must comply with the allowable tolerances in section 39-2.02B(4)(b) for HMA Type A and section 39-2.03B(4)(b) for RHMA-G.

^d The Engineer reports the average of 3 tests from a single split sample.

^e The Engineer determines percent of maximum theoretical density if the specified paved thickness is at least 0.15 foot under California Test 375, except the Engineer uses:

1. California Test 308, Method A, to determine in-place density of each density core instead of using the nuclear gauge in Part 4, "Determining In-Place Density By The Nuclear Density Device."
2. California Test 309 to determine maximum theoretical density instead of calculating test maximum density in Part 5, "Determining Test Maximum Density."

^f The Engineer determines maximum theoretical density (California Test 309) at the frequency specified for Test Maximum Density under California Test 375, Part 5.D.

^g California Test 304, Part 2.13.

^h The Engineer determines the bulk specific gravity of each lab-compacted briquette under California Test 308, Method A, and theoretical maximum specific gravity under California Test 309.

ⁱ Report only if the adjustment for the asphalt binder content TV is less than or equal to ± 0.3 percent from the OBC value submitted on a *Contractor Hot Mix Asphalt Design Data* form.

^j Voids in mineral aggregate for RHMA-G must be within this range.

No single test result may represent more than 750 tons or 1 day's production, whichever is less.

For any single quality characteristic except smoothness, if 2 consecutive acceptance test results do not comply with the specifications:

1. Stop production.
2. Take corrective action.
3. Take samples and split each sample into 4 parts in the Engineer's presence. Test 1 part for compliance with the specifications and submit 3 parts to the Engineer. The Engineer tests 1 part for compliance with the specifications and reserves and stores 2 parts.
4. Demonstrate compliance with the specifications before resuming production and placement.

39-2.01(1d.8) HMA Acceptance and Payment Factor

The Engineer shall sample for acceptance testing and test for quality characteristics as specified in these Special Provisions. Acceptance of placed HMA shall be based on a single defined lot of HMA. A lot is defined as having 1,000 tons of paved HMA, except if a quantity of HMA paved at day's end is greater than 500 tons, this quantity of paved HMA shall be considered a lot. If a quantity of HMA paved at day's end is less than 500 tons, this quantity of HMA shall be included in the previous lot's test result for payment evaluation.

For percent of maximum theoretical density, the Engineer shall determine a deduction for each lot's test result outside the specifications using the following reduced payment factors:

Reduced Payment Factors for Percent of Maximum Theoretical Density

HMA Type A and RHMA-G percent of maximum theoretical density	Reduced payment factor	HMA Type A and RHMA-G percent of maximum theoretical density	Reduced payment factor
91.0	0.0000	97.0	0.0000
90.9	0.0125	97.1	0.0125
90.8	0.0250	97.2	0.0250
90.7	0.0375	97.3	0.0375
90.6	0.0500	97.4	0.0500
90.5	0.0625	97.5	0.0625
90.4	0.0750	97.6	0.0750
90.3	0.0875	97.7	0.0875
90.2	0.1000	97.8	0.1000
90.1	0.1125	97.9	0.1125
90.0	0.1250	98.0	0.1250
89.9	0.1375	98.1	0.1375
89.8	0.1500	98.2	0.1500
89.7	0.1625	98.3	0.1625
89.6	0.1750	98.4	0.1750
89.5	0.1875	98.5	0.1875
89.4	0.2000	98.6	0.2000
89.3	0.2125	98.7	0.2125
89.2	0.2250	98.8	0.2250
89.1	0.2375	98.9	0.2375
89.0	0.2500	99.0	0.2500
< 89.0	Remove and replace	> 99.0	Remove and replace

39-2.01(1d.9) Smoothness

39-2.01(1d.9a) Straightedge

The straightedge for smoothness determination on the top layer of HMA pavement shall conform to the tolerance specified in Section 36-3, "Pavement Smoothness" of the Standard Specifications.

39-2.01(1d.9b) Profilograph

In addition to the straightedge provisions in Section 36-3, "Pavement Smoothness" of the Standard Specifications, HMA concrete pavement shall conform to the surface tolerances specified in this Section, "Profilograph."

When directed by the Engineer, 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, Section 36-3, "Pavement Smoothness" of the Standard Specifications, 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 36-3, "Pavement Smoothness" of the Standard Specifications:

1. Pavement with a total thickness less than 0.24 foot;
2. Pavement on horizontal curves with a centerline curve radius of less than 1,000 feet and the pavement within the superelevation transition on those curves;

3. Pavement placed in a single lift when required by the Special Provisions;
4. Pavement with extensive grade or cross slope correction which does not receive advance leveling operations in conformance with the provisions in Section 39-2.01C(8), "Leveling" of the Standard Specifications;
5. Pavement for ramps and connectors with steep grades and high rates of superelevation, as determined by the Engineer;
6. 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 from and parallel with the edges of the lane.

Pavements profiled shall conform to the following Profile Index requirements:

1. Pavement on tangent alignment and pavement on horizontal curves having a centerline curve radius of 2,000 feet or more shall have a Profile Index of 0.16 foot or less for each 330 feet section profiled;
2. Pavement on horizontal curves having a centerline curve radius of 1,000 feet or more but less than 2,000 feet, including the pavement within the superelevation transition of these curves, shall have a Profile Index of 0.32 foot or less for each 330 feet section profile;
3. Pavement within any 330 feet section, containing high point areas with deviations in excess of 0.025 foot in a length of 25 feet 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. 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 foot, 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 foot 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.

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

39-2.01(1e) Payment

Payment for Hot Mix Asphalt (HMA) will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, and shall include full compensation for furnishing all labor, tools, materials, equipment, and incidentals, and for doing all the work involved including the sampling and testing of HMA quality characteristics, sampling and testing of density cores, and furnishing and applying asphaltic emulsion (paint binder/tack coat).

At road connections and at limits of asphalt paving, existing pavement shall be header cut as directed by the Engineer.

AA

DIVISION VII DRAINAGE FACILITIES

66 CORRUGATED METAL PIPE

66-1 GENERAL

Add to Section 66-1:

CORRUGATED STEEL PIPE:

Corrugated steel pipes shall conform to the provisions in Section 66, "Corrugated Metal Pipe," of the Standard Specifications and these Special Provisions.

Pipe shall be placed in a trench 12" minimum wider than the outside diameter of the pipe being installed.

Trenching shall be 6" minimum in width on each side of the pipe.

The pipe shall be placed in the bottom of the trench and the trench shall be backfilled.

If so directed by the Engineer, the pipe shall be backfilled with two sack slurry. Slurry cement backfill shall conform to Section 19-3.02E of the Standard Specifications.

Payment:

Payment for Corrugated Steel Pipe will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved including clean up existing storm drain culverts prior to constructing structure excavation and backfill, slurry encasement, and removing and properly disposing of existing pipe that is being replaced, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

AA

DIVISION IX TRAFFIC CONTROL DEVICES

81 MISCELLANEOUS TRAFFIC CONTROL DEVICES

81-3 PAVEMENT MARKERS

Add to Section 81-3.02C, Retroreflective Pavement Markers:

RETROREFLECTIVE PAVEMENT MARKERS:

Pavement markers shall conform to the provisions of Section 81-3, "Pavement Markers," and Section 81-3.02C, "Retroreflective Pavement Markers" of Standard Specifications and these Special Provisions.

Certificates of compliance shall be furnished for pavement markers as specified in Section 6-2.03C "Certificates of Compliance" of the Standard Specifications.

Reflective pavement markers shall comply with the specific intensity requirements for reflectance after abrading the lens surface in accordance with the "Steel Wool Abrasion Procedure," specified for pavement markers placed in pavement recesses in Section 81-3.02C, "Retroreflective Pavement Markers", of the Standard Specifications.

The bituminous adhesive used to install the markers shall be a hot melt bituminous adhesive asphaltic material with homogeneously mixed mineral filler and shall conform to the requirements specified in Section 81-3.02D, "Hot Melt Bituminous Adhesives," of the Standard Specifications.

Reflective pavement markers shall be installed at locations as established by the applicable Caltrans (or MUTCD) striping detail noted on the approved Striping Plan, which includes, but is not limited to temporary painted line(s), new striping or existing striping. There shall be one marker for each location. All work necessary to establish satisfactory locations for markers shall be performed by the Contractor.

Existing reflective pavement markers that do not conform to the approved Plan shall be removed by the Contractor.

Reflective pavement markers shall be of the prismatic reflector type (3M model white RP290w and yellow RPM 2912y or equal) as outlined in Section 81-3.02C, "Retroreflective Pavement Markers" of the Standard Specifications.

Payment:

Payment for Pavement Marker (Retroreflective) will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in installing pavement markers complete, in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions or as directed by the Engineer.

82 SIGNS AND MARKERS

82-3 ROADSIDE SIGNS

Add to Section 82-3 General:

ROADSIDE SIGN - ONE POST and TWO POST:

The Contractor shall furnish and install roadside signs at the locations shown on the plans or as directed by the Engineer, in conformance to the provisions in Section 82-3, "Roadside Signs," of the State Standard Specifications and these Special Provisions.

All Signs shall be installed on new square perforated steel tube posts in accordance with County Standard No. 1222.

Street name signs shall be furnished and installed in conformance with County Standard No. 1221 as shown on the plans, as specified in these Special Provisions and as directed by the Engineer.

All roadway signs shall have retroreflective sheeting. Except as stated below, the retro-reflectivity for all roadway signs, both temporary and permanent installations, shall meet or exceed ASTM Standard D 4956 Type III (3M Co. High Intensity Grade or approved equal). The retroreflectivity for R1-1 ("STOP") signs and W3-1 (Stop Ahead) signs shall meet ASTM Standard D 4956 Type IX (3M Co. Diamond Grade or approved equal).

Payment:

Payment for Roadside Sign - One Post, and Roadside Sign – Two Post will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work including all necessary concrete excavation and backfill as specified in the Standard Specifications.

84 MARKINGS

84-2 TRAFFIC STRIPES AND PAVEMENT MARKINGS

Add to Section 84-2.03C(2)(a) General, Thermoplastic Traffic Stripes and Pavement Markings:

THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT MARKINGS

Thermoplastic traffic striping and pavement markings shall conform to the provisions in Sections 84-1, "General," and 84-2, "Traffic Stripes and Pavement Markings," of the Standard Specifications and these Special Provisions.

Newly installed thermoplastic traffic striping and pavement markings shall be protected from damage by public traffic or other causes until the paint is thoroughly dry. Any newly installed thermoplastic traffic striping and pavement markings which are damaged as a result of the construction, including wheel markings by public traffic and the construction equipment, shall be repainted by the Contractor and any associated removals shall be performed as called for in these Special Provisions.

Payment:

Payment for Thermoplastic Traffic Stripe and Thermoplastic Pavement Markings will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, and shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and for doing all the work involved in installing thermoplastic traffic striping and pavement markings (regardless of the number, widths, and types of individual stripes involved in each traffic stripe) including any necessary cat tracks, dribble lines any layout work, complete in place as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as directed by the Engineer, and no additional compensation will be allowed therefor.

Add to Section 84-2.03C(3)(a) General, Painted Traffic Stripes and Pavement Markings:

PAINT TRAFFIC STRIPE (2 COAT)

Painting traffic stripe shall conform to the provisions in Sections 84-1, "General", and 84-2, "Traffic Stripes and Pavement Markings" of the Standard Specifications and these Special Provisions.

Traffic striping shall be applied in two coats with airless equipment and shall be performed with a roadliner truck mounted striping machine. Where the configuration or location of a traffic stripe is such that the use of a roadliner truck mounted striping machine is unsuitable, traffic striping and glass spheres may be applied by other methods and equipment approved by the Engineer.

Newly painted traffic striping shall be protected from damage by public traffic or other causes until the paint is thoroughly dry. Any newly painted traffic striping which are damaged as a result of the construction, including wheel markings by public traffic and the construction equipment, shall be repainted by the Contractor and any associated removals shall be performed as called for in these Special Provisions.

Payment:

Payment for Paint Traffic Stripe (2 Coat) will be paid for on a force account basis, in accordance with Section 9-1.04, Force Account, of the Standard Specifications, and shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and for doing all the work involved in painting traffic stripe (regardless of the number, widths, and types of individual stripes involved in each traffic stripe) including any necessary cat tracks, dribble lines any layout work, complete in place as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as directed by the Engineer, and no additional compensation will be allowed therefor.

Appendix A

AQMD Recommendations

Dust Abatement Attachments

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AQMD SIGNAGE RECOMMENDATIONS**November, 2001**

Plan holder shall post signage at specified locations on the subject property in accordance with the standards specified below. The exception to the standards is that all letters shall be 4 inches high, with the names and telephone numbers of appropriate contacts and services in bold print, as indicated in the standards. These signs shall also include the SCAQMD toll free complaint line 1-800-CUT-SMOG (1-800-288-7664) and the telephone number for the Environmental Observer. These signs shall be posted within 50 feet of the curb on all four (4) corners of the subject property.

For each Dust Control Plan aggregating less than, or equal to, ten (10) acres:

1. The applicant shall install a sign on such property which is visible to the public that meets the following requirements:
 - (a) Such sign shall measure at least four (4) feet wide by four (4) feet high and conform to the specifications in 1 (a) below.

For each Dust Control Plan aggregating over ten (10) acres:

2. The applicant shall install a sign on such property which is visible to the public that meets the following requirements:
 - (a) Such sign shall measure at least eight (8) feet wide by four (4) feet high and conform to the specifications in 1 (b) below.

THE SIGN SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

1. **The sign boards shall be constructed with materials capable of withstanding the environment in which they are placed.**
 - (a) For 4' x 4' signs, the District recommends the following:
 - I. ¾" A/C laminated plywood board
 - II. Two 4" x 4" posts
 - III. The posts should be attached to the edges of the plywood board with at least 2 carriage bolts on each post.
 - IV. The front surface of the sign board should be painted in the contrasting color of a white background with black lettering.
 - (b) For 4' x 8' signs, the District recommends the following:
 - I. 1" A/C laminated plywood board
 - II. Two 5" x 6" posts
 - III. The posts should be attached to the 4' edges of the plywood board with at least 2 carriage bolts on each post.
 - IV. The front surface of the sign board should be painted in the contrasting color of a white background with black lettering.

2. The sign board shall be installed and maintained in a condition such that members of the public can easily view, access, and read the sign at all times until the expiration date of the Dust Control plan.

(a) For 4' x 4' signs, the District recommends the following:

- I. The lower edge of the sign board should be mounted at least 2' above the existing ground surface to facilitate ease of viewing.
- II. The posts should be set in a hole at least 3' deep with concrete footings to preclude downing by high winds.
- III. On the construction site, the sign should be positioned such that nothing obstructs the public's view from the primary street access point.
- IV. For construction projects that are developed in phases, the sign should be moved to the area that is under active construction.
- V. In situations where all phases of the construction project are completed on a property prior to expiration of the Dust Control Plan, a written request for cancellation of the Dust Control Plan must be submitted to the Engineer.

(b) For 4' x 8' signs, the District recommends the following:

- I. The lower edge of the sign board should be mounted at least 2' above the existing ground surface to facilitate ease of viewing.
- II. The posts should be set in a hole at least 4' deep with concrete footings to preclude downing by high winds.
- III. On the construction site, the sign should be positioned such that nothing obstructs the public's view from the primary street access point.
- IV. For construction projects that are developed in phases, the sign should be moved to the area that is under active construction.
- V. In situations where all phases of the construction project are completed on a property prior to expiration of the Dust Control Plan, a written request for cancellation of the Dust Control Plan must be submitted to the Engineer.

3. The sign board shall contain the following information:

- (a) Project Name
- (b) Name of Prime Contractor
- (c) Phone Number of Contractor's Employee Responsible for Dust Control Matters
- (d) County designated phone number (to be provided by the Engineer)
- (e) South Coast Air Quality Management District Phone Number

4. The sign board shall be designed to the following alpha and numeric text dimensions (sign boards written in longhand are unacceptable).

(a) For a permittee subject to the 4' x 4' sign requirement, the District provides the following example: (as modified by the County of Riverside for use on County Public Works projects)

1" UPPERCASE Letters →	PROJECT NAME:		3 ½ " Title Case Bold Letters ←
1" UPPERCASE Letters →	CONTRACTOR		3 ½ " Title Case Bold Letters ←
1" Title Case Letters →	Contractor's Dust Control Phone #		3" Bold Numbers ←
1" Title Case Letters →	County of Riverside Phone #		3" Bold Numbers ←
1" Title Case Letters →	Phone Number:	SCAQMD 1-800-CUT-SMOG	3 ½ " Bold Numbers ←

"Title Case" means the first letter of a word is capitalized and subsequent letters are lower case.

AQMD Recommendations

(b) For a permittee subject to the 4' x 8' sign requirement, the District provides the following example: (as modified by the County of Riverside)

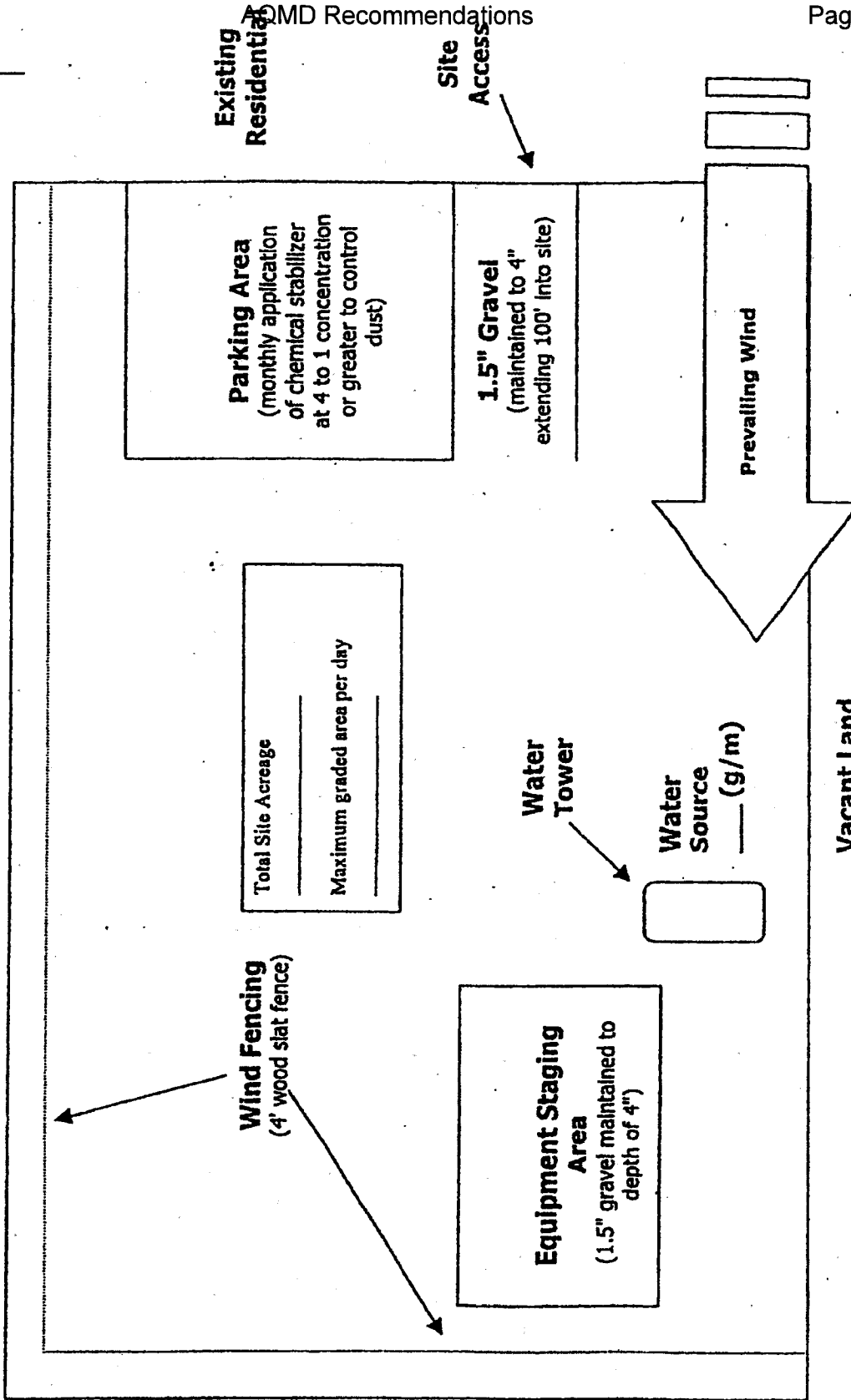
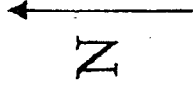
2" UPPERCASE Letters	PROJECT NAME:		4" Title Case Bold Letters
2" UPPERCASE Letters	CONTRACTOR		4" Title Case Bold Letters
2" Title Case Letters	Contractor's Dust Control Phone #		4" Bold Numbers
2" Title Case Letters	County of Riverside Phone #	909-	4" Bold Numbers
2" Title Case Letters	Phone Number:	SCAQMD 1-800-CUT-SMOG	4 1/2" Bold Numbers
2" Title Case Letters	COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT		

Section 1

Simplified Sample Site Plan

Existing Residential

Distance and location of nearest:
Residence _____
Business _____



OSMD Recommendations

Remember...
**DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK,
REGARDLESS OF CONSTRUCTION STATUS**

Plan Review Checklist
Clearing/Grubbing/Mass Grading Phase

- If feasible, use grading permit conditions to break the project into phases so that only a portion of the site is disturbed at any given time to ensure control of fugitive dust. This technique is critical for project sites with greater than 100 acres.
- Prior to initiating activity, pre-water site through use of portable irrigation lines. At least 72 hours of pre-watering is recommended for each area prior to initiating earth-movement. Require the Applicant to specify water source and available flow rate (g/m).
- Water applied continuously to all disturbed portions of the site by means of water truck/water pull as necessary to maintain sufficient visible moisture on the soil surface. For reference, one 2,000 gallon water truck can treat approximately 4 acres of active construction per hour. Also, for cut and fill activities, one 10,000 gallon water pull is estimated to be necessary for each 7,000 cubic yards of daily earth-movement. Multiple 4,000-gallon water trucks may be used in place of one 10,000-gallon water pull. Touch and visual contrast are reasonably good indicators of soil moisture. Surface areas that are dry to the touch and appear lighter-colored require the application of additional water to prevent visible or fugitive dust. Require the Applicant to specify the number of watering vehicles available for dust control during mass grading and during off-hours as well as availability of back-up water trucks if the site experiences dust control problems.
- Water towers are necessary for projects with more than 10 acres of active construction. Without a water tower, it can take up to 30 minutes to fill a 2,000 gallon water truck. Also, multiple water towers are necessary for projects that use water pulls as filling one 10,000 gallon water pull can drain a water tower which takes up to 40 minutes to refill.
- Wind fencing is necessary between the site and nearby residences or businesses. Off-site upwind fencing and on-site wind fencing for larger projects can also keep blowsand from being deposited onto the site or traveling through the site.
- A perimeter watering system consisting of portable irrigation equipment may be an effective mitigation system to protect surrounding residences and businesses. The portable watering system may be used in place of or in conjunction with watering trucks. The local jurisdiction may also be provided access to this equipment.

Remember...

**DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK,
REGARDLESS OF CONSTRUCTION STATUS**

Construction site accesses are to be improved with 1.5" gravel maintained to a depth of 4" , at least 20' wide, and extending 100 feet into the site. If the project site is not balanced, a wheel washing system and/or ribbed steel plates should be placed in the roadway before the vehicle enters the graveled area to clean the tires and prevent trackout.

Equipment staging areas are to be treated with 1.5" gravel maintained to a depth of 4".

Employee parking areas are to be covered with 1.5" gravel maintained to a depth of 4" or treated with chemical dust suppressants at a 4 to 1 ratio on at least a monthly basis to prevent fugitive dust.

Chemical dust suppressants are to be mixed at a ratio of 20 to 1 and applied to all disturbed surfaces that are proposed to remain inactive for a period of at least 10 consecutive days. These products are effective in preventing and controlling dust. Recordkeeping is necessary to demonstrate compliance.

All project sites greater than 100 acres shall monitor daily wind speeds and AQMD forecasted wind events (call 1.800.CUT.SMOG, press one for air quality information, and then press five for Coachella Valley wind forecasts). Operators shall maintain these records for review by any local code enforcement officer or AQMD inspector.

An environmental observer whose primary duty is to oversee dust control at the site is to be used for construction projects greater than 100 acres and/or sites with more than 50 acres of active construction. The environmental observer is tasked with monitoring dust abatement measures and authorized to deploy additional water trucks and other dust control actions (i.e., wind fencing, street sweepers, chemical dust suppressants, etc.) as necessary to prevent or control fugitive dust.

Other (specify): _____

Remember...
DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK,
REGARDLESS OF CONSTRUCTION STATUS

**Plan Review Checklist
Finish Grading Phase**

Water applied continuously to all disturbed portions of the site by means of water truck/water pull as necessary to maintain sufficient visible moisture on the soil surface. For reference, one 2,000 gallon water truck can treat approximately 4 acres of active construction per hour. Also, for cut and fill activities, one 10,000 gallon water pull is estimated to be necessary for each 7,000 cubic yards of daily earth-movement. Multiple 4,000-gallon water trucks may be used in place of a 10,000-gallon water pull. Touch and visual contrast are reasonably good indicators of soil moisture. Surface areas that are dry to the touch and appear lighter-colored require the application of additional water to prevent visible or fugitive dust. Require the Applicant to specify the number of watering vehicles available for dust control during finish grading and during off-hours as well as availability of back-up water trucks if the site experiences dust control problems.

Water towers are necessary for projects with more than 10 acres of active construction. Without a water tower, it can take up to 30 minutes to fill a 2,000 gallon water truck. Also, multiple water towers are necessary for projects that use water pulls as filling one 10,000 gallon water pull can drain a water tower which takes up to 40 minutes to refill.

Wind fencing is necessary between the site and nearby residences or businesses to reduce fugitive dust. Off-site upwind fencing and on-site wind fencing for larger projects can also keep blow-sand from being deposited onto the site or traveling through a site.

Chemical dust suppressants are to be applied at a concentration of at least 10 to 1 to finish graded areas once final elevations have been reached. For areas that will remain inactive for longer periods, vegetation can be a cost-effective alternative to chemical stabilization. Wind fencing or other obstructions can keep the stabilized area free from future disturbances.

Construction site access(es) are to be improved with 1.5" gravel maintained to a depth of at least 4" with a minimum width of at least 20', extending 100 feet into the project site.

Equipment staging areas are to be treated with 1.5" gravel maintained to a depth of 4".

Internal roadway networks are to be treated with chemical dust suppressants at a minimum rate of at least 4 to 1 and retreated on a monthly basis once final roadway elevations have been reached.

Employee parking areas are to be treated with chemical dust suppressants at a mix ratio of at least 4 to 1 and retreated on at least a monthly basis or covered with 1.5" gravel maintained to a depth of 4" to prevent fugitive dust.

Other (specify): _____

**Remember...
DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK,
REGARDLESS OF CONSTRUCTION STATUS**

Plan Review Checklist Construction Phase

- Water applied continuously to all disturbed portions of the site by means of water truck/water pull is necessary to maintain sufficient visible moisture on the soil surface. For reference, one 2,000 gallon water truck can treat approximately 4 acres of active construction per hour. Touch and visual contrast are reasonably good indicators of soil moisture. Surface areas that are dry to the touch and appear lighter-colored require the application of additional water to prevent visible or fugitive dust. Require the Applicant to specify the number of watering vehicles available for dust control during the construction phase and during off-hours as well as availability of back-up water trucks if the site experiences dust control problems.
- Wind fencing is necessary between the site and nearby residences or businesses. Off-site upwind fencing and on-site wind fencing for larger projects can also keep blowsand from being deposited onto the site or traveling through the site. Block walls, if part of the final project, can replace wind fencing during the construction phase.
- Chemical dust suppressants are to be applied at a concentration of at least 20 to 1 to finish graded areas once final elevations have been reached. For areas that will remain inactive for longer periods, vegetation can be a cost-effective alternative to chemical stabilization. Wind fencing or other obstructions can keep the stabilized area free from future disturbances.
- Construction site accesses are to be improved with 1.5" gravel, maintained to a depth of 4", with a width of at least 20', extending 100' into the project site. Paving internal roadways can substitute for gravel.
- Internal roadway networks are to be paved as early as feasible in the construction phase. Street sweeping of internal and/or external access roads will likely be required to control entrained road dust.
- Employee parking areas are to be treated with chemical dust suppressants at a mix ratio of no less than 4 to 1 and retreated on a monthly basis, or more frequently if fugitive dust is observed. If internal roadway is complete, employees are to be instructed to park on paved roads.
- Other (specify): _____

Remember...
DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK,
REGARDLESS OF CONSTRUCTION STATUS

RULE 403 IMPLEMENTATION HANDBOOK

REASONABLY AVAILABLE CONTROL MEASURES

Paragraph (d)(3) of Rule 403 allows activities outside the South Coast Air Basin (see Figure 2-1) to implement reasonably available control measures in lieu of best available control measures. Additionally, as specified by subparagraph (f)(3)(D) of Rule 403, any person seeking approval of a fugitive dust emissions control plan for projects outside the South Coast Air Basin must demonstrate to the satisfaction of the District that the given activity is employing all reasonably available fugitive dust control measures.

The District has prepared the attached listing of reasonably available fugitive dust control measures for a variety of source categories. This list is based on the U.S. Environmental Protection Agency's reference document entitled, "Control of Open Fugitive Dust Sources," Midwest Research Institute, September 1988.

The District encourages the use of those dust control measures that minimize the use of potable water. When water is needed, reclaimed water should be utilized to the greatest extent feasible.

REASONABLY AVAILABLE CONTROL MEASURES

The left column contains a listing of the sources of fugitive dust which are intended for emission control under District Rule 403 and a listing of control measures and high-wind measures. The right column contains a description of the reasonably available fugitive dust control measures for each of the sources.

Source: (1) Land Clearing/Earth-Moving

CONTROL MEASURES

(A) Watering

DESCRIPTION

- (1) Application of water by means of trucks, hoses and/or sprinklers prior to conducting any land clearing. This will increase the moisture content of the soils; thereby increasing its stability.
- (2) Pre-application of water to depths of proposed cuts.
- (3) Once the land clearing/earth moving activities are complete, a second application of water can generate a thin crust that stabilizes the disturbed surface area provided that it is not disturbed. (Security fencing can be used to prevent unwanted future disturbances of sites where a surface crust has been created).

(B) Chemical stabilizers

- (1) Only effective in areas which are not subject to daily disturbances.
- (2) Vendors can supply information on product application and required concentrations to meet the specifications established by the Rule.

(C) Wind fencing

- (1) Three- to five-foot barriers with 50% or less porosity located adjacent to roadways or urban areas can be effective in reducing the amount of windblown material leaving a site.
- (2) Would likely be used in conjunction with other measures (e.g., watering, chemical stabilization, etc.) to ensure that visible emissions do not cross a property line.

(D) Cover haul vehicles

- (1) Entire surface area of hauled earth should be covered once vehicle is full.

(E) Bedliners in haul vehicles

- (1) When feasible, use in bottom-dumping haul vehicles.

HIGH WIND MEASURE

- (a) Cease all active operations; or
- (b) Apply water within 15 minutes to any soil surface which is being moved or otherwise disturbed.

Source: (2) Unpaved Roads

CONTROL MEASURES

DESCRIPTION

- | | |
|----------------------------|---|
| (F) Paving | (1) Requires street sweeping/cleaning if subject to material accumulation. |
| (G) Chemical stabilization | (1) Vendors can supply information as to application methods and concentrations to meet the specifications established by the Rule
(2) Not recommended for high volume or heavy equipment traffic use. |
| (H) Watering | (1) In sufficient quantities to keep surface moist.
(2) Required application frequency will vary according to soil type, weather conditions, and vehicular use. |
| (I) Reduce speed limits | (1) 15 mile per hour maximum. May need to be used in conjunction with watering or chemical stabilization to prevent visible emissions from crossing the property line. |
| (J) Reduce vehicular trips | (1) Access restriction or redirecting traffic to reduce vehicle trips by a minimum of 60 percent. |
| (K) Gravel | (1) Gravel maintained to a depth of four inches can be an effective measure.
(2) Should only be used in areas where paving, chemical stabilization or frequent watering is not feasible. |

HIGH WIND MEASURE

- (c) Apply a chemical stabilizer (to meet the specifications established by the Rule) prior to wind events; or
- (d) Apply water once each hour; or
- (e) Stop all vehicular traffic.

RULE 403 IMPLEMENTATION HANDBOOK

Source: (3) Storage Piles

CONTROL MEASURES

DESCRIPTION

- (L) Wind sheltering
 - (1) Enclose in silos.
 - (2) Install three-sided barriers equal to height of material, with no more than 50 percent porosity.
- (M) Watering
 - (1) Application methods include: spray bars, hoses and water trucks.
 - (2) Frequency of application will vary on site-specific conditions:
- (N) Chemical stabilizers
 - (1) Best for use on storage piles subject to infrequent disturbances.
- (O) Altering load-in/load-out procedures
 - (1) Confine load-in/load-out procedures to leeward (downwind) side of the material.
 - (2) May need to be used in conjunction with wind sheltering to prevent visible emissions from crossing the property line.
- (P) Coverings
 - (1) Tarps, plastic, or other material can be used as a temporary covering.
 - (2) When used, these should be anchored to prevent wind from removing coverings.

HIGH WIND MEASURE

- (f) Apply chemical stabilizers (to meet the specifications established by the Rule) prior to wind events; or
- (g) Apply water once per hour; or
- (h) Install temporary covers.

Source: (4) Paved Road Track-Out

CONTROL MEASURES

DESCRIPTION

- | | |
|--------------------------------|--|
| (Q) Chemical stabilization | (1) Most effective when used on areas where active operations have ceased.
(2) Vendors can supply information on methods for application and required concentrations. |
| (R) Sweep/clean roadways | (1) Either sweeping or water flushing may be used. |
| (S) Cover haul vehicles | (1) Entire surface area should be covered once vehicle is full. |
| (T) Bedliners in haul vehicles | (1) When feasible, use in bottom dumping vehicles. |
| (U) Site access improvement | (1) Pave internal roadway system.
(2) Most important segment, last 100 yards from the connection with paved public roads |

HIGH WIND MEASURE

- (i) Cover all haul vehicles; and
(j) Clean streets with water flushing, unless prohibited by the Regional Water Quality Control Board.

RULE 403 IMPLEMENTATION HANDBOOK

Source: (S) Disturbed Surface Areas/ Inactive Construction Sites

CONTROL MEASURES

DESCRIPTION

- (Q) Chemical stabilization
 - (1) Most effective when used on areas where active operations have ceased.
 - (2) Vendors can supply information on methods for application and required concentrations.
- (R) Watering
 - (1) Requires frequent applications unless a surface crust can be developed.
- (S) Wind fencing
 - (1) Three- to five-foot barriers with 50% or less porosity adjacent to roadways or urban areas can be effective in reducing the amount of wind blown material leaving a site.
- (T) Vegetation
 - (1) Establish as quickly as possible when active operations have ceased.
 - (2) Use of drought tolerant, native vegetation is encouraged.

HIGH WIND MEASURES

- (k) Apply chemical stabilizers (to meet the specifications established by the Rule); or
- (l) Apply water to all disturbed surface areas 3 times per day.

RULE 403 IMPLEMENTATION HANDBOOK

BEST AVAILABLE CONTROL MEASURES

Rule 403, paragraph (d)(2) requires active operations [defined in Rule 403, paragraph (c)(1)] within the South Coast Air Basin (see Figure 2-1) to implement at least one best available control measure for each fugitive dust source type on site. Additionally, as specified by subparagraph (f)(3)(D) of Rule 403, any person seeking approval of a fugitive dust emissions control plan for projects within the South Coast Air Basin must demonstrate to the satisfaction of the AQMD that the given activity is employing all best available fugitive dust control measures.

The AQMD has prepared the attached listing of best available fugitive dust control measures for a variety of source categories. This list is based on the U.S. Environmental Protection Agency's reference document entitled, "Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures," Office of Air and Radiation, September 1992.

The AQMD encourages the use of those dust control measures that minimize the use of potable water. When water is needed, reclaimed water should be utilized to the greatest extent feasible.

RULE 403 IMPLEMENTATION HANDBOOK

BEST AVAILABLE CONTROL MEASURES

The left column contains a listing of the sources of fugitive dust which are intended for emission control under District Rule 403, and a listing of control measures and high-wind measures. The right column contains a description of the best available fugitive dust control measures for each of the sources.

Source: (1) Land Clearing/Earth-Moving

CONTROL MEASURES

DESCRIPTION

- | | |
|--------------------------------|---|
| (A) Watering (pre-grading) | (1) Application of water by means of trucks, hoses and/or sprinklers prior to conducting any land clearing. This will increase the moisture content of the soils; thereby increasing its stability. |
| (A-1) Watering (post-grading) | (2) Pre-application of water to depths of proposed cuts. |
| (A-2) Pre-grading planning | (1) In active earth-moving areas water should be applied at sufficient frequency and quantity to prevent visible emissions from extending more than 100 feet from the point of origin. |
| (B) Chemical stabilizers | (1) Grade each phase separately, timed to coincide with construction phase; or
(2) Grade entire project, but apply chemical stabilizers or ground cover to graded areas where construction phase begins more than 60 days after grading phase ends. |
| (C) Wind fencing | (1) Only effective in areas which are not subject to daily disturbances.
(2) Vendors can supply information on product application and required concentrations to meet the specifications established by the Rule. |
| (D) Cover haul vehicles | (1) Three- to five-foot barriers with 50% or less porosity located adjacent to roadways or urban areas can be effective in reducing the amount of windblown material leaving a site. Must be implemented in conjunction with either measure (A-1) or (B). |
| (E) Bedliners in haul vehicles | (1) Entire surface area of hauled earth should be covered once vehicle is full.
(1) When feasible, use in bottom-dumping haul vehicles. |

HIGH WIND MEASURE

- (a) Cease all active operations; or
- (b) Apply water within 15 minutes to any soil surface which is being moved or otherwise disturbed.

RULE 403 IMPLEMENTATION HANDBOOK

Source: (2) Unpaved Roads

CONTROL MEASURES

DESCRIPTION

- | | |
|----------------------------|---|
| (F) Paving | (1) Requires street sweeping/cleaning if subject to material accumulation. |
| (G) Chemical stabilization | (1) Vendors can supply information as to application methods and concentrations to meet the specifications established by the Rule
(2) Not recommended for high volume or heavy equipment traffic use. |
| (H) Watering | (1) In sufficient quantities to keep surface moist.
(2) Required application frequency will vary according to soil type, weather conditions, and vehicular use. |
| (I) Reduce speed limits | (1) 15 mile per hour maximum. May need to be used in conjunction with watering or chemical stabilization to prevent visible emissions from crossing the property line. |
| (J) Reduce vehicular trips | (1) Access restriction or redirecting traffic to reduce vehicle trips by a minimum of 60 percent. |
| (K) Gravel | (1) Gravel maintained to a depth of four inches can be an effective measure.
(2) Should only be used in areas where paving, chemical stabilization or frequent watering is not feasible. |

HIGH WIND MEASURE

- (a) Apply a chemical stabilizer (to meet the specifications established by the Rule) prior to wind events; or
 (b) Apply water once each hour; or
 (c) Stop all vehicular traffic.

RULE 403 IMPLEMENTATION HANDBOOK

Source: (3) Storage Piles

CONTROL MEASURES

DESCRIPTION

- (L) Wind sheltering
 - (1) Enclose in silos.
 - (2) Install three-sided barriers equal to height of material, with no more than 50 percent porosity.
- (M) Watering
 - (1) Application methods include: spray bars, hoses and water trucks.
 - (2) Frequency of application will vary on site-specific conditions.
- (N) Chemical stabilizers
 - (1) Best for use on storage piles subject to infrequent disturbances.
- (O) Altering load-in/load-out procedures
 - (1) Confine load-in/load-out procedures to leeward (downwind) side of the material.
Must be used in conjunction with either measure (L), (M), (N), or (P).
- (P) Coverings
 - (1) Tarps, plastic, or other material can be used as a temporary covering.
 - (2) When used, these should be anchored to prevent wind from removing coverings.

HIGH WIND MEASURE

- (a) Apply chemical stabilizers (to meet the specifications established by the Rule) prior to wind events; or
- (b) Apply water once per hour; or
- (c) Install temporary covers.

RULE 403 IMPLEMENTATION HANDBOOK

Source: (4) Paved Road Track-Out

CONTROL MEASURES

DESCRIPTION

Compliance with District Rule 403.

Paragraph (d)(5).

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RULE 403 IMPLEMENTATION HANDBOOK

Source: (S) Disturbed Surface Areas/ Inactive Construction Sites

CONTROL MEASURES

DESCRIPTION

- | | |
|----------------------------|---|
| (Q) Chemical stabilization | (1) Most effective when used on areas where active operations have ceased. |
| | (2) Vendors can supply information on methods for application and required concentrations. |
| (R) Watering | (1) Requires frequent applications unless a surface crust can be developed. |
| (S) Wind fencing | (1) Three- to five-foot barriers with 50% or less porosity adjacent to roadways or urban areas can be effective in reducing the amount of wind blown material leaving a site. Must be used in conjunction with either measure (Q), (R), or (T). |
| (T) Vegetation | (1) Establish as quickly as possible when active operations have ceased.* |

HIGH WIND MEASURES

- (a) Apply chemical stabilizers (to meet the specifications established by the Rule); or
- (b) Apply water to all disturbed surface areas 3 times per day.

* Use of drought tolerant, native vegetation is encouraged.

TABLE 1
BEST [REASONABLY] AVAILABLE CONTROL MEASURES FOR HIGH WIND CONDITIONS

FUGITIVE DUST SOURCE CATEGORY	<u>CONTROL MEASURES</u>
Earth-moving	(1A) Cease all active operations; OR (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR (1B) Apply chemical stabilizers prior to wind event; OR (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR (3B) Take the actions specified in Table 2, Item (3c); OR (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C) Apply chemical stabilizers prior to wind event; OR (2C) Apply water twice [once] per hour during active operation; OR (3C) Stop all vehicular traffic.
Open storage piles	(1D) Apply water twice [once] per hour; OR (2D) Install temporary coverings.
Paved road track-out	(1E) Cover all haul vehicles; OR (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 1 may be used.

* Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

TABLE 2
DUST CONTROL ACTIONS FOR EXEMPTION FROM PARAGRAPH (d)(4)*

<u>FUGITIVE DUST SOURCE CATEGORY</u>	<u>CONTROL ACTIONS</u>
Earth-moving (except construction cutting and filling areas, and mining operations)	<p>(1a) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR</p> <p>(1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.</p>
Earth-moving: Construction fill areas:	<p>(1b) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.</p>

* Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

TABLE 2 (Continued)

<u>FUGITIVE DUST SOURCE CATEGORY</u>	<u>CONTROL ACTIONS</u>
Earth-moving: Construction cut areas and mining operations:	(1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 [70] percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c) Apply chemical stabilizers within five working days of grading completion; OR (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a) Apply water to at least 80 [70] percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR (3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (3c) Establish a vegetative ground cover within 21 [30] days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR (3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

* Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

TABLE 2 (Continued)*

<u>FUGITIVE DUST SOURCE CATEGORY</u>	<u>CONTROL ACTIONS</u>
Unpaved Roads	(4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR (4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR (4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a) Apply chemical stabilizers; OR (5b) Apply water to at least 80 [70] percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR (5c) Install temporary coverings; OR (5d) Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile.
<u>All Categories</u>	(6a) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.

* Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

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AQMD Recommendations
TABLE 3

TRACK-OUT CONTROL OPTIONS

PARAGRAPH (d)(5)(B)

CONTROL OPTIONS

(1)	Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.
(2)	Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
(3)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.