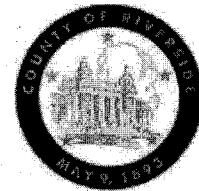


**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



ITEM
12.2
(ID # 3990)

MEETING DATE:
Tuesday, May 2, 2017

FROM : DEPARTMENT OF WASTE RESOURCES:

SUBJECT: DEPARTMENT OF WASTE RESOURCES: Approval of Contract Documents for groundwater monitoring well construction and abandonment at the closed Corona, Hemet, Highgrove, and Pedley Landfills, Districts 2 and 3; [\$0 – Waste Resources Enterprise Funds], CEQA Exempt.

RECOMMENDED MOTION: That the Board of Supervisors:

1. Find that the Project is exempt from the California Environmental Quality Act (CEQA) pursuant to State CEQA Guidelines Section 15061(b)(3) (General Rule for Exemption), and categorically exempt pursuant to Sections 15301 (Existing Facilities), 15302 (Replacement or Reconstruction), 15303 (New Construction or Conversion of Small Structures), and 15304 (Minor Alterations of Land); and
2. Approve the Contract Documents for groundwater monitoring well construction and abandonment at the closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills; and
3. Authorize the General Manager-Chief Engineer of the Riverside County Department of Waste Resources (Department) to advertise for bids; and
4. Direct the Department of Waste Resources to file the Notice of Exemption with the County Clerk upon approval of the Project.

ACTION: Policy

Hans Kemkamp, General Manager - Chief Engineer 4/10/2017

MINUTES OF THE BOARD OF SUPERVISORS

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

Ayes: Jeffries, Tavaglione, Washington and Ashley
Nays: None
Absent: None
Date: May 2, 2017
xc: Waste

Kecia Harper-Ihem
Clerk of the Board
By:
Deputy

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

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$ 0	\$0	\$ 0	\$ 0
NET COUNTY COST	\$ 0	\$0	\$ 0	\$ 0
SOURCE OF FUNDS: Waste Resource Enterprise Funds			Budget Adjustment: No	
			For Fiscal Year: 2016/2017	

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The Riverside County Department of Waste Resources (Department) is required by the California Regional Water Quality Control Board – Santa Ana Region (CRWQCB) to monitor groundwater quality at the Corona, Hemet, and Highgrove landfills. Groundwater elevations have decreased at the Corona and Highgrove sites. Existing groundwater monitoring wells are currently dry and the Department is not able to monitor groundwater as required by the California Code of Regulations (CCR Title 27, §20415). To maintain compliance, the Department needs to construct two new deeper groundwater monitoring wells at the Corona and Highgrove landfills. As a result of changing groundwater conditions at the Hemet landfill, the CRWQCB is requiring the Department to construct a new groundwater monitoring well adjacent to the Hemet landfill.

The Department is no longer required by the CRWQCB to monitor groundwater quality at the Pedley Landfill. There is one groundwater monitoring well located adjacent to the landfill that requires abandonment.

A C-57 California Contractor's License, which the Department does not have, is required to construct and abandon groundwater monitoring wells.

California Environmental Quality Act (CEQA) Findings

The Project is exempt from CEQA pursuant to the State CEQA Guidelines Section 15061(b)(3) (General Rule for Exemption), and categorically exempt from CEQA pursuant to Sections 15301 (Existing Facilities), 15302 (Replacement or Reconstruction), 15303 (New Construction or Conversion of Small Structures), and 15304 (Minor Alterations of Land).

The Project contemplated in this Form 11 involves approval of contract documents for the proposed construction of groundwater monitoring wells at or near the Corona landfill, the Hemet landfill, the Highgrove landfill, and the proposed abandonment of one groundwater monitoring well at the Pedley landfill. The Contract Documents, including Specifications, will be advertised, and ultimately, a contractor will be selected to complete the work (under a separate Board action). The Project involves no expansion of approved uses. This work would not have a direct, indirect, or cumulatively significant effect on the environment. A Notice of Exemption (NOE) to this effect will be filed by the Department with the County Clerk upon Project approval.

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

Impact on Residents and Businesses

The contract ensures that the subject landfills maintain compliance with environmental regulations enforced by the CRWQCB.

SUPPLEMENTAL:

Additional Fiscal Information

The project contemplated in this Form-11 merely approves contract documents identifying proposed work at the Corona, Hemet, Highgrove and Pedley landfills, as well as authorizes the Department to advertise said contract documents. No expenses will be incurred in FY 16/17 as a result of this action.

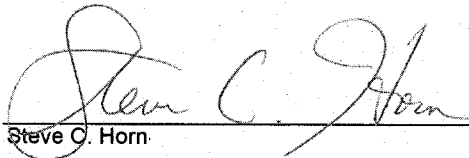
Contract History and Price Reasonableness

The Engineer's estimate for this project is \$188,335 and the action today, if approved, will authorize the Department to pursue competitive bids through the California Public Works Contract process. The Department will then return to the Board of Supervisors to seek approval to award the Contract to the lowest responsible bidder.

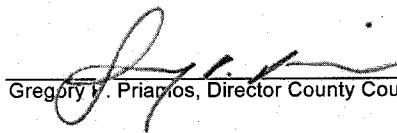
ATTACHMENTS:

ATTACHMENT A. Contract Documents

ATTACHMENT B. CEQA Notice of Exemption


Steve C. Horn

4/24/2017


Gregory V. Priamos, Director County Counsel

4/20/2017

CONTRACT DOCUMENTS

Groundwater Monitoring Well Construction and Abandonment

At the

Closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills

Riverside County, California

Prepared By:



14310 Frederick Street
Moreno Valley, CA 92553

April 2017

FORM APPROVED COUNTY COUNSEL

BY: NEAL R. KIPNIS

DATE

4/4/17

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PROJECT DRAWINGS - MAPS

- Map 1 – Corona Sanitary Landfill Vicinity Map
- Map 2 – Hemet Sanitary Landfill Vicinity Map
- Map 3 – Highgrove Sanitary Landfill Vicinity Map
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- Map 5 – Groundwater Wells CG-7 and CG-8 Location Map
- Map 6 – Groundwater Well HE-6 Location Map
- Map 7 – Groundwater Wells HG-33 and HG-34 Location Map
- Map 8 – Groundwater Well PMW-3 Location Map
- Map 9 – Pre-Bid Meeting Location at the Hemet Sanitary Landfill

PROJECT DRAWINGS – FIGURES

- Figure 1 – Groundwater Details for CG-7
- Figure 2 – Groundwater Details for CG-8
- Figure 3 – Groundwater Details for HE-6
- Figure 4 – Groundwater Details for HG-33

Figure 5 – Groundwater Details for HG-34
Figure 6 – Groundwater Details for PMW-3

APPENDIX

Appendix A – Pedley Sanitary Landfill Groundwater Boring Log for PMW-3
Appendix B – Corona Sanitary Landfill Groundwater Boring Logs
Appendix C – Hemet Sanitary Landfill Groundwater Boring Logs
Appendix D – Highgrove Sanitary Landfill Groundwater Boring Logs

NOTICE TO CONTRACTORS

The Riverside County Department of Waste Resources, hereinafter called "County," invites sealed bids for the

**Groundwater Monitoring Well Construction and Abandonment at the Closed Corona,
Hemet, Highgrove and Pedley Sanitary Landfills**

Contract Documents may be examined at the County's office at 14310 Frederick Street, Moreno Valley, California, and may be obtained upon payment to the County of \$25 per set, received at the County's office and \$35 per set if mailed by U.S. mail (\$10 mailing cost does not apply when using recipient's mailing account number). No refunds will be made.

A digital copy of the Contract Documents, in PDF format, is available on the Department's website <http://www.rcwaste.org/business/bids>. This digital data is to be used at the Contractor's own discretion. The County is not responsible for the manner in which the Contractor chooses to use the digital data. The County is not responsible for how this digital data might be converted by the Contractor to another format. The Contractor is solely responsible for its use of this digital data.

Each proposal must be accompanied by a certified check, cashier's check or bid bond equal to ten percent (10%) of the amount bid, payable to the County of Riverside, as a guarantee that the Contractor will, if awarded the contract, execute a satisfactory contract and furnish the required bonds and provide the required certificates of insurance.

Proposals must be placed in a sealed envelope clearly marked "Contractor's Proposal" and must be in accordance with these Contract Documents. Proposals must be submitted to the County by 11:00 am on May 23, 2017 at 14310 Frederick Street in Moreno Valley which time and place are fixed for the public opening of bids.

The contract work is to be completed on and in close proximity to the following Closed Sanitary Landfills:

- Corona Sanitary Landfill, located at Southwest Corner of El Camino Avenue and Magnolia Avenue, Corona, California.
- Hemet Sanitary Landfill, located at 1871 Warren Road, Hemet, California.
- Highgrove Sanitary Landfill, located at 1420 Highgrove Pass Road, Highgrove Area, Unincorporated Riverside County, California.
- Pedley Sanitary Landfill, located at Intersection of Jurupa Avenue and Van Buren Boulevard, Pedley Area, Unincorporated Riverside County, California.

Refer to Map 1 for the Corona Sanitary Landfill Vicinity Map, Map 2 the for Hemet Sanitary Landfill Vicinity Map, Map 3 for the Highgrove Sanitary Landfill Vicinity Map and Map 4 for the Pedley Sanitary Landfill Vicinity Map. **A mandatory pre-bid meeting will be conducted at the Hemet Sanitary Landfill on May 9, 2017 at 10:00 am.** The meeting location for the pre-bid meeting will be near the main site entrance, as shown on Map 9.

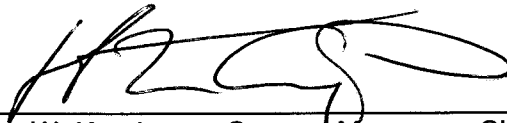
General prevailing rate of per diem wages and general prevailing rate of per diem wages for holiday and overtime work, including employer payments for health and welfare, pension, vacation, apprentices and similar purposes for each craft, classification or type of workman needed for execution of contracts under the jurisdiction of the County have been obtained by the County from the Director of Industrial Relations of the State of California for the area where

the work is to be done. These are on file at the County's office, and will be made available to any interested person upon request.

Contractors submitting proposals for this project shall have a C57 Contractor's license from the State of California, be registered as a well driller with the Riverside County Department of Environmental Health and shall have a business license with the City of Riverside in order to be considered eligible for the contract award.

Dated: _____

RIVERSIDE COUNTY DEPARTMENT
OF WASTE RESOURCES



Hans W. Kernkamp, General Manager - Chief Engineer

INSTRUCTIONS TO BIDDERS

QUANTITIES: The amount of work to be done or materials to be furnished by the Contractor as stated in the proposal (except for lump sum items) are only estimates and are not to be taken as an expressed or implied statement that the actual amount of work or materials will correspond to the estimate. The County reserves the right to increase or decrease or to entirely eliminate certain items from the work or materials if found desirable or expedient. The Contractor will be allowed no claims for anticipated profits, loss of profits or for any damages of any sort because of any difference between the estimated and the actual amounts of work done, or materials furnished or used in the completed project. The Contractor is cautioned against unbalancing of his bid by including his overhead into one or two items only when there are a number of items on the schedule. The overhead and indirect charges should be prorated on all items in the schedule.

DISCREPANCIES AND OMISSIONS: Discrepancies, omissions, ambiguities, or requirements likely to cause disputes shall be immediately brought to the attention of the County. When appropriate, Addenda will be issued by the County. No communication by anyone except by an Addendum affects the meaning or requirements of the Contract Documents. If at any time (before or after submittal of its bid) the Contractor is of the opinion that there is or may be a discrepancy or inconsistency in the plans, drawings, specifications or other Contract Documents, it shall immediately report this in writing to the County and shall not proceed with any related work until ordered so to do.

WITHDRAWAL OF PROPOSALS: Any proposal may be withdrawn at any time prior to the hour fixed in the Notice to Contractors for the opening of proposals, provided that a request in writing, executed by the bidder or his duly authorized representative, for the withdrawal of such proposal, is filed with the County. The withdrawal of a proposal shall not prejudice the right of a bidder to file a new proposal.

AGREEMENT OF FIGURES: If the unit prices and the total amounts named by the bidder in the proposal do not agree, the unit prices alone will be considered as representing the bidder's intention.

INVALID PROPOSALS: Proposals submitted by fax or e-mail and those which fail to reach the place fixed for opening of proposals prior to the date and hour set for opening will not be considered.

INSPECTION OF SITE AND UNDERSTANDING OF CONTRACT PROVISIONS: Prior to submission of a bid, bidders must have examined the site and fully acquainted themselves with all conditions affecting the work. Information derived from maps, plans or specifications, or from the County, will not relieve the successful bidder from properly carrying out all the terms of the written contract. By the submittal of a proposal, the bidder will be held to have personally examined the site and the drawings, to have carefully read all of the specifications and other Contract Documents, and to have satisfied himself as to his ability to meet all the difficulties attending the execution of the work. The bidder agrees that if he is awarded the contract he will make no claim against the County based on ignorance or misunderstanding of the contract provisions; and that the bidder fully understands the payment method for the work.

QUALIFICATIONS OF BIDDERS: No proposal will be accepted from a Contractor who is not licensed under laws of California, as evidenced by the submittal of the Statement of Licensure.

No award will be made to any bidder who cannot give satisfactory assurance to the County as to his 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 bidders shall include a listing of three references attached to the Contractor's Proposal that document prior work, similar to this contract, within the last five years. Each reference shall have an associated project name, work description, contact person, and contact phone number. The County will disqualify a bidder that does not provide references or whose references cannot substantiate the bidder's qualifications. By submission of a bid, the bidders agree to be bound by the County's determination as to whether a bidder is qualified to do the work.

VENDOR REGISTRATION: Contractors must be registered with the County in order to be considered eligible for the Contract award. To register, Contractors may utilize "Vendor Self-Registration" web site at <http://www.purchasing.co.riverside.ca.us> and complete the on-line registration form.

Information needed in order to register:

1. User name (This person will be responsible for original registration and any future change.)
2. User Password
3. Company information including:
 - a. All Addresses (Corporate, Remit to, Sales, etc)
 - b. Company type (Corporation, partnership, sole proprietorship, etc)
 - c. Tax Identification Number (or social security number for individuals)
 - d. Status (women, minority, Disabled Veteran owned, etc)
 - e. Qualification as a local Riverside County business
 - f. Banking Information for future electronic payment processes
4. Contact Information including:
 - a. Names
 - b. Titles/Positions
 - c. Contact Numbers (Phone, Fax, Cell phone, etc)
 - d. E-Mail address for future correspondences
5. List of items/services you wish to provide to the County.

PROPOSAL FORMS: The following forms must be completed and submitted to be considered a valid bid proposal:

- 1) Contractor Proposal
- 2) List of Subcontractors
- 3) Statement of Licensure
- 4) Affidavit
- 5) Bid Bond
- 6) Exhibit A
- 7) List of Three References
- 8) City of Riverside Business License (provide a copy)

Proposals must be made on the forms furnished by the County. Proposals submitted not containing, at least, the above eight forms will not be considered.

REJECTION OF PROPOSALS CONTAINING ALTERATIONS, ERASURES OR IRREGULARITIES: Proposals may be rejected if they show any alterations of form, additions not called for, conditional proposals, incomplete proposals, erasures, or irregularities of any kind. Erasures or interlineations in the proposal must be explained or noted over the signature of the bidder.

PUBLIC OPENING OF PROPOSALS: Proposals will be opened and read publicly at the time and place indicated in the Notice to Contractors. Bidders or their authorized agents are invited to be present.

DISQUALIFICATION OF BIDDERS: More than one proposal from an individual, a firm or partnership, a corporation or an association under the same or different names will not be considered. Reasonable ground for believing that any bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such bidder is interested. If there is any reason for believing that collusion exists among the bidders, none of the participants in such collusion will be considered in awarding the contract. Proposals in which the prices appear to be unbalanced may be rejected.

ADDENDA: County reserves the right to issue Addenda to the Contract Documents at any time prior to the time set to open bids. Each potential bidder shall leave with the County its name, mailing address and email address for the purpose of receiving Addenda. To be considered, a Contractor's proposal must list and take into account all issued Addenda.

AWARD OF CONTRACT: The County reserves the right to reject any and all proposals or to waive technical defects as the best interests of the County may require. Prior to award of the contract, and if requested by County, the Contractor agrees to meet with the County to review the details and calculations of the Contractor's proposal and the Contractor's understanding of any aspect of the work. The award of the Contract, if it be awarded, will be to the lowest responsible and qualified bidder. The Contract award, if made, will be provided within approximately two (2) to four (4) weeks after the opening of the proposals.

BIDDER'S CHECK OR BOND: Each proposal must be accompanied by a certified or cashier's check, or by a bid bond only on the form supplied by the County, drawn in favor of the County in an amount not less than ten percent (10%) of the total bid. This check or bond shall be given as a guarantee that the bidder, if awarded the contract, will execute and deliver the Agreement, the required Payment and Performance Bonds, and the required certificates of insurance in accordance with his bid accepted by the County. In default of execution of the Agreement upon award and/or delivery of said Payment and Performance Bonds and certificates of insurance, such Bid Bond or check shall be held subject to payment to the County for the difference in money between the amount of the contract with another party to perform the work, together with the cost to the County of redrafting, redrawing and publishing documents and papers necessary to obtain new bids on said work. The check or bond shall, in addition, be held subject to all other actual damages suffered by the County. The check or bond will be returned upon the close of the period mentioned in these instructions below and to the successful bidder upon execution of the Agreement. **NO BONDS WILL BE ACCEPTED UNLESS SUBMITTED ON THE FORM SUPPLIED BY THE COUNTY.**

FORFEITURE FOR FAILURE TO POST SECURITY AND EXECUTE AGREEMENT: In the event the bidder, to whom an award is made, fails or refuses to post the required bonds and provide the required certificates of insurance and fails to return executed copies of the Agreement within five (5) calendar days after the prescribed forms are presented to him for

signature, the County may declare the bidder's bid deposit or bond forfeited as damages caused by the failure of the bidder to post such security and execute such copies of the Agreement and may award the work to the next lowest responsible bidder, or may call for new bids.

RETURN OF PROPOSAL GUARANTEES: Within ten (10) business days after the award of the contract, the County will return the proposal guarantees (bidder's check or bond) accompanying those proposals that are not considered in making the award. All other proposal guarantees will be held until the Contract has been fully executed and the required bonds and certificates of insurance have been provided, after which they will be returned to the respective bidders whose proposal they accompany.

CONTRACT BONDS: The Contractor shall furnish two (2) surety bonds in duplicate, one as a security for the faithful performance of the contract in the amount equal to one hundred percent (100%) of the contract price, and one as security for the payment of all persons performing labor and furnishing materials in connection with the contract in an amount equal to one hundred percent (100%) of the contract price. All bonds must be submitted on forms provided by the County. Bonds submitted in any other form will not be accepted. Should any surety on the Payment Bond or Performance Bond be deemed unsatisfactory by the County, Contractor shall upon notice promptly substitute new bonds satisfactory to the County. All bonds must be issued by sureties which are licensed by the State of California to issue such bonds.

SUBLETTING AND SUBCONTRACTING: Bidders are required, pursuant to the Subletting and Subcontracting Fair Practices Act (commencing with Section 4100 of the Public Contract Code), to list in their proposal the name and location of place of business of each subcontractor who will perform work or labor or render services in or about the construction of the work or improvement or a subcontractor who specially fabricates and installs a portion of the work or improvement, in excess of one-half of one percent (0.5%) of the prime Contractor's total bid. Failure to list a subcontractor for a portion of the work means that the prime contractor will do that portion of the work.

"OR EQUAL": Pursuant to Division 2, Chapter 3, Article 5, commencing at Section 3400 of the Public Contract Code, all specifications shall be deemed to include the words "or equal," provided, however, that permissible exceptions or other requirements shall be specifically noted in the specifications. Any "equal" proposed by the Contractor must be described in the Contractor's Proposal.

ANTI-DISCRIMINATION: It is the policy of the County, that in connection with all work performed under this Contract, there be no discrimination against any prospective or active employee engaged in the work because of race, color, ancestry, national origin, religious creed, sex, age, marital status, or sexual preference. The Contractor agrees to comply with applicable Federal and California laws including, but not limited to, the California Fair Employment Practice Act, beginning with Labor Code Section 1410, and Labor Code Section 1735. In addition, the Contractor agrees to require like compliance by any subcontractors employed on the work.

TIME OF COMPLETION AND LIQUIDATED DAMAGES: Please refer to Section 2.1.10 of the Special Provisions.

CONTRACTOR'S PROPOSAL

TO THE BOARD OF SUPERVISORS OF THE COUNTY OF RIVERSIDE:

The undersigned hereby declares:

- (a) That the only persons or parties interested in this proposal as principals are the following:
-
-

(If the Contractor is a corporation, give the name of the corporation and the name of its president, secretary, treasurer, and manager. If a co-partnership, give the name under which the co-partnership does business, and the names and addresses of all copartners. If an individual, state the name and address under which the contract is to be drawn.)

- (b) That this proposal is made without collusion with any other person, firm or corporation.
- (c) That the Contractor has carefully examined the location of the proposed work, and has familiarized himself with all of the physical, climatic or other conditions related to the work.
- (d) That the Contractor has carefully examined the attached specifications, plans, and other Contract Documents, and makes this proposal in accordance therewith.
- (e) That, if this proposal is accepted, the Contractor will enter into a written contract with the County of Riverside.
- (f) That the Contractor proposes to enter into such contract and to accept in full payment for the work actually done the prices shown in the attached schedule. It is understood that the quantities listed (except for those shown as "Final" or "Lump Sum") are but estimates only and final payment will be based on actual quantities whatever they may be, subject to such adjustments and alterations as elsewhere provided for in the Contract Documents.

Contractor bids as follows for Groundwater Monitoring Well Construction and Abandonment at the Closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills.

TOTAL BID AMOUNT: _____ Dollars
(\$ _____)

The itemized total bid amount is complete and attached as Exhibit A.

Accompanying this proposal is a certified check, cashier's check or bid bond payable to the order of the County of Riverside in the sum of _____ Dollars (\$ _____). This amount is not less than ten percent (10%) of the total bid amount.

Contractor acknowledges receipt of Addenda No(s) _____.

Name of Contractor: _____

Address: _____

Telephone: _____

Contractor's License No. and Classification: _____

DIR Registration Number: _____

Signature: _____

Name: _____

Title: _____

Dated: _____

THE REQUIRED REFERENCES AND OTHER DOCUMENTS MUST BE ATTACHED TO THIS PROPOSAL.

LIST OF SUBCONTRACTORS

The name and the location of the place of business of each subcontractor who will perform work or labor or render service to the Prime Contractor in or about the construction of the work or improvement, or a subcontractor who specially fabricates and installs a portion of the work or improvement, in an amount in excess of one-half of one percent (0.5%) of the Prime Contractor's total bid and the portion of the work which will be done by each such subcontractor is as follows:

Item No. (s):

Name of Subcontractor:

Address:

Telephone:

DIR Registration Number:

Item No. (s):

Name of Subcontractor:

Address:

Telephone:

DIR Registration Number:

Item No. (s):

Name of Subcontractor:

Address:

Telephone:

DIR Registration Number:

STATEMENT OF LICENSURE

Pursuant to California Public Contract Code (commencing with Section 3300), the undersigned does certify as follows:

1. That the pocket license/certificate of licensure I have presented to County as of this date is my own license, being State of California Contractors License No.; _____
2. That said Contractors License is current and valid; and
3. That said Contractors License is of a classification appropriate to the work to be undertaken for County, a Class _____ license.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: _____

Signature: _____

Name: _____

Title: _____

AFFIDAVIT FOR INDIVIDUAL CONTRACTORS

STATE OF CALIFORNIA)

SS

COUNTY OF RIVERSIDE)

_____, being first duly sworn, deposes and says:

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

Subscribed and sworn to before me

this ____ day of _____ 20 ____.

Signature of officer administering oath

AFFIDAVIT FOR CORPORATE CONTRACTOR

STATE OF CALIFORNIA)

SS

COUNTY OF RIVERSIDE)

_____, being first duly sworn, deposes and says:

That he or she is

Of

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

Subscribe and sworn to before me

this ____ day of _____ 20____.

Signature of officer administering oath

BID BOND

Recitals:

1. _____ (Contractor) has submitted its Contractor's Proposal to the County of Riverside, by and for the Department of Waste Resources, for the construction of the public works known as Groundwater Monitoring Well Construction and Abandonment at the Closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills, in accordance with a Notice to Contractors, dated April 25, 2017.
2. _____ a _____ corporation, hereafter called Surety, is the surety on this Bond.

Agreement: We, Contractor as principal and Surety as surety, jointly and severally agree and state as follows:

1. The amount of the obligation of this Bond is 10% of the amount of the Contractor's Proposal and inures to the benefit of County.
2. This Bond is exonerated by (1) County rejecting said Proposal or, in the alternate, (2) if said Proposal is accepted, Contractor executes the Agreement and furnishes the Bonds and certificates of insurance as agreed to in its Proposal, otherwise it remains in full force and effect for the recovery of loss, damage and expense of County resulting from failure of Contractor to act as agreed to in its Proposal.
3. Surety, for value received, stipulates and agrees that its obligations hereunder shall in no way be impaired or affected by any extension of time within which County may accept the Proposal and waives notice of any such extension.
4. This Bond is binding on our heirs, executors, administrators, successors and assigns.

Dated: _____

By: _____ By: _____
Title: _____ Title: _____
(Surety) (Contractor)

NOTE: This Bond must be executed by both parties with corporate seal affixed. All signatures must be acknowledge by a notary (attach acknowledgments).

AGREEMENT

THIS AGREEMENT is made as of _____ (date) and is between the COUNTY OF RIVERSIDE (County) and _____ (Contractor).

IT IS AGREED BY THE PARTIES AS FOLLOWS:

1. The Work. Contractor shall furnish all tools, equipment, apparatus, facilities, labor and material necessary to perform the work for the project, Groundwater Monitoring Well Construction and Abandonment at the Closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills, in exact conformity with the Contract Documents, subject to such inspection as County deems appropriate.
2. Contract Documents. The Contract Documents for the project are:
 - (a) Notice to Contractors;
 - (b) Instructions To Bidders;
 - (c) Contractor's Proposal;
 - (d) Agreement;
 - (e) Bid Bond;
 - (f) Performance Bond;
 - (g) Payment Bond;
 - (h) General Provisions;
 - (i) Special Provisions;
 - (j) Appendixes;
 - (k) Standard Specifications for Public Works Construction, 2015 Edition, with Amendments;
 - (l) any other documents included in or incorporated into the Contract Documents;
 - (m) Addenda Nos. _____;
 - (n) Orders, instructions, drawings and plans issued by County during the course of the work in accordance with the provisions of the Contract Documents.

Each of the above-mentioned documents presently in existence are by this reference incorporated into this Agreement and each of these documents not now in existence are incorporated herein as of the time of their issuance.

3. Contract Price - Payment. Exhibit A is attached to and incorporated into this Agreement and states the basis for full payment to Contractor. Contractor represents that it fully understands the payment method for the work.

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES
14310 Frederick St.
Moreno Valley, CA 92553

By: _____
Hans W. Kernkamp
General Manager – Chief Engineer

COUNTY OF RIVERSIDE

By: _____
Chairman, Board of Supervisors

ATTEST:

Kecia Harper-Ihem, Clerk of the Board

By: _____
Deputy

(Seal)

Contractor

By: _____
(Signature)

Name: _____

Title: _____
(If corporation, attach corporate seal)

EXHIBIT A

Project: Groundwater Monitoring Well Construction and Abandonment at the Closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills

This exhibit is the basis for the total bid amount proposed by the Contractor for the above referenced project. It is understood that the quantities listed (except for those shown as "Final" or "Lump Sum") are estimates only and final payment will be based on actual quantities whatever they may be, subject to such adjustments and alterations as elsewhere provided in the Contract Documents.

Item No.	Description	CG-7 Qty	CG-8 Qty	HE-6 Qty	HG-33 Qty	HG-34 Qty	PMW-3 Qty	Total Quantity	Unit	Unit Cost	Item Cost
1.1	Mobilization to Corona	1	0	0	0	0	0	1	LS	\$	\$
1.2	Mobilization to Hemet	0	0	1	0	0	0	1	LS	\$	\$
1.3	Mobilization to Highgrove	0	0	0	1	0	0	1	LS	\$	\$
1.4	Mobilization to Pedley	0	0	0	0	0	1	1	LS	\$	\$
2.1	Borehole Drilling and Sampling at Corona	160	123	0	0	0	0	283	LF	\$	\$
2.2	Borehole Drilling and Sampling at Hemet	0	0	194	0	0	0	194	LF	\$	\$
2.3	Borehole Drilling and Sampling at Highgrove	0	0	0	115	155	0	270	LF	\$	\$
3	Install well screen	70	90	35	65	70	0	330	LF	\$	\$
4	Install well casing	93	36	159	53	88	0	429	LF	\$	\$
5	Install filter pack	80	100	45	75	80	0	380	LF	\$	\$
6	Install transition sand	5	5	5	5	5	0	25	LF	\$	\$
7	Install pellet annular seal	5	5	5	5	5	0	25	LF	\$	\$
8	Install grout annular seal	50	0	119	10	45	0	224	LF	\$	\$
9	Install sanitary seal	20	13	20	20	20	0	93	LF	\$	\$
10	Install flush well head protection	0	0	1	0	0	0	1	EA	\$	\$
11	Install above ground well head protection	1	1	0	1	1	0	4	EA	\$	\$
12	Well development	8	8	8	8	8	0	40	HR	\$	\$
13	Well Abandonment - pressure grout	0	0	0	0	0	20.5	20.5	LF	\$	\$
14	Drill rig standby	2	2	2	2	2	0	10	HR	\$	\$
15	Rock clause drilling	2	2	2	2	2	0	10	HR	\$	\$
16.1	Demobilization Corona	1	0	0	0	0	0	1	LS	\$	\$
16.2	Demobilization Hemet	0	0	1	0	0	0	1	LS	\$	\$
16.3	Demobilization Highgrove	0	0	0	1	0	0	1	LS	\$	\$
16.4	Demobilization Pedley	0	0	0	0	0	1	1	LS	\$	\$
Total Cost										\$	\$

LIST OF REFERENCES

The following should contain persons or entities familiar with the Contractor's Work:

1	Work Performed for:
	Address:
	Contact Number:
	Contact Name:
	Type of Project:
	Date Work Performed:
	Contract Amount:
2	Work Performed for:
	Address:
	Contact Number:
	Contact Name:
	Type of Project:
	Date Work Performed:
	Contract Amount:
3	Work Performed for:
	Address:
	Contact Number:
	Contact Name:
	Type of Project:
	Date Work Performed:
	Contract Amount:

PERFORMANCE BOND

Recitals:

1. _____ (Contractor) has entered into an Agreement dated _____ with the COUNTY OF RIVERSIDE (County) for construction of the public work known as Groundwater Monitoring Well Construction and Abandonment at the Closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills (Project).
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 percent (100%) of the estimated contract price for the Project of:
\$ _____
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 the 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 there under shall affect its obligations hereunder and waives notice as to such matters, except the total contract price cannot be increased by more than 25% without approval of Surety. (If the total contract price is inadvertently increased by more than 25% without approval of Surety, this performance bond will remain in effect for that portion of the contract existent prior to the 25% exceedance).

THIS BOND is executed as of _____.

Dated: _____

SURETY

CONTRACTOR

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

NOTE: This Bond must be executed by both parties with corporate seal affixed. All signatures must be acknowledge by a notary (attach acknowledgments).

PAYMENT BOND

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

The makers of this Bond are:

_____ 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 Agreement dated _____, between Principal and the COUNTY OF RIVERSIDE (County), a public entity, for

\$ _____ the total amount payable.

THE AMOUNT OF THIS BOND IS 100 PERCENT OF SAID SUM. Said contract is for the public work known as Groundwater Monitoring Well Construction and Abandonment at the Closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills (Project). The beneficiaries of this Bond are as is stated in Section 3248 of the Civil Code and Sections 3248, 3249, 3250 and 3252 of said Code. Without notice, Surety consents to extension of time for performance, change in requirements, amount of compensation, or prepayment under said contract.

Dated: _____

SURETY

CONTRACTOR

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

NOTE: This Bond must be executed by both parties with corporate seal affixed. All signatures must be acknowledge by a notary (attach acknowledgments).

GENERAL PROVISIONS

Groundwater Monitoring Well Construction and Abandonment

At the

Closed Corona, Hemet, Highgrove Sanitary and Pedley Landfills

Riverside County, California

Prepared By:



**14310 Frederick Street
Moreno Valley, CA 92553**

April 2017

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1. DEFINITION OF TERMS

1.1. Terms

Whenever in these specifications, or in any documents or instruments where these specifications govern, the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

- a) **AGENCY:** Whenever used in the Standard Specifications shall refer to County.
- b) **BOARD OF SUPERVISORS:** The Board of Supervisors of the County, also sometimes referred to as the Board.
- c) **DEPARTMENT, COUNTY, OR OWNER:** The County of Riverside, by and for the Department Of Waste Resources.
- d) **ENGINEER:** The General Manager - Chief Engineer of the Riverside County Department Of Waste Resources, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.
- e) **LABORATORY:** The laboratories authorized by the County to test materials and work involved in the contract.
- f) **BIDDER:** Any individual, firm or corporation submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.
- g) **CONTRACTOR:** The person or persons, co-partnership or corporation, private or municipal, who have entered into the Agreement with the County, or his or their legal representatives.
- h) **SUPERINTENDENT:** The executive representative of the Contractor, present on the work at all times during progress, authorized to receive and execute instruction from the County.
- i) **PLANS or PROJECT DRAWINGS:** The official plans, profiles, typical cross sections, general cross sections, working drawings, and supplemental drawings, or exact reproductions thereof, approved by the County, which show the location, character, dimension and details of the work to be done, and which are to be considered a part of the Contract Documents.
- j) **SPECIFICATIONS:** The directions, provisions, and requirements contained in the Contract Documents as to the method and manner of performing the work or to the quantities and qualities of materials to be furnished under the contract.
- k) **CONTRACT:** The written Agreement covering the work.
- l) **CONTRACT PRICE:** Shall mean either the lump sum, unit price, or unit prices named in the Agreement, or the total of all payments under the contract at the lump sum, unit price, or unit prices, as the case may be.
- m) **SURETY OR SURETIES:** The bondsmen or party or parties, approved by the County, who may guarantee the fulfillment of the contract by bond, and whose signatures are attached to said bond.
- n) **RIGHT OF WAY:** The whole right of way which is reserved for and secured for use in constructing the improvement.
- o) **THE WORK:** All the work specified in the Contract Documents.

1.2. Similarity of Words

Wherever in the specifications or upon the plans the words directed, required, permitted, ordered, designated, prescribed, or words of like import are used, it will be understood that the direction, requirements, permission, order, designation, or prescription of the County is intended, and similarly the words approved, acceptable, satisfactory, or words of like import, shall mean approved by, or acceptable to, or satisfactory to, the County, unless otherwise expressly stated.

2. SCOPE OF WORK

2.1. Work To Be Done

The Contractor shall provide all labor, power, light, water, materials, equipment, tools, scaffolding, machinery, transportation, insurance, permits, bonds, temporary protection, watchmen, and superintendence necessary to construct and complete all work, and to furnish all materials included in the contract, except those furnished by the County as specifically stated in the Contract Documents.

The Contract Documents are complementary, and the work called for by any one shall be as binding as if called for by all.

2.2. Construction Schedule

The Contractor shall submit to the County at least monthly, or at such times as may be requested by the County, a schedule which shall show the order and dates in which the Contractor proposes to carry on the various parts of the work, including estimated completion dates. The County's receipt of such schedule(s) shall not indicate any concurrence by the County in the items or dates described in the schedule(s).

2.3. Drawings And Specifications On The Work

The Contractor shall keep one copy of all drawings and specifications on the work, in good order, available to the County and its representatives.

2.4. Estimate Of Quantities

It is understood that the quantities listed (except for those shown as "Final" or "Lump Sum") are but estimates only and final payment will be based on actual quantities for the work whatever they may be, subject to such adjustments and alterations as elsewhere provided for in the Contract Documents. The County is not to be held responsible for the accuracy of the estimate of quantities. The Contractor shall judge for himself, after considering all circumstances and conditions, the costs and quantities of materials involved in the work.

The Contractor shall not at any time assert that there was any misunderstanding in regard to the nature of the work or the kind or amount of materials to be furnished for the work. The Contractor shall not ask, demand, sue for, or seek to recover compensation in excess of the costs or charges for the work as stated in the Agreement.

2.5. Protests

If the Contractor considers any work demanded of it to be outside of the requirements of the contract, the Contractor shall immediately and before the start of such work state this in writing to the County. In such writing, the Contractor shall clearly and in detail state the basis of its protest. Except for such protests as are made of record in the manner herein specified, the records, rulings, instruction, or decisions of the County shall be final and conclusive. Written protest by the Contractor shall not in any way relieve the Contractor from proceeding with the work as directed by the County.

2.6. Alterations

The Contractor agrees that reasonable alterations and modifications may be made by the County and that this may be done without notice to the sureties on the Contractor's bonds. If such changes result in increased or decreased quantities under the items specified in the

Agreement, the Contractor will be paid on the basis of actual quantities as measured by the County; and such changes shall not affect the unit prices bid by the Contractor.

2.7. Extra Work

2.7.1. General

The County reserves and shall have the right to revise the details of the contemplated work, or to add work of a different character or function, and have the Contractor perform such revised or added work as "Extra Work", when such extra work is considered by the County to be appurtenant to the satisfactory completion of the project. "Extra Work" is defined as added work of a different character or function and for which no basis for payment is prescribed; or that work which is indeterminate at the time of advertising and is specifically designated as extra work. The signing of the contract by the Contractor will be deemed to be an agreement on his part to perform extra work, as and when ordered by the County. If required extra work results in delay to the work, the Contractor will be given an appropriate extension of time.

The General Manager – Chief Engineer shall have the authority to approve changes or additions in the work in accordance with Public Contract Code 20142 without Board of Supervisors approval.

2.7.2. Procedure for Extra Work

Extra work may not be done by the Contractor without prior request and proper written approval by the County. Upon decision of the County to have extra work performed, the County will so inform the Contractor, acquainting it with the details of the new work. The Contractor shall thereupon present in writing a price for said work to the County, whose written approval shall be secured before work is started; except that the County may order the Contractor to proceed with extra work in advance of the submission of such prices provided that preliminary estimates show that the cost will not exceed \$1,000.

Prices for extra work shall be prepared by the Contractor on one or both of the following methods, as requested by the County, and submitted to the County for approval:

- For a stated unit price or lump sum amount based upon current prevailing fair prices for materials, labor, plant, overhead and profit.
- On a cost plus 15 percent basis (force account by the Contractor). The cost of all work done by the Contractor on a cost plus 15 percent basis will be computed in the manner described in Section 7, and the compensation thus provided shall be full payment to the Contractor related to the extra work.

Upon receipt of the Contractor's price, the County will make an analysis thereof and in its discretion adopt one of the following procedures:

- Accept the Contractor's price for lump sum or unit price amount in the original or amended form and direct it to proceed with the work; or direct it to perform the work on a cost plus 15 percent basis.
- Have the work performed by County's forces or by separate contract.
- Direct the Contractor to proceed with the work and accept payment therefore in the amount as adjudicated later in a court of law.

The price agreed to by the Contractor for the extra work shall be full compensation to the Contractor for all labor, materials, equipment or other costs related to the extra work.

2.8. Payment For Extra Work

At the end of each month the Contractor shall make and deliver to the County a statement of the cost of the extra work completed during the current month, itemized and in a form satisfactory to the County. Payment for extra work shall be added to the monthly partial payment made in accordance with Section 7.5 of the General Provisions.

2.9. Rights Of Way

The County shall provide the rights of way as specifically described in the Contract Documents upon which the work under this contract is to be done, except that the Contractor shall provide land required for the erection of temporary construction facilities and storage of his material, together with right of access to same.

2.10. Cleaning Up

The Contractor shall, as directed by the County, remove from the County's right of way and from all public and private property, at its own expense, all temporary structures, rubbish and waste materials resulting from its operations.

3. CONTROL OF THE WORK

3.1. Authority Of The County

The County shall have general supervision of the contract under authority of the Board of Supervisors. The County has the authority to stop the work whenever such stoppage may be necessary to ensure the proper execution of the contract. The County shall decide all questions which may arise as to the quality or acceptability of materials furnished, work performed, and rate or progress of the work; all questions which may arise as to the interpretation of the plans and specifications; all questions as to the acceptable fulfillment of the contract on the part of the Contractor; and all questions as to compensation. The County's determination and decision thereon shall be final and conclusive.

3.2. Detail Drawings

The approved plans shall be supplemented by such working drawings as are necessary to control the work adequately. All authorized alterations affecting the requirement and information given on the approved plans shall be in writing. No changes shall be made to any plan or drawing after the same has been approved by the County, except by its written direction.

Approval by the County of the Contractor's working drawings (or other documents) does not relieve the Contractor of responsibility for accuracy of dimensions, details or other requirements of the Contract Documents. It is mutually agreed that the Contractor shall be responsible for agreement and conformity of his working drawings with the approved plans and specifications. Full compensation for furnishing all working drawings shall be considered as included in the prices paid for the various contract items of work, and no additional allowance will be made therefore.

3.3. Conformity With Plans And All Allowable Deviations

Except as otherwise specifically stated in the Contract Documents, finished surfaces in all cases shall conform exactly with the elevations, lines, grades, cross-sections, and dimensions shown or described in the Contract Documents. Any deviations must be authorized in advance in writing by the County.

3.4. Interpretation Of Plans And Specifications

Should it appear that the work to be done is not sufficiently detailed or explained in the Contract Documents, the Contractor must bring this to the County's attention in writing prior to submittal of the Contractor's Proposal.

In the event of any discrepancy between any drawings and the figures written thereon, the figures shall be taken as correct. The Contractor will not be allowed to take advantage of errors and omissions in the drawings and specifications. When errors or omissions are found, they shall immediately be brought to the attention of the other party in writing.

3.5. Superintendence

The Contractor shall keep on his work, continually during its progress, a competent Superintendent responsible for the construction of the work, as well as any necessary assistants. All such persons shall be acceptable to the County continuously throughout the duration of the project. The Superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor.

3.6. Lines And Grades

The Contractor shall provide opportunities and facilities for setting points and making measurements as requested by the County or otherwise as reasonably required. The Contractor shall not proceed until it has made timely demand upon the County for, and has received from the County, such lines and grades as may be necessary as the work progresses. The work shall be done in strict conformity with such lines and grades.

The Contractor shall carefully preserve benchmarks, reference points and stakes, and in case of willful or careless destruction, the Contractor shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their loss or disturbance.

3.7. Inspection Of Work

The County and its representatives shall at all times have access to the work and shall be furnished with every reasonable opportunity for ascertaining that the materials and workmanship are in accordance with the requirements of the Contract Documents. All work done and all materials furnished shall be subject to the County's inspection and approval.

The inspection of the work by any County representatives shall not relieve the Contractor of any of its obligations to fulfill the requirements of the Contract Documents. Defective work or unsuitable materials may be rejected, notwithstanding that such work or materials may have been previously overlooked by County representatives, accepted, or estimated for payment.

3.8. Removal Of Defective And Unauthorized Work

All work which has been rejected shall be remedied or removed and replaced by the Contractor in an acceptable manner; and no compensation will be allowed for such removal or replacement. Any work done beyond the lines and grades as described by the Contract Documents, or any extra work done without proper written authority, will be considered as unauthorized and will not be paid for. Work so done may be ordered removed at the Contractor's expense. Upon failure on the part of the Contractor to comply, the County shall have authority to cause defective or unauthorized work to be remedied, or removed and replaced, and to deduct the costs for this work from any monies due or to become due the Contractor.

3.9. Equipment And Plant

Equipment not suitable to produce the quality of work required will not be permitted to operate on the project. Plants shall be designed and constructed in accordance with general practice for such equipment and shall be of sufficient material to carry the work to completion within the time limit. The Contractor shall provide adequate and suitable equipment and plant to meet these requirements and, when ordered by the County, shall immediately remove unsuitable equipment from the work and discontinue the operation of unsatisfactory plants. No worn or obsolete equipment shall be used, and in no case shall the maker's rating of the capacity for any equipment be exceeded. All vehicles used to haul materials over existing highways shall be equipped with pneumatic tires.

3.10. Final Inspection

The County will not make the final inspection until all the work provided for and contemplated by the contract has been fully completed and the final clean up has been performed.

4. CONTROL OF MATERIAL

4.1. County Furnished Materials

The Contractor shall furnish all materials required to complete the work, except those specified in the Contract Documents to be furnished by the County. Any materials furnished by the County will be delivered to the Contractor at the points specified in the Contract Documents. The Contractor will be held responsible for all materials so delivered to him, and deductions will be made from any monies due Contractor to make good any shortages and deficiencies, from any cause whatsoever, which may occur after such delivery, or for any demurrage charges due to delinquency in unloading.

4.2. Source Of Supply And Quality Of Materials

At the option of the County the source of supply of any materials shall be approved by the County before the delivery is started. Only materials conforming to the exact requirements of the Contract Documents and approved by the County shall be used in the work. All materials proposed for use may be inspected or tested by the County at any time during their preparation and use. If it is found that sources of supply which have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources. No material which, after approval, subsequently becomes unfit for use shall be used in the work.

Wherever the name, or brand, or manufacturer of an item is specified, it is used as a measure of quality and utility or a standard. Except in those instances where the product is designated to match others presently in use, or as otherwise stated in the Contract Documents, specifications calling for a designated material, product, thing or service by specific brand or trade name shall be deemed to be followed by the words "or equal" so that the Contractor may propose in the Contractor's bid any equal material, product, thing or service. If the Contractor desires to use any other brand or manufacturer of equal quality or utility to that specified, he shall list definite particulars of that which it considers equivalent to the specified item in its bid. The County will then determine whether or not the proposed name brand or article is equal in quality and utility to that specified, and the County's determination in that regard shall be final and binding upon the Contractor.

4.3. Samples And Tests

All tests of materials furnished by the Contractor shall be made by the County in accordance with commonly recognized standards of national organizations for this type of landfill project, and such special methods and tests as are in use at the County's approved laboratory or otherwise determined by the County to be needed. The County shall determine what testing is needed.

Field tests of materials will be made by the County or its representative when deemed necessary as determined by the County; and these tests shall be made in accordance with standard practices of the County or as otherwise needed.

The Contractor shall furnish samples of all materials as requested by the County without charge. No material shall be used until it has been approved by the County. Samples will be secured and tested whenever necessary as determined by the County to determine the quality of the material.

Promptly after the approval of the contract, the Contractor shall notify the County of the proposed sources of supply of all materials to be furnished by it, using a form which will be supplied by the County upon request.

Whenever reference is made to standard tests or requirements of the County, the American Society for Testing Materials, the American Railway Engineering Association or the American Association of State Highway Officials, the reference shall be construed to mean the standards that are in effect at the date the Agreement is signed with subsequent amendments, changes, or additions as thereafter adopted and published by the organization referred to.

None of the provisions stated in this section shall relieve the Contractor of its obligations as stated elsewhere in the Contract Documents.

4.4. Storage Of Materials

Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary by the County, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground. They shall be placed under cover when so directed by the County. Stored materials shall be so located as to facilitate prompt inspection.

4.5. Defective Materials

All materials not conforming to the exact requirements of the Contract Documents shall be considered as defective; and all such materials, whether in place or not, shall be rejected and shall be removed immediately from the site of the work. No rejected materials, the defects of which have been subsequently corrected, shall be used until approval in writing has been given by the County. Upon failure on the part of the Contractor to comply forthwith with any order of the County made under the provisions of this article, the County shall have authority to remove and replace defective material and to deduct the cost of removal and replacement from any monies due or to become due the Contractor.

4.6. Assignment Of Claims

In submitting a bid 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 subcontractors do offer and agree to assign to the County all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

5. LEGAL RELATIONS AND RESPONSIBILITY

5.1. Laws To Be Observed

5.1.1. Compliance with Applicable Law

Reference to and/or incorporation into the Contract Documents of a particular law, statute, ordinance, rule or regulation is not, nor is it intended to be, a definitive statement of the law applicable to the Contract Documents and the accomplishment of the work. Contractor must keep informed as to all such applicable laws - Federal, State, County, Municipal - as they affect the conduct of the work and comply with such law, including, but not limited to, having requisite licenses, obtaining necessary permits, paying necessary fees and taxes, posting notices and installing, operating and maintaining safety precautions and facilities. It is likewise Contractor's responsibility to see to it that its subcontractors also fully comply with such applicable laws. Contractor shall protect and defend County, its officers, agents, employees and contractors against any claim or liability arising from or based upon any alleged violation of such applicable law.

5.1.2. Labor Code

The Contractor shall comply with all applicable requirements of the California Labor Code including but not limited to Labor Code, Chapter 2, Subchapter 1, Article 10, Required Apprentices on Public Works Contracts. Reference is made to Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 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 with, among other things, discrimination, penalties and forfeitures, their disposition and enforcement, wages, working hours and securing workers' compensation insurance 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 Agreement by the parties constitutes their agreement to abide by said Chapter 1. Their stipulation as to all matters which they are required to stipulate 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 Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this contract." Contractor and his subcontractors shall comply with the provisions of the Labor Code regarding apprentices. Contractor shall post at each job site during the course of the work a copy of County's "Determination of Prevailing Wage Rate". Copies of this Determination are available from County for this purpose.

5.1.3. Equal Employment Opportunity

The Contractor shall comply with all applicable non-discrimination and equal employment laws. The Contractor shall not discriminate in his 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 and shall comply with the provisions of the California Fair Employment Practice Act (commencing with S1410 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 (including but not limited to certified payroll information) by County and any state or federal agency having jurisdiction for the purpose of investigation to ascertain compliance with this Section.

County may assign an affirmative action representative to monitor Contractor and his 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 more specific requirements may be contained covering the same subject matter of this Section. If so, such more specific requirements prevail over this section in case of conflict.

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 contract 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.

Transactions in Excess of \$10,000, but less than \$50,000 - At County's request, Contractor shall certify that he 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 his affirmative action plan and furnish County a copy of the Plan upon request. County may require Contractor to complete an Affirmative Action Compliance Report, on a form furnished by County, setting forth definite goals during the term of this contract.

Transactions of \$50,000 or more - If Contractor has 50 or more employees and a contract for \$50,000 or more, he shall develop and submit to County within 30 days after award, a written affirmative action compliance program providing in detail specific steps to guarantee equal employment opportunity. Contractor shall include in his 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 50 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 his subcontractor's employees from the 12 month period immediately prior to award, or the total number of employees contractor or its subcontractor will have when performing this contract, whichever is higher, shall be used.

Federally Assisted Construction - If this project is a federally assisted construction project, then the contract provisions contained 41 CFR S60-1.4(b) are incorporated herein and Contractor shall likewise incorporate said provisions in each subcontract

entered into by Contractor to perform the work. Federally assisted construction is identified as such in the Notice Inviting Bids.

5.1.4. Registration of Contractors

In order to be considered, a prospective bidder must be licensed in accordance with Division 3, Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

5.1.5. Accident Prevention

Particular attention shall be given to relevant Division of Industrial Safety Construction and Electrical Safety Orders. Said Orders are contained in Title 8 of the California Code of Regulations, Chapter 4, Subchapters 4 and 5. Specific attention shall be taken of the California Occupational Safety and Health Act of 1973 (commencing with Section 6300 of the Labor Code) and the Federal Occupational Safety and Health Act of 1970 (P.L. 91-596) and rules and regulations issued pursuant to said Acts. Specific reference is made to Article 6 of said Construction Safety Orders. Contractor shall submit to County, in advance of excavation a detailed plan showing the design of shoring, bracing, sloping of the sides of trenches, or other provisions to be made for protection of personnel during earthwork operations. In event the Contractor's plan does not conform to the shoring system requirement of Article 6, the contractor's proposed shoring design shall be prepared and signed by a civil or structural engineer registered in the State of California. The Contractor shall also impose these requirements on all subcontractors involved and enforce compliance therewith. The duties here set forth are non-delegable by Contractor.

5.2. Contractor's Responsibility

Contractor is under the absolute duty in fulfilling his contractual obligations hereunder to proceed, and cause his subcontractors to proceed, in a safe, workmanlike manner, with adequate safeguards for the protection of the public, the workmen and persons from time to time inspecting the work. If at any time Contractor finds any of his subcontractors are allowing work to proceed in an unsafe manner or contrary to the terms of the Contract Documents, Contractor shall immediately cause such action to stop and immediately take all action necessary to protect workmen, inspectors and the general public and cause the work to proceed in a safe manner or in accordance with the terms of the Contract Documents.

5.3. Contractor's Responsibility For Work

Until the formal final acceptance of the completed work by the County, the Contractor shall have the charge and care of the work and shall bear the risk of injury or damage to any part of the work by the action of the weather or from any other cause, whether or not arising from the execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work.

5.4. Property Rights In Materials

Nothing in the contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil. All such materials shall become the property of the County upon being so attached or affixed.

5.5. Permits And Licenses

The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the prosecution of the work and includes obtaining a business license from the City of Riverside. The only permit and/or license that will be obtained by the County is specified below:

Riverside County Department of Environmental Health Permit Well Permits - The Department shall procure well permits for the work specified herein, including paying applicable well permit fees. As a condition of the well permit applications, the Contractor shall sign and agree to the terms of the well permit application, that the Department prepares.

5.6. Royalties And Patents

The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the work, and agrees to indemnify and save harmless the County and its duly authorized representatives, from all suits at law, or actions of every nature for, or on account of, the use of any patented materials, equipment, devices, or processes.

5.7. Sanitary Provisions

Necessary conveniences, properly secluded from public observation, shall be provided by the Contractor where needed for the use of laborers on the work. Their location, construction and maintenance shall be subject to the approval of the County. The Contractor shall obey and enforce such sanitary regulations as may be prescribed by the State Department of Health or other authorities having jurisdiction.

5.8. Public Safety

The Contractor at its own expense shall furnish, erect, and maintain such fences, barriers, lights, and signs as are necessary to give adequate warning to the public at all times that the work is under construction; and the Contractor shall erect such warning and directional signs and employ such flagmen as are required and shall maintain same throughout the construction period. Full compensation for the work involved in carrying out the precautionary measures above specified shall be considered as included in the prices paid for the various contract items of work and no additional payment will be made therefore.

5.9. Use Of Explosives

When the use of explosives is necessary for the prosecution of the work, the Contractor shall use the utmost care not to endanger life or property. All explosives shall be stored in accordance with the provisions of Division II Part I, Chapter 3, of the Health and Safety Code of the State of California and other applicable laws or regulations.

5.10. Provisions For Emergencies

Unusual conditions may arise on the work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage to life or property, and it is part of the service required of the Contractor to make such provisions and to furnish such protection.

The Contractor shall use such foresight and shall take such steps and precautions as its operations make necessary to protect the public from danger or damage, or loss of life or property.

Whenever work is undertaken pursuant to this Section, Contractor shall promptly file with County a verified report setting forth the nature of the emergency and the action taken by the Contractor by reason of the emergency.

Whenever, in the opinion of the County, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or property which may be injured or damaged because of the Contractor's work; and, in the opinion of the County, immediate action shall be considered necessary in order to protect public or private, personal or real property interests, or prevent likely loss of human life or damage; then the County may provide suitable protection to said interests by causing such work to be done and material to be furnished as, in the opinion of the County, may seem reasonable and necessary. The cost and expense of all such emergency work shall be borne by the Contractor, and if he shall not pay said cost and expense upon presentation of the bills therefore, duly certified by the County, then said cost and expense will be paid by the County and shall thereafter be deducted from any amounts due or which may become due said Contractor. Failure of the County, however, to take such precautionary measures, shall not relieve the Contractor of its full responsibility for public safety.

5.11. Unforeseen Difficulties

The risk of all loss or damage, except as noted in Section 8.4, arising out of the work, or from any unforeseen obstructions or difficulties which may be encountered during the progress of the work, or from the action of the weather, or from encumbrances in the line of work, shall be the responsibility of the Contractor.

5.12. Access To The Work

Unless provided for in the Special Provisions, access to the work from existing roads shall be provided by the Contractor at its expense and maintained in a manner so as not to create a public nuisance. The County assumes no responsibility for the condition or maintenance of any existing road or structure thereon that may be used by the Contractor for performing the work or for traveling to and from the site of the work. No additional payment will be made to the Contractor for constructing any temporary road used for construction operations or for improving, repairing, or maintaining any existing road or structure thereon that may be used by the Contractor for performance of the work under these specifications. The cost of all work described in this paragraph shall be included in the prices bid in the schedule for other items of construction work.

5.13. Guarantee Of Work

All work shall be guaranteed by Contractor for a period of two (2) years from the recordation of the Notice of Completion against any defects, including but not limited to those resulting from the use of inferior materials, equipment, or workmanship. Upon notice from County, Contractor shall promptly remedy such defects at its expense, including payment to County of its expenses in connection with such defects; otherwise County shall proceed to remedy such defects and Contractor shall reimburse County for its expenses.

This guarantee is in addition to any specific guarantee(s) provided for elsewhere in the Contract Documents or provided by manufacturers or suppliers.

5.14. Surety Of Guarantee

The performance of guarantee and conditions specified in Section 5.13., shall be secured by a surety bond which shall be delivered by the Contractor to the County prior to the date on which final payment is made to the Contractor. Said bond shall be in an approved form and executed

by a surety company or companies satisfactory to the County, in the amount of 10 percent of the final contract price. Said bond shall remain in force for the duration of the guarantee period specified in Section 5.13. Instead of providing such a bond as described above, the Contractor may, at its option, provide for the performance bond furnished under the contract to remain in force for said amount until the expiration of said guarantee period; and the amount of said performance bond may be reduced to 10 percent of the final contract price beginning at the time of recordation of the Notice of Completion.

5.15. Damages By Act Of God

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 five percent of the contract amount, provided that the work damaged is built in accordance with applicable building standards and the plans and specifications, then the County may, without prejudice to any other right or remedy, terminate the contract.

6. PROSECUTION AND PROGRESS

6.1. Progress Of The Work

The Contractor shall begin the work within ten (10) calendar days after the date of receipt by Contractor of notice to proceed from the County and shall diligently and continuously prosecute the same to completion within the time limit provided in the Special Provisions.

6.2. Overtime Work And Work At Night

The Contractor shall conduct the work on a five (5) day, forty (40) hour work week with no work on legal holidays (as further described in the Special Provisions). If the Contractor feels it is necessary to work more than the normal 40 hour work week, he will make a written request for permission from the County, outlining the reasons for such request. The decision of granting permission for overtime work shall be in the sole discretion of the County; and the decision of the County shall be final. If granted, a condition will be imposed requiring the Contractor to pay the County the cost incurred at overtime rates for additional inspection and engineering time required in connection with the overtime work.

When any work is performed at night, only such classes of work shall be done as can be properly inspected. Adequate light must be provided for the safety of the workers and for proper inspection.

6.3. Subcontracting

Reference is made to the Subletting and Subcontracting Fair Practice Act contained in the California Public Contract Code (commencing with Section 4100). By this reference, said Act is incorporated herein with like effect as if it were here set forth in full and the parties shall abide by its terms and substitution shall be only as allowed by that Act. County reserves the right to approve all subcontractors whether or not they are required to be listed in the Contractor's Proposal.

Contractor shall be responsible for the acts and omissions of its subcontractors and shall make certain that at all times its subcontractors comply with the terms of the Contract Documents and applicable law. Where a portion of the work which has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to the County, the subcontractor shall be removed immediately on the request of the County and shall not again be employed on the work.

The Contractor shall give its personal attention to the fulfillment of the contract and shall keep the work under its control. The Contractor shall perform with its own organization work of a value amounting to not less than 50 percent of the remainder obtained by subtracting from the total original contract value the sum of any item designated herein or in the Special Provisions as Specialty Items. The furnishing and placing of reinforcing steel, when placing is performed by the supplier, will be considered as a Specialty Item for this purpose; however, he shall be designated in the list of subcontractors. The value of the work subcontracted will be based on the contract item bid price, if any subdivision of a contract unit is subcontracted, the entire unit shall be considered as subcontracted.

6.4. Character Of Workmen

If any subcontractor or person employed by the Contractor shall fail or refuse to carry out the directions of the County or shall appear to the County to be incompetent or to act in a disorderly or improper manner, he/she shall be discharged immediately upon the request of the County and such person shall not again be employed on this work.

6.5. Temporary Suspension Of The Work

The County shall have the authority to suspend the work wholly or in part, for such period as the County may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the work, or for such time as the County may deem necessary due to the failure on the part of the Contractor to properly perform the work. The Contractor shall immediately comply with the order of the County to suspend the work wholly or in part. The work shall be resumed when conditions are favorable or methods are corrected, as ordered or approved by the County.

6.6. Time For Completion And Liquidated Damages

The Contractor shall complete the work called for under the contract in all parts and requirements within the number of working days specified in the Special Provisions. Liquidated damages shall apply as stated in the Special Provisions.

A working day is hereby defined as any day (except Saturdays, Sundays, legal holidays, and days on which the Contractor is specifically required by the Special Provisions to suspend construction operations) on which the Contractor is not prevented by inclement weather or resulting conditions from proceeding with at least 60 percent of the normal labor and equipment force engaged in the controlling operation or operations for at least five hours.

The County will furnish the Contractor a weekly statement showing the number of working days charged to the contract for the preceding week, the number of working days specified for completion of the contract, and the number of working days remaining to complete the contract. The Contractor will be allowed one week in which to file a written protest setting forth in what respects the weekly statement is incorrect, otherwise the statement shall be deemed to have been accepted by the Contractor as correct.

The following holidays will be considered as legal holidays: New Year's Day; Martin Luther King Jr. Birthday, Lincoln's Birthday; Washington's Birthday (observed); Memorial Day; Independence Day; Labor Day; Columbus Day; Veteran's Day; Thanksgiving Day; Christmas; and such other days as are declared County holidays by ordinance passed by the Board of Supervisors. Please refer to specific holiday dates listed in the Special Provisions.

Contractor acknowledges that failure to perform in strict accordance with the Contract Documents and within the time limits specified in the Special Provisions will cause County to suffer special damages in addition to cost of completion of the work in accordance with the provisions of the Contract Documents. Such special damage could include, but is not limited to, lease and rental cost, additional salaries and overhead, interest during construction, attorney expense, additional engineering, inspection expense, cost of maintaining or constructing alternate facilities, and injury to the property of the County or others. Such special damage could also include penalties assessed against the County by other governmental agencies for failure to have the project completed in a timely manner or as required by law. The County may withhold from any money due or that may become due the Contractor under the contract such amount as the County may elect to offset the damages incurred. Any withholding or failure to withhold shall not in any way limit recovery for damages actually incurred.

It is further agreed that in case the work called for under the contract is not finished and completed in all parts and requirements within the time specified, the County (in its sole discretion) shall have the right to extend the time for completion or not. If the County decides to extend the time limit for the completion of the contract, the County shall further have the right to charge to the Contractor and to deduct from the Contractor's payment all or any part of the actual cost of engineering, inspection, superintendence, and other related expenses caused by

the Contractor's failure to complete the project as required. Liquidated damages shall apply as stated in the Special Provisions.

6.7. Delays And Extension Of Time

If delays are caused by unforeseen causes beyond the control of either the Contractor or the County, such as war, strikes, fire, floods, or other action of the elements, such delays will entitle the Contractor to an equivalent extension of time for the completion of the contract but not damages or additional payments over the contract price. Furthermore, if the Contractor suffers any delay caused by the failure of the County to furnish the necessary right of way or materials agreed to be furnished by it, or by failure to supply necessary plans or instructions concerning the work to be done after written request therefore has been made, the Contractor shall be entitled to an extension of time equivalent to the time lost for any of the above-mentioned reasons but shall not be entitled to any damages for such delay.

6.8. Assignment

The contract may be assigned only upon prior written consent of the County. Such written consent to sublet, assign or otherwise dispose of any portion of the contract, shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract.

6.9. Termination Of Contract

If the Contractor fails to begin delivery of material and equipment or to commence work within the time specified herein, or to maintain the rates of delivery of materials, or to execute the work in the proper manner, written notice by the County may be served upon the Contractor demanding compliance with the contract. If the Contractor refuses or neglects to comply with such notice within five (5) working days after receipt of the notice, then the County may take possession of the work, together with all material and equipment thereon, and may complete the work itself in the manner the County determines to be appropriate. The cost of the completion of the work shall be charged against the Contractor and its surety and may be deducted from any money due to the Contractor; and if the sums due under the contract are insufficient, the Contractor and/or its surety shall pay to the County within five (5) working days after the completion of the work all of such cost in excess of the contract price.

7. PAYMENT

7.1. Scope Of Payments

The compensation described in the Agreement shall be complete and full payment to the Contractor for furnishing all materials, labor, tools, equipment and related items necessary to complete the work; and for all obligations imposed upon the Contractor pursuant to the Contract Documents. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material.

7.1.1. Measurement and Computation of Quantities

Unless otherwise stated, all items of the work to be paid for at a contract price per unit of measurement will be measured by the County in accordance with United States Standard Measures. A ton shall mean 2,000 pounds, avoirdupois. Except as otherwise expressly provided in the specifications, the methods of measurement and computation of quantities will be determined by the County.

The weights of metalwork, and other metal parts to be paid for by weight will be determined by the County on the basis of handbook weights, scale weights, or

manufacturer's catalog weights, or in the absence of any of the foregoing, on the basis of estimated weights; provided, that weights of nonmetallic coatings will be excluded.

7.1.2. Payment at Contract Prices

The contract price for an item of the work shall include full compensation for all costs of that item, including the costs of any work, materials and equipment incidental to the item but not specifically shown or described in the Contract Documents.

The contract prices shall include full compensation for all costs of any work, materials, and equipment required by the Contract Documents, but not covered by a contract price or otherwise expressly made the subject of direct payment.

7.2. Payment And Compensation For Altered Quantities

When alterations in plans or quantities of work are ordered and performed, the Contractor agrees to accept payment in full at the contract unit price for the actual quantities of work done; and no additional payment will be made for anticipated profits.

7.3. Force Account Payment

When extra work is to be paid for on a force account basis, compensation will be determined as follows:

7.3.1. Work Performed by Contractor

The Contractor will be paid for labor, materials, and equipment rental as hereinafter provided, except where agreement has been reached to pay in accordance with Section 7.3.2. Only materials incorporated in the work will be paid for.

To the total computed as provided in Section 7.3.1.1, 7.3.1.2 and 7.3.1.3 will be added the following percentages:

- Labor -- 24 percent
- Materials -- 15 percent
- Equipment Rental -- 15 percent

It is understood labor, materials, and equipment may be furnished by the Contractor or by the subcontractor or by others on behalf of the Contractor.

When extra work paid for on a force account basis is performed by forces other than the Contractor's organization, the Contractor shall reach agreement with such other forces as to the distribution of the payment made by the County for such work and no additional payment therefore will be made by the County.

7.3.1.1. Labor

The Contractor will be paid the cost of labor for the workmen (including foremen when authorized by the County), used in the actual and direct performance of the work. The cost of labor, whether the employer is the Contractor, subcontractor, or other forces, will be the sum of the following:

7.3.1.1.1. Actual Wages

The actual wages paid shall include any employer payments to or on behalf of the workmen for health and welfare, pension, vacation, and similar purposes.

7.3.1.1.2. Labor Surcharge

To the actual wages as defined in Section 7.3.1.1.1, will be added a labor surcharge set forth in the Special Provisions, which labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workmen, other than actual wages as defined in Section 7.3.1.1.1 and subsistence and travel allowance as specified in Section 7.3.1.1.3.

7.3.1.1.3. Subsistence and Travel Allowance

Subsistence and travel allowance paid to such workmen as required by collective bargaining agreements.

7.3.1.2. Materials

The cost of materials incorporated in the work will be the cost to the purchaser, whether Contractor, subcontractor or other forces, from the supplier thereof, except as the following are applicable:

- If a cash or trade discount by the actual supplier is offered or available to the purchaser, it shall be credited to the County notwithstanding the fact that such discount may not have been taken.
- If the materials are procured by the purchaser by any method which is not a direct purchase from and a direct billing by the actual supplier to such purchaser, the cost of such materials shall be deemed to be the price paid to the actual supplier as determined by the County. No markup except for actual costs incurred in the handling of such materials will be permitted.
- If the materials are obtained from a supply or source owned wholly or in part by the purchaser, payment therefore will not exceed the price paid by the purchaser for similar materials furnished from said source on contract items or on the current wholesale price for such materials delivered to the job site whichever price is lower.
- If the cost of such materials is, in the opinion of the County, excessive, then the cost of such materials shall be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned delivered to the job site, less any discounts as provided in this Section.
- If the Contractor does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof, the cost shall then be determined in accordance with this Section.

The County reserves the right to furnish such materials as it deems advisable, and the Contractor shall have no claims for costs and profit on such materials.

7.3.1.3. Equipment Rental

The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Special Provisions regardless of ownership and any rental or other agreement, if such may exist, for the use of such equipment entered into by the Contractor. If it is deemed necessary by the County to use equipment not listed in the Special Provisions, a suitable rental rate for such equipment will be established by the County. The Contractor may furnish any cost data which might assist the County in the establishment of such rental rate.

The rental rates paid as above provided shall include the cost of fuel, oil, lubrication, supplies, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Operators of rented equipment will be paid for as provided under Section 7.3.1.1.

All equipment shall, in the opinion of the County, be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

Individual pieces of equipment or tools having a replacement value of \$25.00 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore.

Rental time will not be allowed while equipment is inoperative due to breakdowns.

In computing the rental time of equipment, less than 30 minutes shall be considered ½ hour.

7.3.1.3.1. Equipment on the Work

The rental time to be paid for equipment on the work shall be the time the equipment is in operation on the extra work being performed, and in addition, shall include the time required to move the equipment to location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location, except that moving time will not be paid for if the equipment is used at the site of the extra work on other than such extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made if the equipment is used at the site of the extra work on other than such extra work.

7.3.1.3.2. Equipment not on the Work

For the use of equipment moved in on the work and used exclusively for extra work paid for on a force account basis, the Contractor will be paid the rental rates listed in the Special Provisions or as agreed to as provided in Section 7.3.1.3 and for the cost of transporting the equipment to the location of the work and its return to its original locations, all in accordance with the following provisions:

- (i) The original location of the equipment to be hauled to the location of the work shall be agreed to by the County in advance.
- (ii) The County will pay the costs of loading and unloading such equipment.
- (iii) The cost of transporting equipment on low bed trailers shall not exceed the hourly rates charged by established haulers.
- (iv) The cost of transporting equipment shall not exceed the applicable minimum established rates of the Public Utilities Commission.
- (v) The rental period shall begin at the time the equipment is unloaded at the site of the extra work, shall include each day that the equipment is at the site of the extra work, excluding Saturdays, Sundays, and legal holidays unless the extra work is performed on such days, and shall terminate at the end of the day on which the County directs the Contractor to

discontinue the use of such equipment. The rental time to be paid per day will be in accordance with the following:

Hours In Operation	Hours to be Paid
0	4
0.5	4.25
1	4.5
1.5	4.75
2	5
2.5	5.25
3	5.5
3.5	5.75
4	6
4.5	6.25
5	6.5
5.5	6.75
6	7
6.5	7.25
7	7.75
8	8
Over 8	Hours in operation

When hourly rates are listed, less than 30 minutes of operation shall be considered to be ½ hour of operation.

When daily rates are listed, payment for ½ day will be made if the equipment is not used. If the equipment is used, payment will be made for one day.

The minimum rental time to be paid for the entire rental period on an hourly basis shall not be less than 8 hours or if on a daily basis shall not be less than one day.

Should the Contractor desire the return of the equipment to a location other than its original location, the County will pay the cost of transportation in accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment to the work.

Payment for transporting, loading and unloading equipment, as above provided, will not be made if the equipment is used on the work in any other way than upon extra work paid for on a force account basis.

7.3.2. Work Performed by Special Forces or Other Special Services

When the County and the Contractor, by advance agreement, determine that a special service or an item of extra work cannot be performed by the forces of the Contractor or those of any of his subcontractors, such service or extra work item may be performed by a specialist. Invoices for such service or item of extra work on the basis of the current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with the established practice of the special service industry to provide such complete itemization. In those instances wherein a Contractor is required to perform extra work necessitating a

fabrication or machining process in a fabrication or machine shop facility away from the job site, the charges for that portion of the extra work performed in such facility may, by agreement, be accepted as a specialist billing.

To the specialist invoice price, less a credit to the County for any cash or trade discount offered or available, whether or not such discount may have been taken, will be added 15 percent in lieu of the percentages provided in Section 7.3.1.

7.3.3. Records

The Contractor shall maintain his records in such manner as to provide a clear distinction between the direct costs of extra work paid for on a force account basis and the costs of other operations.

The Contractor shall furnish the County (on a form provided by the County) report sheets in duplicate of each day's extra work paid for on a force account basis no later than the working day following the performance of said work. The daily report sheets shall itemize the materials used, and shall cover the direct costs of labor and the charges for equipment rental, whether furnished by the Contractor, subcontractor, or other forces, except for charges described in Section 7.3.2. The daily report sheets shall provide names or identifications and classifications of workmen, the hourly rate of pay and hours worked, and also the size, type and identification number of equipment, and hours operated.

Materials charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily report sheets, or if not available, they shall be submitted with subsequent daily report sheets. Should said vendor's invoices not be submitted within 15 days after acceptance of the work, the County reserves the right to establish the cost of such materials at the lowest current wholesale prices at which said materials are available in the quantities concerned delivered to the location or the work, less any discounts provided in Section 7.3.1.2.

Daily report sheets shall be signed by the Contractor or its authorized agent.

The County will compare its records with the daily report sheets furnished by the Contractor, make any necessary adjustments, and compile the costs of work paid for on a force account basis on daily extra work report forms furnished by the County. When these daily extra work reports are agreed upon and signed by both parties, they shall become the basis of payment for the work performed, but shall not preclude subsequent adjustment based on a later audit.

The Contractor's cost records pertaining to work paid for on a force account basis shall be open to inspection or audit by representatives of the County, during the life of the contract and for a period of not less than 18 months after the date of acceptance thereof, and the Contractor shall retain such records for that period. Where payment for materials or labor is based on the cost thereof to forces other than the Contractor, the Contractor expressly guarantees that the cost records of such other forces shall be open to inspection and audit by representatives of the County on the same terms and conditions as the cost records of the Contractor. If an audit is to be commenced more than 60 days after the acceptance date of the contract, the Contractor will be given a reasonable notice of the time when such audit is to begin.

7.3.4. Payment

Payment as provided above in Sections 7.3.1 and 7.3.2 shall constitute full compensation to the Contractor for performance of work paid for on a force account basis and no additional compensation will be allowed therefore.

7.4. Acceptance

The work shall be inspected for final acceptance by the County promptly upon receipt of notice in writing from the Contractor that the completed work is ready for such inspection.

7.5. Partial Payments

On or about the last day of each month, the County shall make an estimate in writing of the total amount of work done by the Contractor to the time of such estimate and the value thereof. The County shall retain 5 percent (5%) of such estimated value of the work or partial payment for the fulfillment of the contract by the Contractor.

After deducting all previous payments and all sums to be kept or retained under the provisions of the contract or applicable law, the County shall make monthly progress payments to the Contractor. No such estimate or payment shall be required to be made when, in the judgment of the County, the work is not proceeding properly. No payment shall be required to be made by the County unless and until all required submittals have been delivered to the County, including but not limited to the following: certified payroll information (at a frequency specified in the Special Provisions, if project is a prevailing wage contract), construction schedule updates as listed in Section 2.2, and National Pollution Discharge and Elimination System permit requirements and frequencies as stated in Special Provisions.

In accordance with Public Contract Code Section 22300 and other applicable law, the Contractor may substitute securities for any monies withheld to ensure performance under the contract. Such substitution shall be made only upon a separate agreement between the County Board of Supervisors and the Contractor which contains terms and conditions in compliance with all laws applicable to monies withheld under the contract.

7.6. Delayed Payments

All the monies due the Contractor under the contract will be paid by the Treasurer of the County of Riverside, prepared and approved as required by law; and it is understood that any delay in the preparation, approval and payment of these demands will not constitute a breach of the County's obligations.

7.7. Final Payment

The County, after completion of the work, and submittal of any final documents or reports required by the Special Provisions, shall make a final estimate in writing to the County Board of Supervisors of the amount of work done and the value of such work; and pursuant to order of the Board of Supervisors the County shall pay the sum found to be due after deducting therefrom all previous payments and all amounts to be kept and retained under the provisions of the contract or applicable law. All prior partial estimates and payments shall be subject to correction in the final estimate and payment. The withheld retention funds shall not be due and payable to the Contractor until the expiration of thirty-five (35) days after the date of approval by the Board of Supervisors and recordation of the notice of completion.

The Contractor agrees that no certificate given or payments made under the contract except the final payment and approval by the Board of Supervisors shall be conclusive evidence of the

performance of the contract. No payment shall be construed to be an acceptance of any defective work or improper materials.

The Contractor agrees that payment of the final amount due under the contract will be withheld until the guarantee of work as required in Section 5.13 herein is accepted by the County in approved form.

The Contractor's agreement to the final payment shall release the County, including its officers, employees, agents and contractors, from any and all claims from the Contractor for further or additional compensation related to the work.

7.8. Claims Resolution – Claims up to \$375,000

In accordance with Public Contract Code Section 20104 - 20104.8 and other applicable law, public works claims of \$375,000 or less which arise between the Contractor and the County shall be resolved following the statutory procedure unless the County has elected to resolve the dispute pursuant to Public Contract Code 10240 et seq.

7.8.1. Submission of Claims

All claims shall be submitted in writing and accompanied by substantiating documentation. Claims must be filed before processing of the final payment unless other notice requirements are provided in the contract. "Claim" means a separate demand by the claimant for (1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the claimant and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled, or (3) an amount the payment of which is disputed by the County.

7.8.1.1. Claims Under \$50,000.00

The County shall respond in writing to the claim within 45 days of receipt of the claim, or, the County may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the County may have. If additional information is needed thereafter, it shall be provided upon mutual agreement of the County and the claimant. The County's written response shall be submitted 15 days after receiving the additional documentation, or within the same period of time taken by the claimant to produce the additional information, whichever is greater.

7.8.1.2. Claims over \$50,000.00 but less than or equal to \$375,000.00

The County shall respond in writing within 60 days of receipt, or, may request in writing within 30 days of receipt of the claim, any additional documents supporting the claim or relating to defenses or claims the County may have against the claimant. If additional information is needed thereafter, it shall be provided pursuant to mutual agreement between the County and the claimant. The County's response shall be submitted within 30 days after receipt of the further documents, or within the same period of time taken by the claimant to produce the additional information or documents, whichever is greater.

7.8.2. Meet and Confer

If the claimant disputes the County's response, or if the County fails to respond within the statutory time period, the claimant may so notify the County within 15 days of the receipt of the response or the failure to respond, and demand an informal conference to

meet and confer for settlement. Upon such demand, the County shall schedule a meet and confer conference within 30 days.

7.8.3. Filing of Claims

If following the meet and confer conference, the claim or any portion thereof remains in dispute, the claimant may file a claim pursuant to Government Code 900 et seq. and Government Code 910 et seq.

7.8.4. Mediation and Judicial Arbitration

If a civil action is filed to resolve any claim, the provisions of Public Contract Code 20104.4 shall be followed providing for nonbinding mediation and judicial arbitration.

7.8.5. Location for Filing of Claims, Jurisdiction

Any legal action related to the performance of the work or the terms of the Contract Documents shall be filed only in the Superior Court of the State of California located in Riverside, California.

7.9. Claims Resolution – All Claims (Public Contract Code Section 9204)

This section is intended to help resolve disputes between the parties related to this project. Such disputes shall be brought to the attention of the County at the earliest possible time, so that such disputes may be promptly resolved, if possible, or other appropriate action or investigation may be promptly undertaken. Public works claims which arise between the Contractor and the County shall be resolved using the following procedure:

A "claim" means a separate demand by the Contractor sent by registered mail or certified mail return receipt requested for one or more of the following: (a) a time extension including, without limitation, for relief from damages or penalties for delay assessed by the County; (b) payment by the County of money or damages arising from work done by or on behalf of the Contractor and payment for which is not otherwise expressly provided or to which the Contractor is not otherwise entitled; (c) payment of an amount that is disputed by the County. The Contractor shall furnish reasonable documentation to support the claim.

Upon receipt of a claim, the County shall conduct a reasonable review of the claim and within 45 days, or an extended period as may be set by mutual agreement of the parties, provide the Contractor with a written statement identifying what portion of the claim is still disputed and what portion is undisputed. (If consultation with the Board of Supervisors is required, the County may have additional time as stated in Section 9204.) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the County issues its written statement.

If the County fails to issue a written statement, the claim shall be deemed rejected in its entirety. A claim that is denied by reason of the County's failure to respond to a claim, or its failure to otherwise meet the applicable time requirements, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the Contractor.

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 to attempt to reach settlement of the portion of the claim in dispute. Upon receipt of the demand, the County shall schedule a meet and confer conference within 30 days.

Within 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 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 mediator costs equally. The County and Contractor shall mutually agree to a mediator within 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 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. If mediation is unsuccessful to resolve all issues, the parts of the claim remaining in dispute shall be subject to other applicable legal procedures.

As used herein, 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.

Additional applicable requirements, including but not limited to subcontractor claims, may be stated in Public Contract Code Section 9204.

Any legal action related to the performance of the work or the terms of the Contract Documents shall be filed only in the Superior Court of the State of California located in Riverside, California.

8. GENERAL

8.1. Cooperation Between Contractors

The Contractor shall fully cooperate and coordinate its work with all utility and public agency representatives engaged in construction, relocation, altering or otherwise rearranging any facilities interfering with the progress of the work, and with any other contractors working at or near the project site. Full compensation for any delay or inconvenience to the Contractor's operation due to such operations shall be considered included in the prices for the other items of work and no additional allowance will be made therefore.

8.2. 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 from any liability claim, action, or damages 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 this Agreement, 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, agents, employees, subcontractors, agents or representatives relating to this Agreement. Contractor shall defend, at its sole expense and pay all costs and fees including, but not limited to attorney fees cost of investigation, defense and settlements or awards, 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 in any claim or action to which this indemnification and hold harmless obligation applies.

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 County 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 this Agreement shall in no way limit or circumscribe Contractor's obligations to indemnify and hold harmless the County herein from third party claims.

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

8.3. Insurance

Without limiting or diminishing the Contractor's obligation to indemnify or hold the County harmless, Contractor shall procure and maintain or cause to be maintained, at its sole cost and expense, the following insurance coverage's during the term of this Agreement.

8.3.1. Workers' Compensation:

If the Contractor has employees as defined by the State of California, the Contractor shall maintain statutory Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State of California. Policy shall include Employers' Liability (Coverage

B) including Occupational Disease with limits not less than \$1,000,000 per person per accident. The policy shall be endorsed to waive subrogation in favor of The County of Riverside, and, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement.

8.3.2. Commercial General Liability:

Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products and completed operations liability, personal and advertising injury, cross liability coverage and employment practices liability, covering claims which may arise from or out of Contractor's performance of its obligations hereunder. Policy shall name the County of Riverside, its Agencies, Districts, Special Districts, and Departments, their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as Additional Insureds. Policy's limit of liability shall not be less than \$1,000,000 per occurrence combined single limit and \$2,000,000 annual aggregate. If such insurance contains a general aggregate limit, it shall apply separately to this agreement or be no less than two (2) times the occurrence limit.

8.3.3. Vehicle Liability:

If Contractor's vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then Contractor shall maintain liability insurance for all owned, non-owned or 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 this agreement or be no less than two (2) times the occurrence limit. Policy shall name the County of Riverside, its Agencies, Districts, Special Districts, and Departments, their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as Additional Insureds.

8.3.4. Environmental Impairment Insurance:

Contractor shall maintain Environmental Impairment Insurance providing coverage for the Contractor's performance of work included within this Agreement, with a limit of liability of not less than \$1,000,000 per occurrence and \$1,000,000 annual aggregate.

8.3.5. General Insurance Provisions - All lines:

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.

The Contractor's insurance carrier(s) must declare its insurance deductibles or self-insured retentions. If such deductibles or self-insured retentions exceed \$500,000 per occurrence such deductibles and/or retentions shall have the prior written consent of the County Risk Manager before the commencement of operations under this Agreement. Upon notification of deductibles or self-insured retention's unacceptable to the County, and at the election of the Country's Risk Manager, Contractor's carriers shall either; 1) reduce or eliminate such deductibles or self-insured retention's as respects this Agreement with the County, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.

Contractor shall cause Contractor's insurance carrier(s) to furnish the County of Riverside with either 1) a properly executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein, and 2) if requested to do so orally or in writing by the County Risk Manager, provide original Certified copies of policies including all Endorsements and all attachments thereto, showing such insurance is in full force and effect. 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 of Riverside prior to any material modification, cancellation, expiration or reduction in coverage of such insurance. In the event of a material modification, cancellation, expiration, or reduction in coverage, this Agreement shall terminate forthwith, unless the County of Riverside receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing 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.**

It is understood and agreed to by the parties hereto and the insurance company(s), that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary 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.

The County's Reserved Rights--Insurance. If, during the term of this Agreement or any extension thereof, there is a material change in the scope of services; or, there is a material change in the equipment to be used in the performance of the scope of work which will add to additional exposures (such as the use of aircraft, watercraft, cranes, etc.); or, the term of this Agreement including any extensions thereof exceeds five (5) years the County reserves the right to adjust the types of insurance required under this Agreement and the monetary limits of liability for the insurance coverage's currently required herein, if, in the County Risk Manager's reasonable judgment, the amount or type of insurance carried by the Contractor has become inadequate.

Contractor shall pass down the insurance obligations contained herein to all tiers of subcontractors working under this Agreement.

The insurance requirements contained in this Agreement may be met with a program(s) of self-insurance acceptable to the County.

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 this Agreement.

8.4. Public Utilities

The locations of all pipelines, power lines, communication lines and other utility components known to County to exist within the limits of the work, are indicated on the drawings and may be the subject of a specific section in the Special Provisions. Size, location and characteristics of such utilities are based upon information made available to County, generally from the owner of the utility in question. The exactness of such information is not guaranteed but may be assumed to have been accomplished with reasonable accuracy.

In addition to the drawings and any such provision regarding utilities, Contractor is under a duty to take into account the location of service laterals or other appurtenances which can be inferred from the presence of facilities such as buildings, meter, junction boxes or similar items in or about the limits of the work.

Unless otherwise directed by the Contract Documents, all existing utilities, whether shown or described or not, shall be left in place and Contractor must conduct its operations so that such utilities are protected from damage at all times during the course of the work; and the work must be accomplished so as to give such utilities proper protection and support upon completion of the work by Contractor.

If during the course of the work, Contractor discovers underground utility components not indicated in the drawings or elsewhere in the Contract Documents, Contractor must immediately notify, in writing, the County and the utility company (public or private) involved, stating with exactness the condition found.

If Contractor encounters a utility not shown or described in the Contract Documents, Contractor shall cease all work which would disturb such utility and its support until given specific instructions as to how to proceed regarding such utility by County.

All work needed to protect existing utilities shown or described in the Contract Documents, or which can be reasonably inferred from the presence of other visible facilities, is to be done at Contractor's expense.

Contractor's cost of locating and repairing damage not due to the failure of Contractor to exercise reasonable care, and removing or relocating utility components and facilities not indicated in the drawings or elsewhere in the Contract Documents, and for equipment on the project necessarily idled during such work shall be paid Contractor as Extra Work.

County may direct the Contractor to do such repair or relocation work as required. When such repair or relocation work is not elsewhere provided for in these Contract Documents, or reasonably inferred therefrom, Contractor shall be compensated for such work as Extra Work.

8.5. Protection Of Existing Street Facilities

The Contractor shall be responsible for the protection of existing signs, fences, concrete curbs, gutters and other facilities or structures. The Contractor shall be responsible to repair or replace any such items which are damaged.

Excavation within the street right of way shall be conducted in a manner to cause the least interruption to traffic. Where traffic must cross open trenches, the Contractor shall provide suitable bridges at street intersections and driveways. Hydrants under pressure, valve pipe covers, valve boxes, curb stop boxes, fire or police call boxes, or other utility controls shall be left unobstructed and accessible during construction.

8.6. Diversion And Control Of Water

Unless otherwise provided in the Agreement, no separate or additional payment will be made for diversion or control of surface or groundwater. All costs incidental to maintaining dry working areas shall be the responsibility of the Contractor and shall be included in the unit prices paid for other items of work.

8.7. Dust Abatement

During the performance of all work, the Contractor shall take the necessary precautions to avoid any loss or damage resulting from its operations that raise or produce dust. The Contractor will

be required to have a positive and continuous method of dust control which is satisfactory to the County. The methods to be used for controlling dust in the construction area and along haul roads shall be approved by the County prior to starting any of the work. All costs incidental to dust control shall be included in the unit prices paid for other items of work.

8.8. Examination Of Plans, Specifications, Contract, And Site Of Work

The Contractor shall examine fully and carefully the site(s) of the work, the plans, the specifications, and any other Contract Documents prior to submitting its bid. The submission of a bid shall be conclusive evidence that the Contractor has investigated the site(s) and is satisfied as to the conditions and requirements of the work to be performed.

Where the County has made investigations of subsurface conditions in areas where work is to be performed, or in other areas, such investigations are made only for the purpose of study and design. Where such investigations have been made, bidders may, upon request, inspect the records of the County as to such investigations. The records of such investigations are not a part of the contract and are solely for the convenience of the bidders. It is expressly understood and agreed that the County assumes no responsibility whatsoever in respect to the sufficiency or accuracy of the investigations thus made, the records thereof; or of the interpretations set forth therein or made by the County in its use thereof and there is no warranty or guarantee, either express or implied, that the conditions indicated by such investigations or records thereof are representative of those existing throughout such areas, or any part thereof, or that unlooked-for developments may not occur, or that materials other than, or in proportions different from those indicated, may not be encountered. No information derived from inspection of such records will in any way relieve the Contractor from its obligations under the Contract Documents.

9. WATERING

9.1. Description

This work shall include providing a water supply for all water required for the work, in excess of that amount provided by the County. Refer to the Special Provisions for details regarding County provided water. The application of the water shall be subject to the approval of the County at all times and shall be applied in the necessary amounts and at the necessary locations subject to the approval of the County.

10. PUBLIC CONVENIENCE, TRAFFIC CONTROL AND DETOURS

10.1. General

The Contractor shall so conduct its operations as to offer the least possible obstruction and inconvenience to the public and it shall have under construction no greater length or amount of work than it can prosecute properly with due regard to the rights of the public.

Unless otherwise provided in the Special Provisions, all public traffic shall be permitted to pass through or near the work with as little inconvenience and delay as possible.

Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately at the Contractor's expense.

Construction operations shall be conducted in such a manner as to cause as little inconvenience and annoyance as possible to abutting and nearby property owners.

Convenient access to driveways, houses and buildings along or near the work shall be maintained and temporary approaches to crossings or intersecting highways shall be provided and kept in good condition.

10.2. Signs

It shall be the responsibility of the County to provide a traffic control plan, maintain all traffic control, lights, barricades and signs, both on and off the site of work. The County shall furnish the Contractor with a copy of any such plans, following the Contract award. The Contractor shall familiarize himself with any such plans and comply with such plans. Any such plans do not relieve the Contractor for providing safe working conditions for his workman. Any such plans are considered minimum requirements and the Contractor shall supplement any such plans as necessary to satisfy himself with the safety and suitability of the working conditions.

10.3. Materials Storage

Storing or stockpiling of excavated material, imported backfill material or construction materials on any street or highway will not be permitted except as approved in advance in writing by the County.

SPECIAL PROVISIONS

Groundwater Monitoring Well Construction and Abandonment

At the

Closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills

Riverside County, California

Prepared By:



**14310 Frederick Street
Moreno Valley, CA 92553**

April 2017

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SECTION 1. SCOPE OF WORK SUMMARY

1.1 GENERAL

The work to be performed as specified in these Special Provisions shall consist of furnishing all materials, equipment and tools, the performance of all necessary labor, for the subject public works construction project. The construction project is known as Groundwater Monitoring Well Construction and Abandonment at the Closed Corona, Hemet, Highgrove and Pedley Sanitary Landfills (hereinafter referred to as the "Project").

1.1.1 Site Information

The Corona Sanitary Landfill is jointly owned by the Riverside County Department of Waste Resources (County) and the City of Corona. The Corona Sanitary Landfill is located at the southwest corner of El Camino Avenue and Magnolia Avenue, in the city of Corona, California. Refer to Map 1 – Corona Sanitary Landfill Vicinity Map to view the landfill location with respect to major surrounding roads and freeways.

The Hemet Sanitary Landfill is owned by the City of Hemet and is primarily maintained by the County. The Hemet Sanitary Landfill is located at the 1891 Warren Road, in the city of Hemet, California. Refer to Map 2 – Hemet Sanitary Landfill Vicinity Map to view the landfill location with respect to major surrounding roads and freeways.

The Highgrove Sanitary Landfill is owned by the County. The Highgrove Sanitary Landfill is located at the 1420 Highgrove Pass Road, in the Highgrove Area of Unincorporated Riverside County, California. Refer to Map 3 – Highgrove Sanitary Landfill Vicinity Map to view the landfill location with respect to major surrounding roads and freeways.

The Pedley Sanitary Landfill is owned by the State of California Department of Fish and Game, managed by the Riverside County Parks District, and maintained by the County. The Pedley Sanitary Landfill is northwest of the intersection of Van Buren Boulevard and Jurupa Avenue, in the City of Riverside, California. Refer to Map 4 – Pedley Sanitary Landfill Vicinity map to view the landfill location with respect to major surrounding roads and freeways.

1.1.2 Site Conditions

All four landfills can experience severe weather conditions, ranging from near freezing conditions to high temperatures in excess of 100°F. The CONTRACTOR shall be aware of these weather conditions and be prepared to work in these conditions.

1.2 EXECUTION

The work to be performed under these Special Provisions shall be conducted in a manner consistent with standard industry practices for such projects. No portion of this Contract shall relieve the CONTRACTOR from all applicable Federal, State, and local regulations pertaining to construction of this Project.

1.3 GENERAL SCOPE OF WORK

The Work to be performed and bid complete herein, shall be as shown and specified in the Contract Documents and is generally described as supplying all labor, equipment, materials and forces necessary to construct the following groundwater monitoring wells:

- CG-7 and CG-7 at the Closed Corona Sanitary Landfill
- HE-6 at the Closed Hemet Sanitary Landfill
- HG-33 and HG-34 at the Closed Highgrove Sanitary Landfill

Each well borehole shall be drilled by a method chosen by the CONTRACTOR. Limitations and/or conditions for different drilling methods are specified in SECTION 6 BOREHOLE DRILLING AND SAMPLING.

CG-7 and CG-8 shall be constructed on the Corona Sanitary Landfill property. The proposed well construction details are shown graphically on Figure 1 – Groundwater Well Details for CG-7 and Figure 2 – Groundwater Well Details for CG-8. The proposed well locations for CG-7 and CG-8 are shown on Map 5 – Groundwater Wells CG-7 and CG-8 Location Map.

HE-6 shall be constructed in West Esplanade Avenue, southeast of the Hemet Sanitary Landfill property. The proposed well construction details are shown graphically on Figure 3 – Groundwater Well Details for HE-6. The proposed well location for HE-6 is shown on Map 6 – Groundwater Well HE-6 Location Map.

HG-33 and HG-34 shall be constructed on the Highgrove Sanitary Landfill property. The proposed well construction details are shown graphically on Figure 4 – Groundwater Well Details for HG-33 and Figure 5 – Groundwater Well Details for HG-34. The proposed well locations for HG-33 and HG-34 are shown on Map 7 – Groundwater Wells HG-33 and HG-34 Location Map.

The final depths and well screen intervals are subject to change based upon the subsurface conditions encountered during construction. The Engineer will provide the CONTRACTOR with final drilling depths during drilling, as subsurface field conditions are revealed, and well construction details upon completion of drilling.

PMW-3 shall be abandoned at an offsite location that is east of the Closed Pedley Sanitary Landfill. The well location is specified in Map 8 – Groundwater Well PMW-3 Location Map. The as-built well construction details for PMW-3 are provided on Figure 6 – Groundwater Well Details for PMW-3.

The well construction and abandonment shall be performed in accordance with the Department of Water Resources, Bulletin 74-81, Water Well Standards: State of California and Bulletin 74-90 (Supplement to Bulletin 74-81), California Well Standards and Riverside County Ordinance No. 682.3.

All construction materials shall be new prior to delivery onsite. Construction and equipment substitutions require written notification at the time of bid and shall not be accepted anytime thereafter, unless by written authorization from the Engineer. The CONTRACTOR's scope of work for this project will generally include, but not be limited to, the following. This list is an overview of the scope of work. The construction details, which the CONTRACTOR is responsible to comply with, are described fully in these Special Provisions.

1. Meet all applicable Federal, State and local air, water and waste discharge requirements.
2. Drill boreholes to the approximate depths specified in Figure 1, Figure 2, Figure 3, Figure 4, and Figure 5. Final drilling depths will be provided by the Engineer to the CONTRACTOR based on the subsurface field conditions encountered.
3. Drilling cuttings from CG-7, CG-8, HG-33 and HG-34 will be stockpiled adjacent to the well location. The County shall be responsible for the final handling, transportation and disposal of drilling cuttings.
4. Drilling cuttings from the offsite well, HE-6, near the closed Hemet Sanitary Landfill, will be contained in 55-gallon drums. The CONTRACTOR will transport the drums to the Hemet Sanitary Landfill (Map 6) at the end of each drilling work day. The County shall

be responsible for the final handling, transportation and disposal of drilling cuttings once the CONTRACTOR has placed the drums on the landfill property.

5. Provide means and assist the Engineer in collecting representative subsurface samples at a minimum of 5-foot depth intervals and at lithologic changes during drilling of each groundwater monitoring well.
6. Construct wells as shown on Figure 1, Figure 2, Figure 3, Figure 4, and Figure 5. Final well design details will be provided by the Engineer to the CONTRACTOR based on the subsurface field conditions encountered.
7. Furnish and install 4-inch diameter, Schedule 80, PVC casing and screen.
8. Furnish and install filter pack material, transition sand, and annular grout seals via a flush-threaded tremie (herein referred to as "tremie").
9. Furnish and install cement sanitary seal via tremie.
10. Provide well head protection for well casings.
11. Develop wells by flushing, bailing, and airlifting/pumping.
12. Arrange for temporary storage of all fluids resulting from well development operations. The Engineer will direct the CONTRACTOR to discharge the development water or the Engineer will dispose of the development fluids.
13. Maintain drilling site areas during construction and perform final site cleanup and restoration to original condition.
14. Provide all records, as required herein.
15. Abandon well PMW-3 by pressure grouting the well casing.

END OF SECTION

SECTION 2. CONDITIONS

2.1 GENERAL

2.1.1 Standard Specifications

The term Standard Specifications is a direct reference to the publication entitled "A Standard Specifications for Public Works Construction" (2003 edition) written and promulgated by the Joint Cooperative Committee of the Southern California Chapter American Public Works Association and Southern California Districts Associated General Contractors of California and all subsequent amendments, supplements, and additions. This publication is also known as the "Greenbook". The U.S. Standard Measures, also called the U.S. Customary System is the method of measurement to be used at all times.

2.1.2 Order of Precedence

In case of conflict between the Contract Documents, the following order of governing documents shall be followed:

1. Special Provisions
2. General Provisions
3. Project Drawings
4. Standard Specifications

2.1.3 Errors and Omissions in the Project Drawings

The written dimensions on the Project Drawings are presumed to be correct, but the CONTRACTOR shall be required to check carefully all dimensions before beginning work. If errors or omissions are discovered, the County immediately shall be so advised in writing and will make the proper corrections. No extra work shall be performed on this contract on account of errors and omissions without the express and written authorization by the County.

2.1.4 Material Substitutions

Reference is made to Section 4.2 of the General Provisions.

2.1.5 Abbreviations

AISC:	American Institute of Steel Construction
ANSI:	American National Standards Institute
AQMD:	Air Quality Management District
ASTM:	American Society for Testing and Materials
AWS:	American Welding Society
BGS:	Below Ground Surface
BOP:	Bottom Of Pipe
CL:	Center Line
CMP:	Corrugated Metal Pipe
COND:	Condensate
CS:	Carbon Steel

DIA:	Diameter
ELEV:	Elevation
GB:	Grade Break
LEL:	Lower Explosive Limit
LFG:	Landfill Gas
NFPA:	National Fire Protection Association
NIC:	Not in Contract
NMHC:	Non-Methane Hydrocarbons
NMOC:	Non-Methane Organic Compounds
NPT:	National Pipe Thread
NTS:	Not to Scale
O&M:	Operation and Maintenance
OSHA:	Occupational Safety and Health Administration
PPM:	Parts per Million
PVC:	Polyvinyl Chloride
RWQCB:	Regional Water Quality Control Board
SCAQMD:	South Coast Air Quality Management District
SCH:	Schedule
STL:	Steel
SWANA:	Solid Waste Association of North America
TYP:	Typical

2.1.6 Definitions

Whenever the following terms are used in these Special Provisions, the intent and meaning shall be interpreted as follows:

Calendar Days: Each day of the year.

Night Hours: Thirty minutes after sunset to 30 minutes prior to sunrise.

2.1.7 Contact

For information or technical questions, please contact the following. This contact, or his designated person, shall serve as the Engineer for the Project.

Todd D. Shibata, P.E., Senior Civil Engineer
Riverside County Department of Waste Resources
14310 Frederick Street
Moreno Valley, California 92553
(951) 486 - 3261
tshibata@rivco.org

2.1.8 Contractor Qualifications

The CONTRACTOR shall be, at the time of bidding, and throughout the period of the Contract, licensed by the State of California to do the type of work required under terms of these Contract Documents. The CONTRACTOR, or the CONTRACTOR's personnel, shall hold appropriate certificates, licenses, and permits necessary to perform the work.

2.1.9 Allowances

The CONTRACTOR shall provide allowances for unforeseen circumstances which may arise from conditions unknown at the time of bidding. These allowances shall be for the purpose of providing necessary time and expense involved in completing the work within the time and budget given in the Contract Documents.

2.1.10 Time of Completion

The CONTRACTOR shall diligently and continuously work to complete the entire project before the expiration of 28 calendar days. The first calendar day shall be considered the first calendar day following the CONTRACTOR's receipt of the BOS approved and executed contract. The working day shall be as set forth in Section 6.6 of the General Provisions. The length of each working day shall be from 7:00 AM to 4:00 PM, including one hour for lunch break, unless otherwise approved in writing by the County. The CONTRACTOR shall not be permitted to work on the following days designated by the County as holidays:

New Year's Day	January 2,2017
Martin Luther King Jr. Day	January 16,2017
Lincoln's Birthday	February 13,2017
Presidents' Day	February 20,2017
Memorial Day	May 29,2017
July 4 th	July 4, 2017
Labor Day	September 4,2017
Columbus Day	October 9,2017
Thanksgiving	November 24,2017
Christmas	December 25,2017

In case all the work called for and all the conditions and requirements of the project are not completed within the number of calendar days specified above, liquidated damages of five hundred dollars (\$500.00) for each additional calendar day required to properly complete the project in excess of the allowed number of calendar days shall be paid by the CONTRACTOR to the County.

2.1.11 Payment Terms

Payment includes full compensation for all required labor, products, materials, tools, equipment, plant, transportation, sale taxes, services and incidentals, erection, application or installation of an item of the work, overhead and profit. This includes costs for preparation and delivery of all required submittals including, but not limited to, the following items: construction schedule, supplemental and required inspection reporting forms, health and safety plan, and certified payroll. Costs for these items are considered incidental and are to be included in the various items of work. Full compensation for all expenses shall be

considered as included in the unit prices paid for the line items of work specified in Exhibit A of the Contract Documents and no additional compensation will be allowed therefore.

The method of measurement and payment is for each line item of work that appears in the CONTRACTOR's Proposal. Payments for unit price items shall be made on the basis of measured quantity in place/constructed as determined by the County. Payment for lump-sum items shall be paid as a pro rata portion of the entire lump sum based upon an estimated percent completion of the item, as approved by the County.

The County will make monthly progress payments as the work progresses, in accordance with the General Provisions, and upon final completion of construction. The CONTRACTOR's invoice shall be similar in form to Exhibit A of the Contract Documents, shall specify the amount of units claimed completed (quantity) for each line item of Exhibit A for the period invoiced and for the total amount of units claimed completed for each line item of Exhibit A for all invoices. The CONTRACTOR may be requested by the County to prepare supporting documentation certifying work completed by the CONTRACTOR. Monthly progress payments shall be paid by the County, less 10 percent retention, which shall be calculated by the CONTRACTOR and shown on the monthly invoice. Final payment for retention shall be made by the County in accordance with the General Provisions.

Upon receipt of an invoice (payment request), the County shall review the request as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request and any payment request determined not to be a proper request suitable for payment shall be returned to the CONTRACTOR as soon as practicable, but not later than seven calendar days after receipt. The returned request for payment shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper. Any progress payment which is undisputed and properly submitted and remains unpaid for thirty (30) calendar days after receipt by County shall accrue interest to the CONTRACTOR equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the California Code of Civil Procedure. The number of days available to the County to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which the County exceeds the seven day return requirement set forth above.

Failure or lack of cooperation by the CONTRACTOR to prepare or to submit reports, progress schedules, or plans for changes contemplated in the CONTRACTOR's operations, or to participate in preparation of same promptly, as required, shall be cause for withholding all or parts of the progress payment then pending until such time as the CONTRACTOR has met all requirements to the satisfaction of the County.

If any of the work is performed on a cost-reimbursable, unit price or hourly rate basis, the CONTRACTOR shall maintain, and require all Subcontractors and vendors to maintain, full and detailed accounts of actual quantities and hours on a form acceptable to the County. The CONTRACTOR's field representative shall obtain signature of approval by the County on the submitted form within one work day of performance of the work. Work paid for on a reimbursable or chargeable basis, the County will include, as part of the Contract, special terms and conditions setting forth all chargeable and non-chargeable cost items and procedures for the payment of costs and CONTRACTOR's fees related thereto.

All records of quantity computations or labor hours expended to perform the work against estimated (or non-estimated) material quantities or time shall be subject to audit by the County at any time during the Contract. The CONTRACTOR shall at all times cooperate with the County to amend or change any accounting procedure for cost plus work found to be unsatisfactory.

The CONTRACTOR shall agree to accept the Contract Price as full compensation for all work embraced in the Contract and for all losses or damages arising out of the nature of the work, the action of the elements, or from any unforeseen or unknown difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance, and for all risks of every description connected with the work.

2.1.12 Regulatory Requirements

The CONTRACTOR shall be familiar with and comply with all regulatory requirements associated with the work including, but not limited to, Cal OSHA, South Coast Air Quality Management District (SCAQMD), California State Water Resources Control Board, Regional Water Quality Control Board, Santa Ana Region (RWQCB-SAR), CalRecycle, and Riverside County Department of Environmental Health. All expenses incurred as a result of non-compliance with regulations shall be borne by the CONTRACTOR.

All work is subject to inspection by the governmental agencies that have jurisdiction over the work. The CONTRACTOR and all Subcontractors shall be responsible for complying with all of the requirements of the governmental agencies.

2.1.13 Existing Conditions

The Project Drawings cover existing conditions in an approximate manner only. The CONTRACTOR shall be responsible for determining the existing site conditions prior to bid submission and at all times during execution of the work; and this shall be reflected in the CONTRACTOR's proposal.

2.1.14 Site Security

The work area used for material storage and drilling operations, including areas occupied by the construction equipment, engines and motors, shall be secured at the CONTRACTOR's discretion. The Engineer shall not be responsible for loss or damage of the CONTRACTOR's materials or equipment.

Damage to construction machinery and installation equipment by accident, vandalism, or acts of nature shall be borne by the CONTRACTOR. The CONTRACTOR shall be able to store the drill rig, support vehicle or equipment within the landfill site at night and on weekends during the duration of this Project. However, the County takes no responsibility for any damage, vandalism or theft that may occur to the CONTRACTOR's vehicles or equipment while parked at the landfill sites.

Damage or loss of materials, parts and components of the construction work, which occur before final acceptance by the County, shall be borne by the CONTRACTOR. The CONTRACTOR shall close access to the work area prior to performing other work and shall maintain the closure until construction in that area is complete. In order to ensure the effectiveness of the closure, CONTRACTOR shall provide, at the CONTRACTOR's expense, such means as are necessary, including but not limited to, fences, barricades, posting of signs, or any other means deemed prudent by the CONTRACTOR. The area where work is performed shall be protected daily to prevent access by unauthorized personnel.

2.1.15 Construction Site Maintenance

The CONTRACTOR shall keep all areas clear of debris, refuse or construction materials that render the construction area an eye-sore, odor source, or safety and health risk. Throughout the period of construction, the CONTRACTOR shall keep the work site clean of all rubbish and debris, and shall promptly remove from any portion of the site, or from property adjacent to the site of the work, all unused materials, and debris. Upon completion of the work, and

prior to final acceptance, the CONTRACTOR shall remove from the vicinity of the work all surplus material and equipment belonging to the CONTRACTOR or used under the CONTRACTOR's direction during construction, shall clean the site, and remove rubbish and debris to an appropriate permitted disposal facility.

2.1.16 Water

The Department does not have water available at the landfill sites to use for construction. During past construction projects at these landfill sites CONTRACTORs have either brought water onsite or secured an offsite nearby water source.

END OF SECTION

SECTION 3. WARRANTY OF WORK

3.1 GENERAL

The CONTRACTOR shall warrant and guarantee the performance of all work. The CONTRACTOR shall be responsible for the correction of all deficiencies of work, including detailed design and fabrication performed by the CONTRACTOR, all Subcontractors, vendors, and suppliers. The CONTRACTOR's warranty period shall be a minimum of two years from the date of final project acceptance by the County, except where longer warranty periods are specifically stated by the manufacturer of individual components or required in the Special Provisions. The CONTRACTOR shall assign all warranties and guarantees of equipment vendors which extend the minimum warranty to the County. Point of sale/purchase and date of purchase of equipment items shall be submitted. The CONTRACTOR shall guarantee all materials and workmanship suitable for the service intended and that said materials shall be free from all inherent defects in design and workmanship. All costs to correct defects shall be at the CONTRACTOR's expense.

The performance of guarantee and conditions specified in this section shall be secured by a surety bond per Section 5.14 of the General Provisions.

3.2 EXECUTION

All work which has been rejected or defects discovered after project close-out shall be remedied, or removed and replaced, by the CONTRACTOR at the CONTRACTOR's own expense, with work conforming to the Project Drawings and Special Provisions. Latent defects which become apparent after lapse of the warranty period shall be corrected by the CONTRACTOR at its sole cost and expense provided County notifies CONTRACTOR of such defect within two months after discovery thereof by County. Failure to inspect work at any stage shall not relieve the CONTRACTOR from an obligation to perform sound and reliable work as herein described.

The County will endeavor to locate errors or defective materials of workmanship and call them to the attention of the CONTRACTOR prior to subsequent work being performed. However, the County is under no obligation to do so, and neither the County shall be held liable because errors or defective material or workmanship by the CONTRACTOR are not discovered by the County prior to subsequent work. Any omission or failure on the part of the County to discover, or notify the CONTRACTOR of, or to condemn defective work or material at the time of construction shall not be deemed an acceptance, and the CONTRACTOR will be required to correct defective work or material.

During the warranty period, should the CONTRACTOR fail to remedy defective material or workmanship, or to make replacements within five working days after written notice by the County, it is agreed that the County may (but is not bound to) make such repairs and replacements and the actual cost of the required labor and materials shall be chargeable to and payable by the CONTRACTOR. In the event that immediate repairs are required by a regulatory agency due to system failure caused by or due to defective material or workmanship, repairs and/or replacements may be made by County if CONTRACTOR does not respond upon notification or cannot be contacted. The actual cost of the required labor and materials shall be chargeable to and payable by the CONTRACTOR.

The warranty provided herein shall not be in lieu of, but shall be in addition to any warranties or other obligations otherwise imposed by law. The remedies provided herein shall not be exclusive and the County shall be entitled to any and all remedies provided by law.

END OF SECTION

SECTION 4. SAFETY

4.1 GENERAL

The CONTRACTOR shall comply with Provisions of Occupational Safety and Health Administration Regulations for Construction, 29 CFR, 1926/1910 and CFR 1910.120, the California Department of Industrial Relations, Division of Industrial Safety (Safety Orders), with the additional Safety Provisions in the CONTRACTOR's Safety Plan, and all other applicable Federal, State, County and local laws, ordinances, codes, the requirements set forth herein, and any regulations that may be specified in other parts of this Contract. If any of these requirements are in conflict, the more stringent requirement shall apply. The CONTRACTOR's failure to be thoroughly familiarized with the aforementioned safety and health provisions shall not relieve the CONTRACTOR of responsibility for full compliance with the obligations and requirements set forth herein.

The CONTRACTOR shall have sole responsibility for the safety, efficiency, and adequacy of the CONTRACTOR's equipment and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The CONTRACTOR shall be solely and completely responsible for the conditions at the work area arising from the CONTRACTOR's execution of the work, including safety and health of all authorized persons and property involved in the performance of the work. This requirement shall apply continuously and not be limited to normal working hours. The County's review of the CONTRACTOR's performance does not relieve the CONTRACTOR of responsibility for compliance with applicable laws, regulations and requirements.

The CONTRACTOR shall observe and comply with all applicable laws, regulations for hazardous waste operations, employee safety and health requirements set forth in these Special Provisions or otherwise applicable to the work. Such information, interpretation, or representation of laws, regulations or ordinances referenced in the Contract Documents shall not take precedence over the laws, regulation or ordinance itself.

4.2 MATERIALS

Not Used.

4.3 EXECUTION

4.3.1 Health and Safety Plan (HASP)

The CONTRACTOR shall develop and maintain for the duration of work activities at the site, a written, **site specific** Health and Safety Plan (HASP). **A separate HASP shall be prepared for each landfill.** The HASP shall incorporate and implement all applicable requirements, with due consideration given to the known hazards posed by an active landfill. The HASP shall be prepared under the direction of an industrial hygienist, or equivalent, and shall be submitted by the CONTRACTOR to the County after receiving the Award of the Contract. The HASP shall assess all known and potential hazards and specify appropriate health and safety actions and measures to mitigate those hazards, including risk of occupational injuries and illnesses.

The County shall review the HASP and shall have the right to require the CONTRACTOR to amend it if necessary. The CONTRACTOR shall make the recommended corrections and resubmit to the County for review and final acceptance. The CONTRACTOR shall under no circumstances commence work prior to receipt of the County's final written acceptance of the HASP. Acceptance of the HASP by the County does not release the CONTRACTOR of liability in the event of an accident or injury, nor does it place any liability on the County. The CONTRACTOR is solely responsible for the HASP and its implementation, including

supplying engineering controls or equipment, or personal protective equipment specified in the HASP. The CONTRACTOR shall assume full responsibility to ensure that all employees and Subcontractors adhere to the HASP.

Should the County or an applicable regulatory agency determine that the HASP has not been implemented properly, or that deficiencies in the HASP exist during performance of the work, the CONTRACTOR shall immediately correct the identified issue(s). In the event the CONTRACTOR fails or refuses to promptly correct the identified issue(s), the County may issue an order to stop all or any part of the work. When compliance with the directive issue is accomplished, an order to resume work will be issued. The CONTRACTOR shall not be entitled to any extension of the time or any claim for damage to or any compensation for either the directive or the work suspension order. Failure of the County to order discontinuance of any or all of the CONTRACTOR's operations shall not relieve the CONTRACTOR of his sole responsibility for safety.

At a minimum, the HASP shall address the following items:

1. The CONTRACTOR shall provide appropriate gas detection monitoring equipment (e.g. flammable and/or explosive gas meters) during invasive construction activities. The use of the gas detection equipment (e.g. permissible threshold concentrations) shall be specified in the site specific HASP.
2. No smoking is permitted within 100 feet of the borehole.
3. The CONTRACTOR shall require all personnel on the site to wear the appropriate field gear, which may include but is not limited to, steel toe boots, hard hats and visible safety clothing (e.g. orange safety vests).
4. The CONTRACTOR shall secure all work areas and close any open holes or excavations when not working by appropriately marking or delineating the area (e.g. with ribbons or cones), and posting signs indicating to the public or County personnel to stay away due to the existence of a deep open excavation.
5. The CONTRACTOR shall close access to the work area prior to performing other work and shall maintain the closure until construction in that area is complete. The CONTRACTOR shall provide such means as are necessary to ensure the effectiveness of the closure (e.g. fences, barricades, posting of signs).
6. The HASP shall have provisions for all aspects of protection against bodily injury from heavy construction equipment, tools and equipment required for the work.

END OF SECTION

SECTION 5. MOBILIZATION, DEMOBILIZATION AND SITE CLEAN-UP

5.1 GENERAL

5.1.1 Description

This section includes the mobilization and demobilization of equipment, material and personnel to the well sites.

5.1.2 Related Work Specified Elsewhere

Section 2.1.14 - Site Security

Section 4 - SAFETY

5.1.3 Submittals

1. Evidence of Insurance
2. Contract Bonds
3. Site Specific Health and Safety Plan
4. Construction Calendar

5.1.4 Measurement and Payment

1. Payment for mobilization shall be made at the lump sum bid price for Bid Item No 1.1, 1.2, 1.3 and 1.4
2. Payment for demobilization and site cleanup shall be made at the lump sum bid price for Bid Item No 16.1, 16.2, 16.3 and 16.4. Payment will not be made until the Engineer has approved site restoration.

5.2 EXECUTION

5.2.1 Mobilization

CONTRACTOR shall submit the required evidence of insurance, contract bonds, a site-specific health and safety plan and a construction schedule to the County following receipt of the BOS approved and executed contract. Work will not be allowed to start until the County receives reviews and accepts the required submittals. The County shall issue the CONTRACTOR a Notice to Proceed following receipt, review and approval of the required submittals.

Mobilization shall also include the transportation of personnel, equipment, and operating supplies to and from the site; drinking water, and other necessary facilities at the site; and other preparatory work at the site, as well as all work at the site necessary to conduct drilling, construction and development operations. The mobilization phase will be deemed complete when all items necessary to conduct field operations are onsite and operable. The CONTRACTOR will notify the Engineer when the mobilization phase, in his terms, is complete. The Engineer, upon site inspection and approval, will then allow drilling to commence. If the Engineer does not approve the well site mobilization, drilling will not commence and the CONTRACTOR will re-notify the Engineer for additional site inspections. No stand-by time will be allowed during the mobilization phase of the Contract.

5.2.2 Initial Site Report

The CONTRACTOR will prepare an initial site report which will include a written account of all alterations and preparations that must be made to the site to make the site accessible

and suitable for drilling, and to restore the site to its previous condition. The initial site report shall specifically include out-of-ordinary costs.

The mobilization and demobilization bid items should take into account ordinary site restoration costs for the drilling locations, as visually observed during the pre-bid. Out-of-ordinary costs are those restoration items that are could not be visually recognized during the pre-bid meeting at site, and may be unforeseen prior to the commencement of mobilization. Out-of-ordinary items should be identified by the CONTRACTOR and brought to the attention of the Engineer.

The County shall pay a reasonable fee for out-of-ordinary costs. Where the CONTRACTOR utilizes a Subcontractor, the items invoiced for out-of-ordinary site restoration costs will be paid as specified in Section 7. of the General Provisions.. The County will not be responsible for payment of charges not specified in the initial site report and subsequently approved in writing by the County.

5.3 PROTECTION AND RESTORATION OF EXISTING FACILITIES

The CONTRACTOR will be responsible for the protection of public and private properties adjacent to the work and will exercise due caution to avoid damage to such properties. The CONTRACTOR will repair or replace all existing improvements that are damaged or removed as a result of his operations. Such improvements include curbs, gutters, sidewalks, pavement, utility installations, structures, lawns, etc. Repair and replacements will be at least equal to existing improvements and will match them in finish and dimension. All cuts in asphalt and concrete shall be repaired by saw cutting around the damaged area and replacing it with the appropriate patching material. Repair or replacement of asphalt, concrete, or other existing features damaged due to the CONTRACTOR shall be the sole responsibility of the CONTRACTOR. Damaged asphalt will be properly repaired as required by governing city or county agency.

5.3.1 Project Demobilization

Demobilization shall include removal of all equipment, materials, and temporary facilities installed during mobilization, well drilling, completion, and development phases of the work. Demobilization will also include restoration of the site to the original condition and will include those items specified in the initial site report.

5.3.2 General Site Clean-up

The CONTRACTOR shall provide all equipment and personnel to restore the site as required by the individual site conditions. Demobilization and site restoration will include, but not be limited to, grading, pavement restoration, re-fencing, etc. All restoration and resurfacing work will be deemed acceptable upon approval of the Engineer. Payment for site clean-up will not be made until the site restoration has been approved by the Engineer and the wellhead has been completely installed. If the site is not accepted, the CONTRACTOR will make the necessary adjustments to make the site acceptable.

5.3.3 Non-Hazardous Materials Site Clean-up

Cleanup of the site will include complete removal and disposal of all solids, liquids and substances either used or generated during mobilization, demobilization, drilling, completion, and development operations. All materials will be properly disposed by the CONTRACTOR.

Drilling cuttings and well development water are the only exceptions to the list of materials described above. Drilling cuttings and well development water shall be disposed as specified in SECTION 6 and SECTION 12, respectively.

5.3.4 Hazardous Materials Site Clean-up

Any materials suspected by the Engineer of being contaminated due to ambient and/or existing conditions, which were not a result from the CONTRACTOR's equipment, materials or actions, will be analyzed by the Engineer for potential contaminants. Materials that contain levels of contaminants in excess of Federal and/or State disposal standards shall be properly disposed of by the Engineer.

CONTRACTOR shall perform necessary work to contain/control leaking equipment. Generation of hazardous materials by the CONTRACTOR during the course of work caused by his normal operational procedures or negligence (e.g., oil, and/or hydraulic spills or leaks) shall be cleaned, removed, and properly disposed of at the sole cost of the CONTRACTOR. Any materials suspected of contamination due to CONTRACTOR negligence will be submitted by the CONTRACTOR to a State-certified laboratory for analysis at the CONTRACTOR's sole expense. The sample shall be analyzed by approved Federal and/or State methods to determine if the sample contains hazardous materials. The County reserves the right to request additional testing if the methods requested by the CONTRACTOR are insufficient to determine the types of potentially hazardous materials. Tests must be run within 24 working hours of suspected contamination and must be requested at expedited turn-around times, as quick as possible considering the analytical method. The test results shall be provided to the Engineer as soon as available by the CONTRACTOR. The CONTRACTOR, in accordance with applicable Federal and State laws, shall properly dispose of any material that contains levels of contaminants in excess of Federal or State disposal standards within 48 working hours of receiving test results. This will include preparation of a hazardous materials disposal manifest by the CONTRACTOR, and the CONTRACTOR, not the County, shall be listed as the generator of the hazardous waste on all manifests. The CONTRACTOR shall provide the County with a copy of the initial manifest and the final manifest, which indicates waste receipt by the receiving disposal facility.

5.3.5 Final Inspection

The Engineer shall make an inspection of the site following completion of all site cleanup and restoration work by the CONTRACTOR, including setting of the above-ground well head. The CONTRACTOR shall also be present to acknowledge any items that require additional work to make the site acceptable to the Engineer.

Final payment for the Work shall not be granted until the site and contract work has been determined acceptable to the Engineer. Following the Engineer's acceptance of the work, a Notice of Completion will be filed and retention will be released to the CONTRACTOR.

5.3.6 Well Completion Report

The Contractor shall provide the Department with a copy of the completed California Department of Water Resources (DWR) Well Completion Report, for each well installed and abandoned, within two weeks after the project is completed.

END OF SECTION

SECTION 6. BOREHOLE DRILLING AND SAMPLING

6.1 GENERAL

6.1.1 Description

This Section includes the drilling of a borehole. The purpose of the well borehole is to determine the thickness and nature of all formations penetrated, determine the location of water bearing strata, obtain other hydrological and geological information, and allow for well construction.

The CONTRACTOR shall drill the well borehole with one pass to the depth specified in these Contract Documents, or as directed by the Engineer

6.1.2 Related Work Specified Elsewhere

None.

6.1.3 Submittals

1. Alternative drilling method description, if applicable.
2. Daily construction progress report.

6.1.4 Measurement and Payment

Payment for drilling and sampling of the well borehole shall be based on vertical feet drilled (first pass) measured from the ground surface. It shall include all materials, labor, tools, and equipment required to drill the borehole, collect formation samples, maintain circulation (depending on drilling method chosen) and protect the borehole from caving. No payment will be made for temporary casings installed at the CONTRACTOR's option.

Payment will only be made for the CONTRACTOR's first pass successful drilling method. If the CONTRACTOR chooses drilling method(s) that are unsuccessful, the County will not make additional payment for vertical feet drilled for second, third or any subsequent passes by the CONTRACTOR to obtain the required borehole depth. In addition, no payment will be made for borehole corrections that may be necessary to comply with these specifications. Payment for any borehole corrections will be included in the unit price for Bid Item No 2.1, 2.2 and 2.3

Payment for stand-by time will be at the unit price for Bid Item No 14.

Payment for rock clause drilling will be at the unit price for Bid Item No. 15.

6.2 MATERIALS

6.2.1 General

All equipment supplied by the CONTRACTOR shall be available for inspection by the Engineer prior to the beginning of drilling operations. If, in the opinion of the Engineer, any of the equipment is not suitable for drilling operations, either because of mechanical problems, excessive noise, deviation from the specifications, or the build-up of substances which could cause borehole contamination (i.e., from oil, diesel, hydraulic leaks or exhaust residue, etc.), the CONTRACTOR shall adjust, replace or decontaminate it with suitable equipment at the CONTRACTOR's expense.

6.2.2 Drilling Rig

THE DRILLING RIG AND DRILLING TYPE/METHOD IS AT THE CONTRACTOR'S DISCRETION. All associated drilling equipment shall be in good condition and have sufficient capacity to drill to the depths specified in these Contract Documents.

If the CONTRACTOR chooses to use a drilling method, other than auger drilling or air rotary drilling, the CONTRACTOR shall submit a written description of the proposed drilling method to the Engineer, prior to drilling equipment mobilization. The Engineer shall review the written submittal and may amend the Contract Documents to account for the proposed drilling method. The scope of any amendments will be limited to specifications to ensure the environmental integrity of the borehole. The Engineer shall authorize the proposed drilling method in writing. Following the CONTRACTOR's receipt of written approval, the CONTRACTOR may mobilize drilling equipment.

The Engineer's approval of a CONTRACTOR's alternative drilling method does not relieve the CONTRACTOR of his responsibility to drill the boreholes to the depths specified in these Contract Documents, or to construct the monitoring well. The Engineer's authorization does not constitute approval or agreement that the alternative drilling method will allow the CONTRACTOR to successfully complete the project. As stated previously, **THE DRILLING RIG AND DRILLING TYPE/METHOD IS AT THE CONTRACTOR'S DISCRETION.**

The boreholes for CG-7 and CG-8 shall be drilled at the Closed Corona Sanitary Landfill. The table below summarizes the drilling method, total depth and depth to bedrock for each groundwater monitoring well installed previously at the Closed Corona Sanitary Landfill. Refer to Appendix B for a copy of the groundwater well boring logs and a site map showing where the groundwater wells are located at the site.

Well ID	Drilling Method	Total Depth of Borehole	Depth To Bedrock from Ground Surface
CG-1	Speedstar Air Rotary	65 feet bgs	No bedrock
CG-2	Speedstar Air Rotary	100 feet bgs	No bedrock
CG-3	Speedstar Air Rotary	150 feet bgs	No bedrock
CG-4	Speedstar Air Rotary	70 feet bgs	No bedrock
CG-5	Speedstar Air Rotary	80 feet bgs	No bedrock
CG-6A	T660 Drill Rig – Air Rotary	60 feet bgs	No bedrock

Well HE-6 shall be constructed in West Esplanade. The County does not have any information about drilling conditions in the immediate vicinity of the proposed borehole location. The table below summarizes the drilling method, total depth and depth to bedrock for each groundwater monitoring well installed previously at or near the Closed Hemet Sanitary Landfill. Refer to Appendix C for a copy of the groundwater well boring logs and a site map showing where the groundwater wells are located at the site.

Well ID	Drilling Method	Total Depth of Borehole	Depth To Bedrock from Ground Surface
HE-1	Speedstar Air Rotary	52.5 feet bgs	17 feet bgs
HE-2	Speedstar Air Rotary	155 feet bgs	135 feet bgs
HE-3	Speedstar Air Rotary	160 feet bgs	103 feet bgs
HE-4	Speedstar Air Rotary	78.5 feet bgs	57 feet bgs
HE-5	IR T3W-Air Rotary	200 feet bgs	144 feet bgs

The boreholes for HG-33 and HG-34 shall be drilled at the Closed Highgrove Sanitary Landfill. The table below summarizes the drilling method, total depth and depth to bedrock for each groundwater monitoring well installed previously at the Closed Highgrove Sanitary Landfill. Refer to Appendix D for a copy of the groundwater well boring logs and a site map showing where the groundwater wells are located at the site.

Well ID	Drilling Method	Total Depth of Borehole	Depth To Bedrock from Ground Surface
HG-1	Speedstar Air Rotary	178 feet bgs	41 feet bgs
HG-2	8" Hollow Stem Auger	35 feet bgs	35 feet bgs
HG-3	Speedstar Air Rotary	103 feet bgs	No bedrock
HG-4	GD 1000 Air Rotary	100 feet bgs	No bedrock
HG-5	GD 1000 Air Rotary	30 feet bgs	No bedrock
HG-6	GD 1000 Air Rotary	35 feet bgs	No bedrock
HG-8	GD 1000 Air Rotary	80 feet bgs	No bedrock
HG-9	GD 1000 Air Rotary	30 feet bgs	No bedrock
HG-10	8" Percussion Hammer	250 feet bgs	15 feet bgs
HG-11	Air Rotary	75 feet bgs	70 feet bgs
HG-12	Air Rotary	110 feet bgs	102 feet bgs
HG-13	Air Rotary	144 feet bgs	134 feet bgs
HG-14	Air Rotary	110 feet bgs	No bedrock
HG-16	Air Rotary	102 feet bgs	No bedrock
HG-17	Air Rotary	100 feet bgs	No bedrock
HG-18	Air Rotary	100 feet bgs	No bedrock
HG-19	Air Rotary	100 feet bgs	No bedrock
HG-20	Air Rotary	55 feet bgs	45 feet bgs
HG-21	Air Rotary	108 feet bgs	No bedrock
HG-22	Air Rotary	50 feet bgs	37 feet bgs
HG-23	Air Rotary	60 feet bgs	42 feet bgs
HG-24	Air Rotary	79 feet bgs	49 feet bgs
HG-25	Air Rotary	101 feet bgs	80 feet bgs
HG-26	Air Rotary	105 feet bgs	70 feet bgs
HG-27	Air Rotary	115 feet bgs	92 feet bgs
HG-28	Air Rotary	120 feet bgs	80 feet bgs
HG-29	Air Rotary	120 feet bgs	No bedrock
HG-30	Air Rotary	86 feet bgs	56 feet bgs
HG-31	Reverse Circulation Percussion Hammer	83 feet bgs	No bedrock
HG-32	Reverse Circulation Percussion Hammer	90.5 feet bgs	No bedrock

The CONTRACTOR shall provide all tools, accessories, air compressor, power, fuel, materials, supplies, lighting, and other equipment, and experienced personnel necessary to conduct safe and efficient drilling operations. A drilling superintendent (tool pusher) shall be available at all times at the request of the Engineer.

The mast and all running gear (hoists, cables, etc.) of the drill rig shall have a proven, sufficient and demonstrated capacity to lift three times the buoyant weight of the drill string.

6.2.3 Drill Pipe/Auger

If the CONTRACTOR chooses to use the drilling pipe/auger drilling method, the drilling pipe/auger shall be in good condition and shall be connected by standard tool joints. The CONTRACTOR shall not use drilling pipe equipped with external air lines. The drill pipe/auger shall be steam-cleaned prior to its arrival at the drilling site. Drill pipe/auger suspected of being contaminated shall be removed and steam-cleaned at the CONTRACTOR's expense prior to its use at the site. Pipe dope or other lubricating material

such as "Gimmie the Green Stuff" or other environmentally safe material, as pre-approved by the Engineer, can be used on the threads of the drill pipe/auger and tremie.

6.2.4 Air Rotary Drilling Equipment

If the CONTRACTOR chooses to use the air rotary drilling method, the CONTRACTOR shall utilize an oil-less, filtered air compressor with the capability of properly drilling to the minimum depth proposed herein. The CONTRACTOR shall use an air cyclone or other acceptable method, pre-approved by the Engineer, for the collection of drill cuttings at the point where air is returned to the surface (i.e., flow directed out of the discharge pipe). The air cyclone shall function to allow the Engineer to collect representative samples of the subsurface. If samples cannot be adequately collected, drilling will cease until the problem can be corrected to the satisfaction of the Engineer.

6.2.5 Conductor Casing

If the CONTRACTOR chooses to use a conductor casing with the air rotary drilling method, the conductor casing shall be in good condition and shall be connected by standard tool joints. The conductor casing shall be decontaminated prior to its arrival at the well site. Conductor casing suspected of being contaminated shall be decontaminated at the CONTRACTOR's expense prior to its use at the site. Pipe dope or other lubricating material such as "Gimmie the Green Stuff" or other environmentally safe material, as pre-approved by the Engineer, can be used on the threads of the conductor casing if necessary.

6.3 EXECUTION

6.3.1 Borehole Drilling

1. The CONTRACTOR shall not start drilling without the Engineer onsite to confirm the location of the borehole.
2. The CONTRACTOR shall prepare to drill the borehole to the total depth specified in the Contract Documents. The borehole diameter shall be a minimum of 8-inches. The Engineer will be onsite during the drilling process to specify the exact depth of the borehole to be drilled based on drilling cuttings, the geologic log and the depth to groundwater encountered during drilling. The exact depth specified by the Engineer may be more or less than the total depth specified in the Contract Documents
3. The CONTRACTOR shall take all measures necessary to protect the borehole from caving or raveling during drilling operations and at the conclusion of drilling operations, when the final depth has been achieved.
4. Drilling cuttings from CG-7 and CG-8, at the Corona Sanitary Landfill, will be stockpiled adjacent to the borehole location. Soil drilling cuttings shall be placed on plastic sheeting, that has a minimum 10-mil thickness. At the end of each drilling work day, the drilling cutting stockpile shall be securely covered with plastic sheeting, that has a minimum 10-mil thickness. The County shall be responsible for the final handling, transportation and disposal of drilling cuttings, following the CONTRACTOR's demobilization from the site.
5. Drilling cuttings from HE-6, near the Hemet Sanitary Landfill, will be contained in 55-gallon drums. The CONTRACTOR will transport the drums to the Hemet Sanitary Landfill (Map 4) at the end of each drilling work day. The County shall be responsible for the final handling, transportation and disposal of drilling cuttings once the CONTRACTOR has placed the drums on the landfill property.

6. Drilling cuttings from HG-33 and HG-34, at the Highgrove Sanitary Landfill, will be stockpiled adjacent the borehole location. Soil drilling cuttings shall be placed on plastic sheeting, that has a minimum 10-mil thickness. At the end of each drilling work day, the drilling cutting stockpile shall be securely covered with plastic sheeting, that has a minimum 10-mil thickness. The County shall be responsible for the final handling, transportation and disposal of drilling cuttings, following the CONTRACTOR's demobilization from the site.
7. Upon completion of drilling a specific borehole to the depth specified in these Contract Documents or as directed by the Engineer, the Engineer will provide, within 24 hours, the CONTRACTOR with well construction details or request that the CONTRACTOR drill deeper.
8. The CONTRACTOR shall be paid for stand-by time for each working hour beyond the 24 hour assessment period that the Engineer does not provide the CONTRACTOR with well construction details or the request to drill deeper.
9. The CONTRACTOR may discharge minor volumes of nuisance groundwater generated during drilling directly to the ground surface adjacent to the well site, as permitted by the State Water Resources Control Board Water Quality Order No. 97-03-DWQ. The CONTRACTOR shall implement appropriate best management practices (BMPs) to mitigate the discharge of sediment laden groundwater. Where necessary, BMPs shall also be implemented to mitigate groundwater discharge related erosion. The discharge of groundwater shall also be controlled to prevent contact with significant materials or equipment, including those of the CONTRACTOR and County.

6.3.2 Rock Clause

The Rock Clause shall go into effect ONLY after the CONTRACTOR notifies the Engineer that the drilling advancement rate is less than 5 feet per hour and that the CONTRACTOR is requesting Rock Clause time. A recording device such as a "geolograph" shall be required to document Rock Clause time. The decrease in the drilling rate shall be due to natural causes such as hard formations caused by gravel and boulders. Borehole caving problems and decreased penetration rates due to improper air flow rates or choice of drilling bits are not acceptable causes to invoke the Rock Clause. The CONTRACTOR is cautioned to practice proper drilling techniques for gravel alluvium drilling environments. Reduction in drilling rate due to worn bits will not be grounds for invoking the Rock Clause.

6.3.3 Subsurface Formation Sampling

The CONTRACTOR shall, at each change of formation, at five foot intervals between changes in formation, and at intervals requested by the Engineer, collect a representative sample of the interval or new formation. Each sample shall be given to the Engineer for proper logging and storage.

If the CONTRACTOR chooses to drill with hollow stem auger, the CONTRACTOR shall collect relatively undisturbed soil samples with a Standard Penetration Test split spoon sampler.

If the CONTRACTOR chooses to drill with a form of air rotary, the CONTRACTOR shall provide an acceptable means to the Engineer whereby the CONTRACTOR can safely obtain representative samples of formation cuttings from the air stream. The ground surface around the sampling area shall be kept graded and free from stockpiled drilling cuttings and shall be kept free of trash, equipment and other debris. If samples cannot be adequately collected, drilling will cease until the problem is corrected to the satisfaction of the Engineer.

6.3.4 Cleanup

Any waste that is generated by the CONTRACTOR, which is incidental to the drilling activities, shall be collected and properly disposed by the CONTRACTOR, as specified in 5.3. The procedure for collecting and handling soil drilling cuttings is specified in 6.3.1, above.

6.3.5 Daily Construction Progress Report

The driller shall prepare a daily record of drilling activities completed each working day that drilling is completed. The Daily Construction Progress Report shall identify the first pass vertical footage drilled, approved Rock Clause hours, and approved stand-by time hours. The report shall be provided to the Engineer for review and approval at the conclusion of each working day.

END OF SECTION

SECTION 7. WELL CASING AND SCREEN

7.1 GENERAL

7.1.1 Description

This Section describes the supply and installation of the blank well casing and screen. All materials installed under this Contract, unless specified, shall be furnished by the CONTRACTOR. These materials shall be new and conform to these Specifications, except as specified otherwise.

The CONTRACTOR shall use good practice during installation, backfilling and well development to ensure the integrity of the screen and casing is maintained.

The proposed well casing and screen lengths are specified in the Contract Documents. These lengths are subject to change, as specified by the Engineer, based on the subsurface conditions encountered during drilling.

7.1.2 Related Work Specified Elsewhere

Section 5.6.1.– Borehole Drilling

7.1.3 Submittals

Daily construction progress report.

7.1.4 Measurement and Payment

1. Payment for well screen installation shall be based on measurement of vertical feet of well screen installed, exclusive of blank well casing, complete and in place at the unit price for Bid Item No.3 .
2. Payment for blank well casing installation shall be based on measurement of vertical feet of blank well casing installed, complete and in place, which includes furnishing and installing centralizers and end caps, at the unit price for Bid Item No.4 .

7.2 MATERIALS

7.2.1 General

The blank well casings shall be nominal 4-inch diameter, schedule 80, ASTM D1785 (latest edition) PVC. The well screens shall be nominal 4-inch diameter, schedule 80, ASTM D1785 (latest edition) PVC with a machined 0.020-inch slot (20-slot).

A typical well design will consist of a 20 to 30-foot long interval of well screen with approximately five feet of blank casing below (silt trap) and the remainder of the blank casing located above the screen and extending to the ground surface. The lengths and intervals of each casing type shall be determined by the Engineer at the completion of drilling and is generally estimated as described in these Contract Documents.

7.2.2 Blank Casing

1. The blank casing shall be nominal 4-inch inner diameter, schedule 80, PVC as specified in ASTM D1785 (latest edition), equipped with threaded joints at the ends of the blank casing section. The blank casings shall be factory-assembled.
2. Threaded joints shall be machined with beveled/interference compression fit shoulder seals to increase compressional strength.

3. O-ring seals shall be provided within the threaded joints to mitigate leakage and contaminants from entering at the threaded joint.
4. In all cases, the blank casing used in conjunction with the screen shall have the same inner diameter as the screen to ensure that the inside diameter of the blank casing matches the inside diameter of the screen.
5. The bottom of each well casing shall be fitted with a threaded end cap. The end cap shall be of the same chemical and physical properties as the PVC screen.
6. All casing material shall be new.

7.2.3 Slotted Well Screen

1. Slotted well screens shall be nominal 4-inch diameter, schedule 80, PVC as specified in ASTM D1785 (latest edition), equipped with threaded joints at the ends of the slotted well screen section. The screen shall be factory-assembled.
2. The slotted well screen shall be machined 0.020-inch slot (20-slot).
3. Threaded joints shall be machined with beveled/interference compression fit shoulder seals to increase compressional strength.
4. O-ring seals shall be provided within the threaded joints to mitigate leakage and contaminants from entering at the threaded joint.
5. In all cases, the blank casing used in conjunction with the screen shall have the same inner diameter as the screen to ensure that the inside diameter of the blank casing matches the inside diameter of the screen.
6. All slotted well screen material shall be new.

7.3 EXECUTION

7.3.1 General

The Engineer will submit the final well design depths/lengths to the CONTRACTOR within 24 hours after the Engineer directs the CONTRACTOR to terminate drilling at a specific well location. While the well design is being completed, no additional payment for stand-by time shall be made, except where specified in SECTION 6 BOREHOLE DRILLING AND SAMPLING. The final well design will specify where the casing and screen intervals, filter pack intervals, seal intervals and sanitary seal will be placed in the borehole.

The CONTRACTOR is cautioned to properly secure/stabilize the borehole during all phases of construction. Improper or poor security/stabilization of the borehole may lead to borehole collapse and delays prior to or during well construction. Such collapse or delays will be the responsibility of the CONTRACTOR and the Engineer shall not pay any costs associated with such. During casing installation the CONTRACTOR shall measure and record the lengths of the casing and screen as it is being installed into the borehole.

7.3.2 Joints

All field joints, where blank casings and/or screen casing are joined together, shall be connected via the machine threaded ends.

7.3.3 Installation of Casing and Screen

1. The CONTRACTOR shall ensure that the tremie and well casing are sufficiently aligned to prevent binding while raising the tremie during annular fill material installation.

2. The well casing string shall be suspended at all times in tension from the surface by means of a clamp, landing plate, or equivalent method. The bottom of the casing string shall be at a sufficient distance above the bottom of the borehole to ensure that it is not supported by the bottom of the borehole.
3. The CONTRACTOR will measure and record the lengths of the casing as it is being installed into the borehole. The casing lengths will be such that the screens are placed per the design interval and the total installed length of the casing is as specified in the design.
4. Two centralizers shall be installed around the screen section, one near the bottom and one approximately mid-height. One centralizer shall be installed around the blank casing, at approximately mid-height.
5. Prior to backfilling the annular space around the casing string, the CONTRACTOR shall measure the bottom of each casing to verify its total depth. If for any reason the casing cannot be placed in the correct position, or at a depth acceptable to the Engineer, the CONTRACTOR shall take whatever measures are necessary to properly construct the well at his own expense, including abandoning the borehole.
6. If any of the casings should collapse or break prior to well completion, they shall be withdrawn and replaced at the CONTRACTOR's expense.
7. All work required to be repeated because of the CONTRACTOR, and all additional materials, labor, and equipment required, shall be furnished at the expense of the CONTRACTOR and no claim for additional compensation shall be made or be allowed therefore, except as specifically provided herein.
8. The well casing shall be completed at ground surface. Extra casing length should be added to allow for landing of the casing at the depth/heights specified in Section 11. Following completion of backfilling and development, the casing stick-up will be modified as specified in Section 11.

7.3.4 Well Capping

Upon completion of all work in connection with well construction and development, the well shall be capped by placing a lockable J-plug on the top of the casing.

END OF SECTION

SECTION 8. FILTER PACK AND TRANSITION SAND

8.1 GENERAL

8.1.1 Description

This Section covers the supply and installation of the filter pack to the depths and intervals specified by the Engineer.

8.1.2 Submittal

A description and recent certified sieve analysis of filter pack to be used must be submitted and approved by the Engineer prior to the anticipated date of shipment from the supplier.

8.1.3 Measurement and Payment

1. The payment for filter pack will be based on measurement of vertical feet of filter pack installed from the bottom to the top of each specified interval at the unit price for Bid Item No.5 .
2. The payment for transition sand will be based on measurement of vertical feet of transition sand installed from the bottom to the top of each specified interval at the unit price for Bid Item No.6 .

8.1.4 Related Work Specified Elsewhere

None.

8.2 MATERIALS

8.2.1 Filter Pack

All sand/gravel to be used for the filter pack shall be hard, water or air worn gravels, and washed clean of silt, sand, dirt and foreign matter. Crushed gravel will not be accepted. It shall be well rounded, graded, and shall have a coefficient of uniformity less than 2.5. All gravel is subject to approval by the Engineer prior to use in the packing process. Gravel shall be of the type provided by Oglebay Norton Industrial Sands, Inc. (formerly known as Colorado Silica Sand, Inc.), or approved equal. For bidding purposes, a non-mixed (i.e., pure silica) #3 gradation blend of Oglebay Norton Industrial Sands, Inc. is proposed at this time. The #3 gradation blend shall meet the sieve analyses parameters specified below.

Sieve #	Sieve Opening (mm)	Cumulative Percent Passing
½-Inch	12.5	100
4	4.75	100
6	3.35	100
8	2.36	100-98
12	1.7	89-55
16	1.18	46-10
20	0.85	13-1
30	0.60	5-0

8.2.2 Transition Sand

All sand used for the transition sand layer shall be hard, water or air worn gravels, and washed clean of silt, dirt and foreign matter. Crushed gravel will not be accepted. All sand is subject to approval by the Engineer prior to use in the transition sand layer. Sand shall be a non-mixed (i.e., pure silica) #60 gradation blend. The transition sand shall be of the type

provided by Oglebay Norton Industrial Sands, Inc. or approved equal. The #60 gradation blend shall meet the sieve analyses parameters specified below.

Sieve #	Sieve Opening (mm)	Cumulative Percent Passing
20	0.85	100
30	0.60	100
40	0.425	100-94
50	0.30	60-25
70	0.212	15-5
100	0.15	4-0

8.2.3 Surge Block

A surge block consists of a rubber plunger specifically fabricated for 2-inch diameter well casing. The surge block shall fit tightly within the well casing to create the necessary vacuum and pressure in the groundwater column for surging procedures.

8.3 EXECUTION

8.3.1 General

Once drilling is completed, the bottom of the borehole is stabilized, if necessary, and the casing string is installed within the borehole, the installation of the filter pack can proceed. A general schematic diagram of each well construction, including location of annular seals, is provided in Figure 1 – Groundwater Well Details for CG-7, Figure 2 – Groundwater Well Details for CG-8, Figure 3 – Groundwater Well Details for HE-6, Figure 4 – Groundwater Well Details for HG-33 and Figure 5 – Groundwater Well Details for HG-34.

8.3.2 Installation of Filter Pack

1. The gravel/sand, if stockpiled onsite, shall be kept free of all foreign matter. Gravel/sand suspected of being contaminated with dust, oil or other contaminants will not be accepted and shall be removed at the CONTRACTOR's expense prior to the arrival of new gravel/sand onsite.
2. Each gravel/sand filter pack shall be placed into the annulus of the well through a tremie. The gravel/sand shall not be allowed to freefall more than 20 feet from the bottom of the tremie to the top of the gravel/sand. The gravel/sand filter pack shall be installed from the bottom of the borehole to approximately five feet above the top of screen.
3. A device approved by the Engineer shall be used to measure the level of the gravel throughout the backfilling process. Backfilling shall not begin until the measurement method is proved to be accurate by an acceptable method. Upon completion of installation of each filter pack, or portion thereof, no additional work will be performed until the depth to the top of that filter pack has been determined by use of proven, accurate equipment.
4. Throughout the backfilling process, the CONTRACTOR shall complete calculations to determine the amount of material necessary to backfill the specified interval. The CONTRACTOR shall record all calculations and volumes of material used to backfill the specified interval, as well as measurements obtained after each gravel/sand placement and verify those calculations with the Engineer.

5. Prior to installing the transition sand materials, the CONTRACTOR shall consolidate the filter pack by gently surging the well screen with a tight-fitting surge block. The CONTRACTOR shall then re-measure the top of the filter pack and install additional gravel/sand to achieve the design depth.
6. Following the installation of the filter pack, the CONTRACTOR shall install an approximate 5-foot thick layer of transition sand.

8.3.3 Installation of Transition Sand

1. The transition sand, if stockpiled onsite, shall be kept free of all foreign matter. Transition sand suspected of being contaminated with dust, oil or other contaminants will not be accepted and shall be removed at the CONTRACTOR's expense prior to the arrival of new transition sand material onsite.
2. The transition sand shall be placed into the annulus of the well through a tremie. The transition sand shall not be allowed to freefall more than 20 feet from the bottom of the tremie to the top of the transition sand. The transition sand layer shall be installed from the top of the filter pack to a thickness of five feet.
3. A device approved by the Engineer shall be used to measure the level of the transition sand throughout the backfilling process. Backfilling shall not begin until the measurement method is proved to be accurate by an acceptable method. Upon completion of installation of the transition sand layer, or portion thereof, no additional work will be performed until the depth to the top of that transition sand layer has been determined by use of proven, accurate equipment.
4. Throughout the backfilling process, the CONTRACTOR shall complete calculations to determine the amount of material necessary to backfill the specified interval. The CONTRACTOR shall record all calculations and volumes of material used to backfill the specified interval, as well as measurements obtained after placement of the transition sand layer and verify those calculations with the Engineer.

END OF SECTION

SECTION 9. PELLET ANNULAR SEAL

9.1 GENERAL

9.1.1 Description

This Section includes the installation of the annular seal, which seals the annular space between the borehole wall and the well casing. The seal shall be composed of medium-sized bentonite pellets and be installed in the annulus of the well to hydraulically separate the aquifer penetrated by the well casings.

9.1.2 Measurement and Payment

Payment for annular seal materials will be based on measurement of vertical feet of seal installed from the bottom to top of the specified interval, at the unit price for Bid Item No 7.

9.1.3 Related Work Specified Elsewhere

None.

9.2 MATERIALS

9.2.1 Annular Seals

An approximate five-foot thick seal consisting of dry non-coated medium-sized bentonite chips or tablets shall be installed above the screened interval, or as otherwise specified. Coated bentonite pellets, chips or tablets shall not be used to construct these seals. The bentonite chips or tablets shall be certified NSF/ANSI Standard 60, Drinking Water Treatment Chemicals - Health Effects.

9.3 EXECUTION

9.3.1 General

Once the filter pack and/or transition sand, depending on the specific well being constructed, is installed above the screened well casing, the annular seal can be installed. A general schematic diagram of the well construction, including location of the annular seal, is provided in Figure 1 – Groundwater Well Details for CG-7, Figure 2 – Groundwater Well Details for CG-8, Figure 3 – Groundwater Well Details for HE-6, Figure 4 – Groundwater Well Details for HG-33 and Figure 5 – Groundwater Well Details for HG-34.

9.3.2 Annular Seal Installation

1. An approximate five foot thick seal, consisting of bentonite chips or tablets, shall be installed by gravity via a tremie above the filter pack and/or transition sand.
2. Seal materials shall not be allowed to freefall more than 20 feet from the bottom of the tremie to the depth established from previous measurement. The seal or portion thereof shall be placed from the bottom of each interval to the top, in a continuous operation.
3. The CONTRACTOR shall measure the depth of the top of the seal after each load of seal material has been installed. Upon complete installation of the annular seal, or portion thereof, no additional work will be performed until the depth to the top of that seal has been accurately measured.
4. The CONTRACTOR shall calculate the amount of seal material necessary to backfill a specified interval. The CONTRACTOR shall record all calculations and volumes of seal mixture used, and the measurements obtained after the seal placement and verify those calculations with the Engineer.

5. A device approved by the Engineer shall be used to measure the level of the seal material throughout the backfilling process. Backfilling shall not begin until the measurement method is proved to be accurate by an acceptable method. Upon completion of installation of the seal layer, or portion thereof, no additional work will be performed until the depth to the top of the seal layer has been determined by use of proven, accurate equipment.

END OF SECTION

SECTION 10. TRANSITION SEAL

10.1 GENERAL

10.1.1 Description

This Section includes the completion of the transition grout annular seal, sealing the annular space between the borehole and the well casing in the upper portion of the borehole.

10.1.2 Measurement and Payment

Payment for the transition grout annular seal will be based on measurement of vertical feet of seal installed at the unit price for Bid Item No. 8. No stand-by time will be paid for any down-time between the placement of the transition grout annular seal and the sanitary seal.

10.1.3 Related Work Specified Elsewhere

None.

10.2 MATERIALS

10.2.1 Transition Grout Annular Seal

1. The transition grout shall be composed of a bentonite-cement mixture.
2. Cement used for the transition grout seal shall be a Type II Portland cement conforming to ASTM C150 (latest edition).
3. Bentonite used in the grout shall be pulverized (powder or granular) and shall be certified NSF/ANSI Standard 60, Drinking Water Treatment Chemicals – Health Effects.
4. Water used for the cement mix shall be clean and of potable quality.
5. The transition grout shall be composed of 1 gallon of water to 1 - 1¼ pounds of bentonite powder. Cement shall be added to the bentonite grout at a ratio of 1 – 2 pounds of cement to 1 gallon of water.

10.3 EXECUTION

10.3.1 General

After placement of the casings, screens, filter pack, transition sand, and pellet seal, the transition grout annular seal shall be installed. A general schematic diagram of the well construction, including the location of the transition grout annular seal, is provided in Figure 1 – Groundwater Well Details for CG-7, Figure 2 – Groundwater Well Details for CG-8, Figure 3 – Groundwater Well Details for HE-6, Figure 4 – Groundwater Well Details for HG-33 and Figure 5 – Groundwater Well Details for HG-34.

10.3.2 Transition Grout Mixture

1. Bentonite and water shall be mixed first, prior to the addition of cement.
2. Bentonite, water and cement shall be mixed in the ratios specified in Section 9.2.1.
3. The final mixture of transition grout shall be thoroughly blended before pumping. Bentonite and cement shall be completely incorporated into the grout, no unmixed lumps of material shall exist in the grout.