



**BOARD OF SUPERVISORS AGENDA ITEM REPORT  
CONTRACTS / AWARDS / GRANTS**

Award  Contract  Grant

Requested Board Meeting Date: 05/01/18

or Procurement Director Award

\* = Mandatory, information must be provided

**\*Contractor/Vendor Name/Grantor (DBA):**

CMG Drainage Engineering, Inc. (Headquarters: Tucson, AZ)

**\*Project Title/Description:**

El Vado Wash Drainage Improvement (5ELVDO)

**\*Purpose:**

Award: Contract No. CT-FC-18-335. This award of contract is to provide design services and construction documents in a not-to-exceed amount of \$407,134.00 for a contract term from 05/01/18 to 12/31/19. Administering Department: Regional Flood Control District.

**\*Procurement Method:**

Pursuant to the Direct Selection authority of A.R.S. § 34-103, award for Requisition No. 294876 is recommended to the above-named consultant which has accepted the terms of the District's standard contract and with which the District has negotiated a satisfactory agreement.

Attachments: Direct Select Request Memo and Contract.

**\*Program Goals/Predicted Outcomes:**

Develop the design and construction documents for the first of the drainage improvements recommended by the Airport Wash South Basin Management Study (Study). The contract will provide design and construction documents for a detention basin adjacent to the New Hope Methodist Church, a culvert beneath Santa Clara Avenue, reconstruction of Calle Medina and a storm drain beneath Calle Sevilla outletting north on Pinta Avenue at the existing I-19 culvert. The design and construction documents produced by this contract will be used to permit, bid and construct the proposed improvements under separate contract.

**\*Public Benefit:**

The addition of the culvert across Santa Clara Avenue between Calle Medina and Calle Aragon will provide 100-year access to Santa Clara Avenue across El Vado Wash. This is the first phase of the proposed improvements outlined in the Study that will together modify the Federal Emergency Management Agency's (FEMA) 100 - year floodplain for El Vado Wash, relieving the impact of flood insurance on the adjacent neighborhood.

**\*Metrics Available to Measure Performance:**

Successful implementation of this contract will be measured by the production of construction documents necessary to permit, bid and construct the proposed improvements.

**\*Retroactive:**

No.

To: CoB- 4-17-18  
Ver. 1  
Pgs. 52  
(1)

**Contract / Award Information**

Document Type: CT Department Code: FC Contract Number (i.e., 15-123): 18-335

Effective Date: 05/01/18 Termination Date: 12/31/19 Prior Contract Number (Synergen/CMS): \_\_\_\_\_

Expense Amount: \$\* 407,134.00  Revenue Amount: \$ \_\_\_\_\_

\*Funding Source(s) required: Flood Control District Tax Levy

Funding from General Fund?  Yes  No If Yes \$ \_\_\_\_\_ % \_\_\_\_\_

Contract is fully or partially funded with Federal Funds?  Yes  No

\*Is the Contract to a vendor or subrecipient? \_\_\_\_\_

Were insurance or indemnity clauses modified?  Yes  No

If Yes, attach Risk's approval

Vendor is using a Social Security Number?  Yes  No

If Yes, attach the required form per Administrative Procedure 22-73.

**Amendment / Revised Award Information**

Document Type: \_\_\_\_\_ Department Code: \_\_\_\_\_ Contract Number (i.e., 15-123): \_\_\_\_\_

Amendment No.: \_\_\_\_\_ AMS Version No.: \_\_\_\_\_

Effective Date: \_\_\_\_\_ New Termination Date: \_\_\_\_\_

Prior Contract No. (Synergen/CMS): \_\_\_\_\_

Expense or  Revenue  Increase  Decrease Amount This Amendment: \$ \_\_\_\_\_

Is there revenue included?  Yes  No If Yes \$ \_\_\_\_\_

\*Funding Source(s) required: \_\_\_\_\_

Funding from General Fund?  Yes  No If Yes \$ \_\_\_\_\_ % \_\_\_\_\_

**Grant/Amendment Information** (for grants acceptance and awards)  Award  Amendment

Document Type: \_\_\_\_\_ Department Code: \_\_\_\_\_ Grant Number (i.e., 15-123): \_\_\_\_\_

Effective Date: \_\_\_\_\_ Termination Date: \_\_\_\_\_ Amendment Number: \_\_\_\_\_

Match Amount: \$ \_\_\_\_\_  Revenue Amount: \$ \_\_\_\_\_

\*All Funding Source(s) required: \_\_\_\_\_

\*Match funding from General Fund?  Yes  No If Yes \$ \_\_\_\_\_ % \_\_\_\_\_

\*Match funding from other sources?  Yes  No If Yes \$ \_\_\_\_\_ % \_\_\_\_\_

\*Funding Source: \_\_\_\_\_

\*If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)? \_\_\_\_\_

Contact: Matt Sage, Procurement Officer *Matt Sage* 4-518

Department: Procurement *Procurement* Telephone: 724-8586

Department Director Signature/Date: *[Signature]* 4/11/18

Deputy County Administrator Signature/Date: *[Signature]* 4/11/18

County Administrator Signature/Date: *[Signature]* 4/11/18  
(Required for Board Agenda/Addendum Items)

**DATE:** April 2, 2018

**TO:** Mary Jo Furphy, Director  
Procurement Department

**FROM:** Suzanne Shields  
Director

**SUBJECT:** El Vado Wash Drainage Improvement Design Phase 1 – Direct Selection Request

The purpose the El Vado Wash Drainage Improvement Design Phase 1 is to provide design plans for the first of the drainage improvements recommended by the Airport Wash South Basin Management Plan. This contract will provide design and construction documents for a detention basin adjacent to the New Hope Methodist Church, a culvert beneath Santa Clara Avenue, reconstruction of Calle Medina and a storm drain beneath the Calle Sevilla outletting north on Pina Avenue at the existing I-19 culvert. The estimated cost is \$407,134 (attached).

This project is located within the City of Tucson (City). An Intergovernmental Agreement is in progress between the City and the Regional Flood Control District (District). The City will commit to a 25% cost share for the improvements and take ownership and maintenance responsibility of the improvements after construction.

In August 2013, CMG Drainage Engineering, Inc. was awarded a contract for the Airport Wash Basin Management Study. The District recommends the direct selection of CMG Drainage Engineering Inc., as they are uniquely qualified due to their past experience and knowledge specific to the area gained over the course of their prior work.

The District considers the Scope of Work (attached) acceptable; therefore, pursuant to A.R.S. § 34-103 and Board of Supervisors Policy 29.1 C, the District is requesting your approval for this direct select.

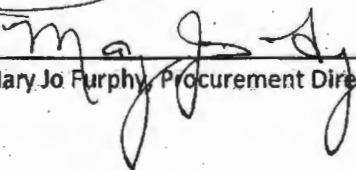
If you have any questions, please call me at 724-4680.

SS/tj

Attachment

c: Carmine DeBonis, Deputy County Administrator – Public Works  
Eric Shepp, P.E., Deputy Director – Regional Flood Control District  
Andy Dinauer, P.E., Division Manager – Regional Flood Control District

APPROVED / DENIED

  
Mary Jo Furphy, Procurement Director

4/3/18  
Date

<b>PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT</b>	
<b>PROJECT:</b>	El Vado Wash Drainage Improvement (5ELVDO)
<b>CONSULTANT:</b>	CMG Drainage Engineering, Inc. 3555 North Mountain Avenue Tucson, Arizona 85719
<b>AMOUNT:</b>	Not to Exceed \$407,134.00
<b>FUNDING:</b>	Flood Control District Tax Levy

**CONTRACT**

**NO.** CT-FC-18-335

**AMENDMENT NO.** \_\_\_\_\_

This number must appear on all invoices, correspondence and documents pertaining to this contract.

(stamp here)

**CONSULTANT SERVICES CONTRACT**

This Contract is entered into between Pima County Regional Flood Control District, a special taxing District under A.R.S. Title 48, hereinafter called DISTRICT, and CMG Drainage Engineering, Inc., hereinafter called CONSULTANT, collectively referred to as the Parties.

**WITNESSETH**

**WHEREAS**, DISTRICT requires the services of a CONSULTANT registered in the State of Arizona and qualified to provide design services and construction documents for the El Vado Wash Drainage Improvement (4ELVDO); and

**WHEREAS**, CONSULTANT is qualified and willing to provide such services; and

**WHEREAS**, due to its past experience and knowledge specific to the area where the Project is to be undertaken, CONSULTANT was determined under the direct select provisions of A.R.S. §34-103 to be the best source for said work; and

**WHEREAS**, CONSULTANT has proposed to perform the work at a price acceptable to DISTRICT.

**NOW, THEREFORE**, in consideration of the foregoing recitals and other valuable and good consideration the Parties agree as follows:

**ARTICLE 1 – TERM AND EXTENSION/RENEWAL/CHANGES**

This Contract as approved by the Board of Directors commences on the May 1, 2018, and terminates on December 31, 2019, unless sooner terminated or further extended pursuant to the provisions of this Contract.

DISTRICT has the option to extend the Contract termination date for project completion. Any modification or extension of the Contract termination date will be by formal written amendment executed by the Parties. The Procurement Director or the DISTRICT Board of Directors, as required by the Pima County Procurement Code, must approve change orders to this Contract or the Scope of Services before CONSULTANT performs the work authorized by the change order.

**ARTICLE 2 – SCOPE OF SERVICES**

CONSULTANT agrees to provide design services and construction documents for the Project for the DISTRICT as described in **EXHIBIT A: SCOPE OF WORK** (4 pages), attached to this Contract.

**ARTICLE 3 – COMPENSATION AND PAYMENT**

In consideration of the services specified in this Contract, DISTRICT agrees to pay CONSULTANT Not to Exceed Four Hundred Seven Thousand One Hundred Thirty-Four Dollars and Zero Cents (\$407,134.00). CONSULTANT'S fees will be as stated in **EXHIBIT B: CONSULTANT FEE PROPOSAL** (28 of Pages), attached to this Contract. Hourly rates and all other rates included under this Contract will remain fixed throughout the term of the Contract. DISTRICT may consider adjustments to rates in connection with any extensions of the Contract term.

Unless otherwise agreed, CONSULTANT will submit invoices monthly. All invoices will be accompanied by a narrative description of the work performed during the period covered by the invoice, time accounting information, and an allocation of all direct costs, including reimbursable costs and SUBCONSULTANT charges, to the tasks identified in the Scope of Work for which those costs were incurred. The time accounting information should be sufficient to show the workers and hours worked by day for the period covered by the invoice. SUBCONSULTANT charges will be supported by appropriate documentation with each separate invoice submitted.

For the period of record retention required under Article 22, DISTRICT reserves the right to question any payment made under this article and to require reimbursement therefor by setoff or otherwise for payments determined to be improper or contrary to the Contract or law.

CONSULTANT will not perform work in excess of the Contract Amount without prior authorization by an amendment executed by DISTRICT. Work performed in excess of the Contract Amount without prior authorization by amendment is at CONSULTANT'S own risk.

#### **ARTICLE 4 – INSURANCE**

The Insurance Requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. DISTRICT in no way warrants that the minimum limits contained herein are sufficient to protect the CONSULTANT from liabilities that arise out of the performance of the work under this Contract. The CONSULTANT is free to purchase additional insurance.

CONSULTANT'S insurance will be placed with companies licensed in the State of Arizona or hold approved non-admitted status on the Arizona Department of Insurance List of Qualified Unauthorized Insurers. Insurers will have an "A.M. Best" rating of not less than A- VII. DISTRICT in no way warrants that the above-required minimum insurer rating is sufficient to protect the CONSULTANT from potential insurer insolvency.

##### **4.1 Minimum Scope and Limits of Insurance:**

CONSULTANT will procure and maintain, until all of their obligations have been discharged, coverage with limits of liability not less than those stated below.

- 4.1.1 Commercial General Liability (CGL) – Occurrence Form with limits of \$1,000,000 Each Occurrence and \$2,000,000 General Aggregate. Policy will include bodily injury, property damage, and broad form contractual liability coverage, and products – completed operations.
- 4.1.2 Business Automobile Liability – Bodily Injury and Property Damage for any owned, hired, and/or non-owned automobiles used in the performance of this Contract with a Combined Single Limit (CSL) of \$1,000,000.
- 4.1.3 Workers' Compensation and Employers' Liability - Statutory requirements and benefits. Coverage is compulsory for employers of one or more employees. Employer's Liability - \$1,000,000.  
Note: The Workers' Compensation requirement will not apply to a CONSULTANT that is exempt under A.R.S. § 23-901, and when such CONSULTANT executes the appropriate DISTRICT Sole Proprietor or Independent CONSULTANT waiver form.
- 4.1.4 Professional Liability (Errors and Omissions) Insurance – This insurance is required when soliciting work from licensed professionals. The policy limits will be not less than \$2,000,000 Each Claim and \$2,000,000 Annual Aggregate. The policy will cover professional misconduct or negligent acts for those positions defined in the Scope of Work of this contract.

In the event that the Professional Liability insurance required by this Contract is written on a claims-made basis, CONSULTANT warrants that any retroactive date under the policy will precede the effective date of this Contract and, either continuous coverage will be maintained, or an extended discovery period will be exercised, for a period of two (2) years beginning at the time work under this Contract is completed.

##### **4.2 Additional Insurance Requirements:**

The policies will include, or be endorsed to include, as required by this written agreement, the following provisions:



- 4.2.1 Additional Insured Endorsement: The General Liability and Business Automobile Liability Policies will each be endorsed to include DISTRICT, its departments, districts, boards, commissions, officers, officials, agents, and employees as additional insureds with respect to liability arising out of the activities performed by or on behalf of the CONSULTANT.
- 4.2.2 Subrogation Endorsement: The General Liability, Business Automobile Liability and Workers' Compensation Policies will each contain a waiver of subrogation endorsement in favor of DISTRICT, and its departments, districts, boards, commissions, officers, officials, agents, and employees for losses arising from work performed by or on behalf of the CONSULTANT.
- 4.2.3 Primary Insurance Endorsement: The CONSULTANT'S policies will stipulate that the insurance afforded the CONSULTANT will be primary and that any insurance carried by the Department, its agents, officials, employees or DISTRICT will be excess and not contributory insurance, as provided by A.R.S. § 41-621 (E).
- 4.2.4 Insurance provided by the CONSULTANT will not limit the CONSULTANT'S liability assumed under the indemnification provisions of this Contract.

4.3 Notice of Cancellation:

For each insurance policy required by the insurance provisions of this Contract, the CONSULTANT must provide to DISTRICT, within two (2) business days of receipt, a notice if a policy is suspended, voided, or cancelled for any reason. Such notice will be mailed, emailed, hand-delivered or sent by facsimile transmission to (Enter Contracting Agency Representative's Name, Address, and Fax Number here).

4.4 Verification of Coverage:

CONSULTANT will furnish DISTRICT with certificates of insurance (valid ACORD form or equivalent approved by DISTRICT) as required by this Contract. An authorized representative of the insurer will sign the certificates.

4.4.1 All certificates and endorsements, as required by this written agreement, are to be received and approved by DISTRICT before work commences. Each insurance policy required by this Contract must be in effect at, or prior to, commencement of work under this Contract. Failure to maintain the insurance coverages or policies as required by this Contract, or to provide evidence of renewal, is a material breach of contract.

4.4.2 All certificates required by this Contract will be sent directly to the Department. DISTRICT project or contract number and project description will be noted on the certificate of insurance. DISTRICT reserves the right to require complete copies of all insurance policies required by this Contract at any time.

4.5 Approval and Modifications:

DISTRICT Risk Management reserves the right to review or make modifications to the insurance limits, required coverages, or endorsements throughout the life of this contract, as deemed necessary. Such action will not require a formal Contract amendment but may be made by administrative action.

**ARTICLE 5 – INDEMNIFICATION**

To the fullest extent permitted by law, CONSULTANT indemnifies and holds harmless DISTRICT, its officers, employees and agents from and against any and all suits, actions, legal administrative proceedings, claims or demands and costs attendant thereto, including reasonable attorney's fees and court costs, to the extent caused by any negligent, reckless or intentionally wrongful act or omission of CONSULTANT, its agents, employees or anyone acting under its direction or control or on its behalf in connection with performance of this Contract. The obligations under this Article do not extend to the negligence of DISTRICT, its agents, employees or indemnities.

All warranty and indemnification obligations under this Contract survive expiration or termination of the Contract, unless expressly provided otherwise. Any indemnification provision inconsistent with A.R.S. § 34-226 is, in all cases, not void, but will be interpreted and applied as if it were consistent with A.R.S. § 34-226.

Upon request, CONSULTANT may fully indemnify and hold harmless any private property owner granting a right of entry to CONSULTANT for the purpose of completing the project.

**ARTICLE 6 – COMPLIANCE WITH LAWS**

CONSULTANT will comply with all applicable federal, state, and local laws, rules, regulations, standards and Executive Orders, without limitation to those designated within this Contract. The laws and regulations of the State of Arizona govern the rights of the Parties, the performance of this Contract, and any disputes hereunder. Any action relating to this Contract will be brought and maintained in Superior Court in Pima County. Any changes in the governing laws, rules, and regulations during the term of this Contract apply, but do not require an amendment.

**ARTICLE 7 – STATUS OF CONSULTANT**

The status of the CONSULTANT is that of an independent consultant and CONSULTANT is not considered an employee of Pima County and is not entitled to receive any of the fringe benefits associated with regular employment, and is not subject to the provisions of the merit system. CONSULTANT is responsible for payment of all Federal, State and Local taxes associated with the compensation received by CONSULTANT from DISTRICT. CONSULTANT is responsible for program development and operation without supervision by DISTRICT.

**ARTICLE 8 – CONSULTANT'S PERFORMANCE**

CONSULTANT will perform the work in accordance with the terms of the Contract and with the degree of care and skill required of any similarly situated Arizona registrant. CONSULTANT will employ suitably trained and skilled professional personnel to perform all required services under this Contract. Prior to changing any key personnel, especially those key personnel DISTRICT relied upon in making this Contract, CONSULTANT will obtain the approval of DISTRICT.

CONSULTANT is responsible for the professional quality, technical accuracy, timely completion, and the coordination of all its effort and other services furnished by CONSULTANT under this Agreement. Without additional compensation, CONSULTANT will correct or revise any errors, omission, or other deficiencies in all products of its efforts and other services provided. This includes resolving any deficiencies arising out of the acts or omissions of CONSULTANT found during or after the course of the services performed by or for CONSULTANT under this Agreement, regardless of DISTRICT having knowledge of or condoning or accepting the products or the services. Correction of such deficiencies will be at no cost to DISTRICT.

**ARTICLE 9 – NON-WAIVER**

The failure of DISTRICT to insist in any one or more instances upon full and complete compliance with any of the terms and provisions of this Contract or to take any action permitted as a result thereof is not a waiver or relinquishment of the right to insist upon full and complete performance of the same or any other covenant or condition either in the past or in the future. The acceptance by either party of sums less than may be due and owing it at any time is not an accord and satisfaction.

**ARTICLE 10 – SUBCONSULTANT**

CONSULTANT is fully responsible for all acts and omissions of its SUBCONSULTANT and of persons directly or indirectly employed by SUBCONSULTANT and of persons for whose acts any of them may be liable to the same extent that CONSULTANT is responsible for the acts and omissions of persons directly employed by it. Nothing in this Contract creates any obligation on the part of DISTRICT to pay or see to the payment of any money due any SUBCONSULTANT, except as may be required by law.

**ARTICLE 11 – NON-ASSIGNMENT**

CONSULTANT may not assign its rights to this Contract in whole or in part, without prior written approval of DISTRICT. DISTRICT may withhold consent to assignment at its sole discretion, provided that DISTRICT will not unreasonably withhold such approval.

## **ARTICLE 12 – NON-DISCRIMINATION**

CONSULTANT will comply with all provisions and requirements of Arizona Executive Order 2009-09 which is hereby incorporated into this Contract as if set forth in full herein **including flow down of all provisions and requirements to any SUBCONSULTANTS**. During the performance of this Contract, CONSULTANT will not discriminate against any employee, client or any other individual in any way because of that person's age, race, creed, color, religion, sex, disability or national origin.

## **ARTICLE 13 – AMERICANS WITH DISABILITIES ACT**

CONSULTANT will comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, including 28 CFR Parts 35 and 36. If CONSULTANT is carrying out government programs or services on behalf of DISTRICT, then CONSULTANT will maintain accessibility to the program to the same extent and degree that would be required of the DISTRICT under 28 CFR Sections 35.130, 35.133, 35.149 through 35.151, 35.160, 35.161 and 35.163. Failure to do so could result in the termination of this Agreement.

## **ARTICLE 14 – CANCELLATION FOR CONFLICT OF INTEREST**

This Contract is subject to the provisions of A.R.S. §38-511 which provides in pertinent part:

"The state, its political subdivisions or any department of either may, within three years after its execution, cancel any contract, without penalty or further obligation, made by the state, its political subdivisions, or any of the departments or agencies of either if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the state, its political subdivisions or any of the departments or agencies of either is, at any time, while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or a consultant to any other party to the contract with respect to the subject matter of the contract."

## **ARTICLE 15 – TERMINATION OF CONTRACT FOR DEFAULT**

- A. Upon a failure by CONSULTANT to cure a default under this Contract within ten (10) days of receipt of notice from DISTRICT of the default, DISTRICT may, in its sole discretion, terminate this Contract for default by written notice to CONSULTANT. In this event, DISTRICT may take over the work and complete it by Contract or otherwise. The CONSULTANT and its sureties, if any, will be liable for any damage to the DISTRICT resulting from CONSULTANT'S default, including any increased costs incurred by DISTRICT in completing the work.
- B. The occurrence of any of the following constitutes an event of default:
1. Abandonment of or refusal or failure to prosecute the work or any separable part thereof with the diligence that will insure completion within the time specified in this Contract, including any extension, or a failure to complete the work (or the separable part of the work) within the specified time;
  2. Persistent or repeated refusal or failure to supply enough properly skilled workers or materials to perform the work on schedule;
  3. Failure to provide competent supervision at the site;
  4. Failure to take down, rebuild, repair, alter or amend any defective or deficient work, or remove any defective or deficient Material
  5. Failure to make prompt payment to subconsultants or suppliers for material or labor;
  6. Loss of CONSULTANT'S business or other required license or authority, or any curtailment or cessation for any reason of business or business operations that would substantially impair or preclude CONSULTANT'S performance of this Contract;
  7. Disregard of laws, ordinances, or the instructions of DISTRICT or its representatives, or any otherwise substantial violation of any provision of the Contract; or
  8. If a voluntary or involuntary action for bankruptcy is commenced with respect to CONSULTANT, or CONSULTANT becomes insolvent, makes a general assignment for the benefit of creditors, or has a receiver or liquidator appointed in respect of its assets.



- C. In the event of a termination for default:
1. All finished and unfinished as-builts, shop drawings, documents, data, studies, surveys, drawings, photographs, reports and other information in whatever form, including electronic, acquired or prepared by CONSULTANT for this project become DISTRICT'S property and will be delivered to DISTRICT not later than five (5) business days after the effective date of the termination;
  2. DISTRICT may withhold payments to CONSULTANT arising under this or any other Contract for the purpose of set-off until such time as the exact amount of damage due DISTRICT from CONSULTANT is determined; and
  3. Subject to the immediately preceding subparagraph (2), DISTRICT'S liability to CONSULTANT will not exceed the reasonable value of work satisfactorily performed prior to the date of termination for which payment has not been previously made.
- D. The Contract will not be terminated for default nor CONSULTANT charged with damages under this Article, if—
1. Excepting item (8) in paragraph B above, the event of default or delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the CONSULTANT. Examples of such causes include—
    - (i) Acts of God or of the public enemy,
    - (ii) Acts of DISTRICT in either its sovereign or contractual capacity,
    - (iii) Acts of another consultant in the performance of a Contract with the DISTRICT,
    - (iv) Fires,
    - (v) Floods,
    - (vi) Epidemics,
    - (vii) Quarantine restrictions,
    - (viii) Strikes,
    - (ix) Freight embargoes,
    - (x) Unusually severe weather, or
    - (xi) Delays of subconsultants or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both CONSULTANT and the subconsultants or suppliers; and
  2. CONSULTANT, within three (3) days from the beginning of any event of default or delay (unless extended by DISTRICT), notifies DISTRICT in writing of the cause(s) thereof. In this circumstance, DISTRICT will ascertain the facts and the extent of the resulting delay. If, in the judgment of DISTRICT, the findings warrant such action, DISTRICT may extend the time for completing the work.
- E. For the purposes of paragraph A above, "receipt of notice" includes receipt by hand by CONSULTANT'S onsite project manager, facsimile transmission, or under the Notices clause of this Contract.
- F. If, after termination of the Contract for default, it is determined that CONSULTANT was not in default, or that the delay was excusable, the rights and obligations of the Parties will be the same as if the termination had been issued for the convenience of DISTRICT.
- G. The rights and remedies of DISTRICT in this Article are cumulative and in addition to any other rights and remedies provided by law or under this Contract.

#### **ARTICLE 16 – TERMINATION FOR CONVENIENCE OF DISTRICT**

DISTRICT may terminate this Contract at any time by giving written notice to CONSULTANT of such termination and specifying the effective date thereof, at least fifteen (15) days before the effective date of such termination. In that event, all finished or unfinished documents and other materials will, at the option of the DISTRICT, become its property. If DISTRICT terminates the Contract as provided herein, DISTRICT will pay CONSULTANT an amount based on the time and expenses incurred by CONSULTANT prior to the termination date. However, DISTRICT will make no payment for anticipated profit on unperformed services.

**ARTICLE 17 – NON-APPROPRIATION OF FUNDS**

Notwithstanding any other provision in this Contract, this Contract may be terminated if for any reason the Pima County Regional Flood Control District Board of Directors does not appropriate sufficient monies for the purpose of maintaining this Contract. In the event of such termination, DISTRICT will have no further obligation to CONSULTANT, other than payment for services rendered prior to termination.

**ARTICLE 18 – NOTICES**

Any notice required or permitted to be given under this Contract will be in writing and will be served by delivery or by certified mail upon the other party as follows:

**DISTRICT:**

Suzanne Shields, Director  
Pima County Regional Flood Control District  
201 N. Stone Avenue, 9<sup>th</sup> Floor  
Tucson, Arizona 85701  
Phone: (520) 724-4681

**CONSULTANT:**

Jerry Curless  
CMG Drainage Engineering, Inc.  
3555 N. Mountain Avenue  
Tucson, Arizona 85719  
Phone: (520) 209-1507

**ARTICLE 19 – OTHER DOCUMENTS**

CONSULTANT and DISTRICT in entering into this Contract have relied upon information provided in CONSULTANT'S response to a request for fee proposal. These documents are hereby incorporated into and made a part of this Contract as if set forth in full herein, to the extent not inconsistent with the provisions of this Contract. CONSULTANT will perform services in accordance with the terms of the Contract and at a level of care consistent with prevailing industry standards. In the event any provision of this Contract is inconsistent with those of any other document, the Contract provisions will prevail.

**ARTICLE 20 – REMEDIES**

Either Party may pursue any remedies provided by law for the breach of this Contract, provided, however, that the procedures in ARTICLE 24 are first exhausted. No right or remedy is intended to be exclusive of any other right or remedy and each is cumulative and in addition to any other right or remedy existing at law or at equity or by virtue of this Contract.

**ARTICLE 21 – SEVERABILITY**

Each provision of this Contract stands alone, and any provision of this Contract found to be prohibited by law will be ineffective to the extent of such prohibition without invalidating the remainder of this Contract.

**ARTICLE 22 – BOOKS AND RECORDS**

CONSULTANT will keep and maintain proper and complete books, records and accounts, which will be open at all reasonable times for inspection and audit by duly authorized representatives of DISTRICT.

CONSULTANT will retain all records relating to this Contract at least five (5) years after its termination or cancellation or until any related pending proceeding or litigation has been closed, if later. Alternatively, CONSULTANT may, at its option, deliver such records to DISTRICT for retention.

**ARTICLE 23 – DELAYS**

Neither Party hereto will be in default in the performance of its obligations hereunder to the extent that the performance of any such obligation is prevented or delayed by any cause, existing or future, which is beyond the reasonable control of such Party.

## **ARTICLE 24 – DISPUTES**

In the event of a dispute between DISTRICT and CONSULTANT regarding any part of this Contract or the Parties' obligations or performance hereunder, either Party may request a special meeting between their respective representatives to resolve the dispute. If the dispute remains unresolved, then either Party may request escalation of the issue to a meeting between the Director of the Pima County Regional Flood Control District and CONSULTANT'S counterpart official, such meeting to be held within one week of the request, unless otherwise agreed. If the dispute is still not resolved after that meeting, then either Party may pursue such remedy or remedies as may be available to them under the laws of the State of Arizona.

The Parties will continue performance of their respective obligations under this Contract notwithstanding the existence of any dispute.

## **ARTICLE 25 – OWNERSHIP OF DOCUMENTS**

All original drawings, field data, estimates, field notes, plans, specifications, documents, reports, calculations, and other information developed by CONSULTANT under this Contract vest in and become the property of DISTRICT and will be delivered to DISTRICT upon completion or termination of the services, but CONSULTANT may retain and use copies thereof. DISTRICT agrees that the material will not be used for any project other than the project for which it was designed without the express permission of CONSULTANT.

## **ARTICLE 26 – PUBLIC INFORMATION**

Pursuant to A.R.S. § 39-121 et seq., and A.R.S. §§ 34-603(H), 604(H), in the case of construction or Architectural and Engineering services procured under A.R.S. Title 34, Chapter 6, all information submitted by CONSULTANT in any way related to this Contract, including, but not limited to, pricing, product specifications, work plans, and any supporting data becomes public information and upon request, is subject to release and/or review by the general public including competitors.

Any information submitted related to this Contract that CONSULTANT believes constitutes proprietary, trade secret or otherwise confidential information must be appropriately and prominently marked as CONFIDENTIAL prior to submittal to DISTRICT and be accompanied by an index specifically identifying and describing the general contents of each page so marked. The index is a Public Record and should not include any information considered confidential.

Notwithstanding the above provisions, in the event records marked CONFIDENTIAL are requested for public release pursuant to A.R.S. § 39-121 et seq., DISTRICT will release records marked CONFIDENTIAL ten (10) business days after the date of notice to CONSULTANT of the request for release, unless CONSULTANT has, within the ten (10) day period, secured a protective order, injunctive relief or other appropriate order from a court of competent jurisdiction, enjoining the release of the records. For the purposes of this paragraph, the day of the request for release is not counted in the time calculation. CONSULTANT will be notified of any request for such release on the same day of the request for public release or as soon thereafter as practicable.

DISTRICT will not, under any circumstances, be responsible for securing a protective order or other relief enjoining the release of records marked CONFIDENTIAL, nor will DISTRICT be in any way financially responsible for any costs associated with securing such an order.

## **ARTICLE 27 – LEGAL ARIZONA WORKERS ACT COMPLIANCE**

CONSULTANT will at all times during the term of this Contract comply with all federal immigration laws applicable to CONSULTANT'S employment of its employees, and with the requirements of A.R.S. § 23-214 (A) (together the "State and Federal Immigration Laws"). CONSULTANT will further ensure that each SUBCONSULTANT who performs any work for CONSULTANT under this Contract likewise complies with the State and Federal Immigration Laws.

DISTRICT has the right at any time to inspect the books and records of CONSULTANT and any SUBCONSULTANT in order to verify such Party's compliance with the State and Federal Immigration Laws.

Any breach of CONSULTANT'S or any SUBCONSULTANT'S warranty of compliance with the State and Federal Immigration Laws, or of any other provision of this section, is a material breach of this Contract subjecting CONSULTANT to penalties up to and including suspension or termination of this Contract. If the breach is by a SUBCONSULTANT, and the subcontract is suspended or terminated as a result, CONSULTANT will be required to take such steps as may be necessary to either self-perform the services that would have been provided under the subcontract or retain a replacement SUBCONSULTANT (subject to DISTRICT approval if SBE or DBE preferences apply), as soon as possible so as not to delay project completion.

CONSULTANT will advise each SUBCONSULTANT of DISTRICT'S rights, and the SUBCONSULTANT'S obligations, under this Article by including a provision in each subcontract substantially in the following form:

"SUBCONSULTANT hereby warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to SUBCONSULTANT'S employees, and with the requirements of A.R.S. § 23-214 (A). SUBCONSULTANT further agrees that DISTRICT may inspect the SUBCONSULTANT'S books and records to insure that SUBCONSULTANT is in compliance with these requirements. Any breach of this paragraph by SUBCONSULTANT is a material breach of this Contract subjecting SUBCONSULTANT to penalties up to and including suspension or termination of this Contract."

Any additional costs attributable directly or indirectly to remedial action under this Article is the responsibility of CONSULTANT. In the event that remedial action under this Article results in delay to one or more tasks on the critical path of CONSULTANT'S approved construction or critical milestones schedule, such period of delay will be excusable delay for which CONSULTANT will be entitled to an extension of time, but not costs.

**ARTICLE 28 – ISRAEL BOYCOTT CERTIFICATION**

CONSULTANT hereby certifies that it is not currently engaged in, and will not for the duration of this Contract engage in, a boycott of Israel as defined by A.R.S. § 35-393.01. Violation of this certification by CONSULTANT may result in action by the DISTRICT up to and including termination of this Contract.

***The remainder of this page intentionally left blank.***

**ARTICLE 29 – ENTIRE AGREEMENT**

This document constitutes the entire agreement between the Parties pertaining to the subject matter hereof, and all prior or contemporaneous agreements and understandings, oral or written, are hereby superseded and merged herein. This Contract may be modified, amended, altered or extended only by a written Amendment signed by the Parties.

IN WITNESS WHEREOF, the Parties have affixed their signatures to this Contract on the dates written below.

PIMA COUNTY REGIONAL:  
FLOOD CONTROL DISTRICT

CONSULTANT:

\_\_\_\_\_  
Chairman, Board of Directors

Jerald L. Curless  
Signature

\_\_\_\_\_  
Date

JERALD L. CURLESS, VICE PRES.  
Name and Title (Please Print)

4/16/18  
Date

ATTEST:

\_\_\_\_\_  
Clerk of the Board

APPROVED AS TO FORM:

[Signature]  
Deputy County Attorney

**TOBIN ROSEN**

\_\_\_\_\_  
Name (Please Print)

4/11/18  
Date



# EXHIBIT A: SCOPE OF WORK (4 PAGES)

El Vado Wash Drainage Improvements Design

## SCOPE OF WORK

April 3, 2018

This scope of work has been prepared by CMG Drainage Engineering, Inc. (CMG) to provide the Pima County Regional Flood Control District (PCRFCD) with professional civil engineering designs suitable for construction of flood hazard mitigation alternative projects EV5 & EV7 from the 2014 Airport Wash Basin Management Study (AWBMS). EV5 & EV7 may also be hereinafter referred to as the El Vado Wash Phase 1 projects. Kimley-Horn (KHA) will also provide professional engineering design services for this project as a sub-consultant to CMG. KHA's scope of work is appended to this document and is incorporated as part of the overall project scope. CMG will provide all H&H design as well as construction documents for the detention basin. KHA will provide civil design and construction documents for all remaining components of the project as outlined in their attached scope of work.

The project scope includes, but is not limited to, land surveying, engineering and geotechnical field investigations, environmental assessments, stormwater systems hydraulic design, preparation of construction plans, documents and cost estimates, Arizona Department of Transportation (ADOT) right-of-way permitting, public involvement support and coordination.

### Task 1: Project Management & Meetings

- CMG will perform project management services that include invoicing, meeting attendance, meeting minute preparation, coordination with PCRFCD, City of Tucson (COT), and sub-consultants.
- Project meetings to include six (6) project update meetings in addition to submittal review meetings at 30%, 60% and 100% milestones.
- This scope of work is based on an 18-month project schedule

### Task 2: Project Initiation & Investigation

- CMG will coordinate with the PCRFCD and sub-consultants to initiate project
- CMG will schedule, attend and prepare meeting agenda and minutes for project kick-off meeting
- Conduct up to 2 site visits in coordination with PCRFCD and subconsultants to collect information and record site conditions pertinent to the design

#### Sub-task 2.1: Land Surveying Services

- CMG and KHA will coordinate field survey needs with Pima Co Survey
- Ashby Surveying and Drafting (Ashby) will establish Vertical (NAVD88) and Horizontal control with ties/conversions to NAD83 HARN, AZ State Plane Central GRID coordinates. Ashby will also provide right-of-way and property acquisition, e.g. Hope Church parcel and any drainage easements needed, land survey services and prepare legal descriptions for the project as a sub-consultant to KHA & CMG. Ashby's scope of work is appended to this document and is incorporated as part of the overall project scope.
- CMG will coordinate right-of-way and Hope Church parcel boundary survey needs with KHA and Ashby Surveying

Sub-task 2.2: Existing Utility Locations

- Cardno will provide utility location services for the project as a sub-consultant to KHA & CMG. The utility location scope is more fully described in KHA's attached scope and Cardno's scope of work is appended to this document and is incorporated as part of the overall project scope.

Sub-task 2.3: Geotechnical Services

- Ninyo and Moore will provide geotechnical services for the project as a sub-consultant to KHA & CMG. Ninyo and Moore's scope of work is appended to this document and is incorporated as part of the overall project scope.

Sub-task 2.4: Environmental Services

- Ninyo and Moore and Ecoplan will provide environmental services for the project as sub-consultants to KHA & CMG. The environmental services scope is more fully described in KHA's attached scope and Ninyo and Moore's and Ecoplan's scopes of work are appended to this document and are incorporated as part of the overall project scope.

Task 3: 30% Concept Package & Over-the-Shoulder Review

CMG & KHA will present an informal plan & cost estimate submittal package, with FLO-2D hydrologic & hydraulic (H&H) support, to PCRFCO & COT at 30% progress meeting. This submittal is to flesh out design of the EV5 and EV7 components, i.e. detention basin, outlet structures, storm drain installation along Calle Sevilla and Pinta Ave., street reconstruction along Calle Medina, culvert installation and street reconstruction on Santa Clara Ave. The presentation will include summary and review of the following items during the meeting:

- Preliminary Drainage Design Report
- Plan view roll plot of proposed improvements
- Preliminary construction cost estimate (show EV7 (Santa Clara culvert crossing) as separate cost item on estimate)

Task 4: Construction Documents

CMG & KHA will prepare construction documents for the AWBMS EV5 and EV7 components as described above in Task 3 in accordance with PCRFCO and PCDOT guidelines, standards, and procedures. Sixty (60)%, and draft & final 100% documents will be submitted to the District, City of Tucson, ADOT, and utilities. For the 60% and draft 100% submittals, the Consultants will provide comment response letters and attend submittal review meetings with the project team. Construction documents will include, but are not limited to:

- Plan sets with sheets for demolition, grading, utilities, drainage structures, access, paving and curb modifications, right-of-way and others as needed.
- Special specification provisions
- Construction cost estimates
- Legal descriptions for properties and/or easements to be acquired
- ADOT permitting documents

Sub-task 4.1: 60% Phase

- Prepare updated Drainage Design Report
- Prepare ADOT Drainage Statement
- Prepare 60% Construction plans and Cost Estimate that address 30% comments
- Plans will be at 1" = 20' and the cost estimate will utilize Pima County bid item numbers.

## El Vado Wash Drainage Improvements Design – Scope of Work

- Prepare irrigation and seeding designs for ground cover/erosion control within the proposed detention basin
- Prepare Stormwater Pollution Prevention Plan (SWPPP) that covers entire project including Santa Clara Ave. culvert, detention basin and Calle Medina and Calle Sevilla improvements

### Sub-task 4.2: 100% PS&E Phase

- Finalize Drainage Design Report that addresses 60% comments
- Finalize ADOT Drainage Statement that addresses 60% comments
- Prepare Final Plans, Special Provisions and Cost Estimate that address 60% comments

### Task 5: El Vado Phase 1 Projects EV5 and EV7 LOMR Feasibility Evaluation

Prepare Feasibility Letter Report that evaluates the floodplain management benefits of submitting a post-construction LOMR as an interim condition with only the Phase 1 improvements (EV5 & EV7) in place. The report will include an inventory of properties that would benefit from the Phase 1 improvements.

### Task 6: Public Involvement Support

- CMG will prepare presentation boards/graphics as needed for COT and/or PCRFCO for stakeholder or public meetings
- CMG & KHA attendance at stakeholder or public meetings is excluded from this project scope of work
- Kaneen will provide limited public involvement services for the project as a sub-consultant to CMG. Kaneen's scope of work will include attendance at up to twelve (12) project team meetings, service as PCRFCO's public relations representative for interactions with neighborhood associations, project-area residents (Barrio Nopal Neighborhood Association, New Hope United Methodist Church) elected officials and the public at large, and for coordination for public meetings as needed.

### Task 7: Additional Services

Additional services are speculative in nature as the need for them, and the ultimate level of effort to be required is unknown. Therefore, relative budgets for each of these potential tasks have been identified, but may be further defined, and or modified, should the need for them or other efforts arise as part of the overall scope of work.

#### Sub-task 7.1: Water Modification Plans

- As needed, KHA will prepare water modification plans for the project as a sub-consultant to CMG. This work is more fully described in KHA's attached scope of work.

#### Sub-task 7.2: Sewer Protection or Modification Plans

- As needed, KHA will prepare sewer protection details to protect existing sewer in-place or sewer modification plans due to impacts to the existing sewer lines within the project as a sub-consultant to CMG. This work is more fully described in KHA's attached scope of work.

#### Sub-task 7.3: Detention Basin Landscape and Fencing Plans

- As needed, KHA will prepare landscape plans for the detention basin as a sub-consultant to CMG as described in KHA's attached scope of work. The Landscape Plans will include plantings along the detention basin slopes, irrigations plans, and fencing details.

## El Vado Wash Drainage Improvements Design – Scope of Work

### Sub-task 7.4: Pre-bid Services

- As needed, CMG and KHA will assist the PCRFC D with Pre-Bid Services which may include but are not limited to the following: Attending pre-bid meeting, assisting in the preparation of addendums, addressing questions on the plans and specifications, and bid evaluations.
- For budgeting services, CMG has assumed a maximum of 30 hours and KHA has assumed a maximum of 60 hours for this task:

### Sub-task 7.5: Flood Hazard Mapping for 10-year Storm

- If needed, CMG will prepare comparative 10-year pre-project and post-project floodplain mapping based on FLO-2D modeling to demonstrate the 10-year flood hazard reductions resulting from the El Vado Wash Phase 1 improvements (EV5 & EV7).

### Sub-task 7.6: Owner's Contingency

- The District shall have a contingency task to account for the unknown. Services performed under this task are at the discretion of the District and will only be authorized in writing by the District's Project Manager. This task can be utilized for unforeseen items that are not specifically outlined in the scope of services, but that become required as the project progresses.

### Deliverables:

- Preliminary Drainage Design Reports (30%, & 60%) – Electronic (pdf) submittal only
- Final Drainage Design Report (100%) – 2 hard copies
- ADOT Drainage Statements (draft & final) – 1 hard copy each
- 30% Concept Plan – Plan-view roll plot only
- Construction Documents (60%) – 4 hard copies (Cost Est & Specs.), 4 half-size plan sets each
- Construction Documents (100% PS&E) – 2 hard copies (Cost Est & Specs.), 2 half-size plan sets
- Task 5 LOMR Evaluation Letter Report – Electronic (pdf) submittal only

### Assumptions:

- Pima County Survey will complete a field survey of all above ground utility appurtenances, hardscape, and all other features necessary to provide a 1' contour interval topographic survey of the entire project area including individual properties needing survey for elevation certificates. The level of detail will be enough to confirm existing locations and conditions and support the subsequent detailed design activities.
- Pima County will provide all Cultural & Biological clearances required for the project
- Pima County will provide USACE Section 404 permitting services for the project
- COT will provide construction permit coordination

### Exclusions:

- Traffic control plans
- Environmental services/clearances other than those included in Sub-task 2.4
- Post-design services
- Record Drawings (As-Builts)

# EXHIBIT B: CONSULTANT FEE PROPOSAL (28 PAGES)



## CMG DRAINAGE ENGINEERING, INC.

3555 N. Mountain Ave. • P.O. Box 64880 (mail) • Tucson, AZ 85728 • phone: (520) 882-4244 • fax: (520) 888-1421

### PROJECT COST SUMMARY BY TASK

Project Name: El Vado Wash Drainage Improvements Design

Date: April 3, 2018

#### I. ESTIMATE OF DIRECT LABOR

<b>Task 1: Project Management &amp; Meetings</b>	
CMG Drainage Engineering	\$ 25,485.00
Kimley-Horn & Associates	\$ 31,093.00
Sub-Total	\$ 56,578.00
<b>Task 2: Project Initiation &amp; Investigation</b>	
CMG Drainage Engineering	\$ 3,740.00
Kimley-Horn & Associates	\$ 5,287.00
Sub-Total	\$ 9,027.00
<b>Sub-task 2.1: Land Surveying Services</b>	
CMG Drainage Engineering	\$ 1,170.00
Kimley-Horn & Associates	\$ 880.00
Ashby Surveying & Drafting	\$ 19,019.00
Sub-Total	\$ 21,069.00
<b>Sub-task 2.2: Existing Utility Locations</b>	
CMG Drainage Engineering	\$ 500.00
Kimley-Horn & Associates	\$ 4,114.00
Cardno	\$ 17,000.00
Sub-Total	\$ 21,614.00
<b>Sub-task 2.3: Geotechnical Services</b>	
CMG Drainage Engineering	\$ 750.00
Kimley-Horn & Associates	\$ 880.00
Ninyo & Moore	\$ 13,100.00
Sub-Total	\$ 14,730.00
<b>Sub-task 2.4: Environmental Services</b>	
CMG Drainage Engineering	\$ 500.00
Kimley-Horn & Associates	\$ 1,767.00
Ninyo & Moore	\$ 4,865.00
Ecoplan	\$ 4,116.00
Sub-Total	\$ 11,248.00
Task 2 Sub-Total	\$ 77,688.00
<b>Task 3: 30% Concept Package &amp; Over-the-Shoulder Review</b>	
CMG Drainage Engineering	\$ 34,480.00
Kimley-Horn & Associates	\$ 12,316.00
Sub-Total	\$ 46,796.00
<b>Task 4: Construction Documents</b>	
<b>Sub-task 4.1: 60% Phase</b>	
CMG Drainage Engineering	\$ 10,040.00
Kimley-Horn & Associates	\$ 47,547.00
Sub-Total	\$ 57,587.00



<b>Sub-task 4.2: 100% PS&amp;E Phase</b>	
CMG Drainage Engineering	\$ 9,330.00
Kimley-Horn & Associates	\$ 44,373.00
<b>Sub-Total</b>	<b>\$ 53,703.00</b>
<b>Task 4 Sub-Total</b>	<b>\$ 111,290.00</b>
<b>Task 5: El Vado Phase 1 Projects EV5 and EV7 LOMR Feasibility Evaluation</b>	
CMG Drainage Engineering	\$ 5,025.00
<b>Sub-Total</b>	<b>\$ 5,025.00</b>
<b>Task 6: Public Involvement Support</b>	
CMG Drainage Engineering	\$ 4,100.00
Kaneen Advertising & Public Relations	\$ 4,950.00
<b>Sub-Total</b>	<b>\$ 9,050.00</b>
<b>Task 7: Additional Services</b>	
<b>Sub-task 7.1: Water Modification Plans</b>	
CMG Drainage Engineering	\$ 250.00
Kimley-Horn & Associates	\$ 26,649.00
<b>Sub-Total</b>	<b>\$ 26,899.00</b>
<b>Sub-task 7.2: Sewer Protection or Modification Plans</b>	
CMG Drainage Engineering	\$ 1,000.00
Kimley-Horn & Associates	\$ 19,956.00
<b>Sub-Total</b>	<b>\$ 20,956.00</b>
<b>Sub-task 7.3: Detention Basin Landscape and Fencing Plans</b>	
CMG Drainage Engineering	\$ 500.00
Kimley-Horn & Associates	\$ 11,503.00
<b>Sub-Total</b>	<b>\$ 12,003.00</b>
<b>Sub-task 7.4: Pre-bid Services</b>	
CMG Drainage Engineering	\$ 3,050.00
Kimley-Horn & Associates	\$ 7,959.00
<b>Sub-Total</b>	<b>\$ 11,009.00</b>
<b>Sub-task 7.5: Flood Hazard Mapping for 10-year Storm</b>	
CMG Drainage Engineering	\$ 6,965.00
<b>Sub-Total</b>	<b>\$ 6,965.00</b>
<b>Task 7 Sub-Total</b>	<b>\$ 77,832.00</b>
<b>TOTAL DIRECT LABOR</b>	<b>\$ 384,259.00</b>
<b>II. CONTINGENCY</b>	
Owner's Contingency (Sub-task 7.6)	\$ 20,000.00
<b>TOTAL CONTINGENCY</b>	<b>\$ 20,000.00</b>
<b>III. ESTIMATE OF DIRECT EXPENSES</b>	
CMG Drainage Engineering	\$ 850.00
Kimley-Horn & Associates	\$ 2,000.00
Kaneen Advertising & Public Relations	\$ 25.00
<b>TOTAL DIRECT EXPENSES</b>	<b>\$ 2,875.00</b>
<b>TOTAL NOT-TO-EXCEED PROJECT COST</b>	<b>\$ 407,134.00</b>



# CMG DRAINAGE ENGINEERING, INC.

3555 N. Mountain Ave. • P.O. Box 64880 (mail) • Tucson, AZ 85728 • phone: (520) 882-4244 • fax: (520) 888-1421

## FEE ESTIMATE

Project Name: El Vado Wash Drainage Improvements Design

Date: April 3, 2018

### I. CMG LABOR

Task 1: Project Management & Meetings				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	0	\$	-
Project Manager	\$ 125.00	174	\$	21,750.00
Project Engineer	\$ 105.00	27	\$	2,835.00
Designer	\$ 90.00	0	\$	-
CADD Tech	\$ 60.00	15	\$	900.00
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	25,485.00
Task 2: Project Initiation & Investigation				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	0	\$	-
Project Manager	\$ 125.00	19	\$	2,375.00
Project Engineer	\$ 105.00	13	\$	1,365.00
Designer	\$ 90.00	0	\$	-
CADD Tech	\$ 60.00	0	\$	-
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	3,740.00
Sub-task 2.1: Land Surveying Services				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	0	\$	-
Project Manager	\$ 125.00	6	\$	750.00
Project Engineer	\$ 105.00	4	\$	420.00
Designer	\$ 90.00	0	\$	-
CADD Tech	\$ 60.00	0	\$	-
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	1,170.00
Sub-task 2.2: Existing Utility Locations				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	0	\$	-
Project Manager	\$ 125.00	4	\$	500.00
Project Engineer	\$ 105.00	0	\$	-
Designer	\$ 90.00	0	\$	-
CADD Tech	\$ 60.00	0	\$	-
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	500.00
Sub-task 2.3: Geotechnical Services				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	0	\$	-
Project Manager	\$ 125.00	6	\$	750.00
Project Engineer	\$ 105.00	0	\$	-
Designer	\$ 90.00	0	\$	-
CADD Tech	\$ 60.00	0	\$	-
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	750.00
Sub-task 2.4: Environmental Services				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	0	\$	-
Project Manager	\$ 125.00	4	\$	500.00
Project Engineer	\$ 105.00	0	\$	-
Designer	\$ 90.00	0	\$	-
CADD Tech	\$ 60.00	0	\$	-
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	500.00
Task 2 Sub-Total			\$	6,660.00

Task 3: 30% Concept Package & Over-the-Shoulder Review				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	4	\$	560.00
Project Manager	\$ 125.00	25	\$	3,125.00
Project Engineer	\$ 105.00	199	\$	20,895.00
Designer	\$ 90.00	70	\$	6,300.00
CADD Tech	\$ 60.00	60	\$	3,600.00
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	34,480.00

Task 4: Construction Documents				
Sub-task 4.1: 60% Phase				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	4	\$	560.00
Project Manager	\$ 125.00	24	\$	3,000.00
Project Engineer	\$ 105.00	24	\$	2,520.00
Designer	\$ 90.00	24	\$	2,160.00
CADD Tech	\$ 60.00	30	\$	1,800.00
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	10,040.00

Sub-task 4.2: 100% PS&E Phase				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	3	\$	420.00
Project Manager	\$ 125.00	27	\$	3,375.00
Project Engineer	\$ 105.00	9	\$	945.00
Designer	\$ 90.00	27	\$	2,430.00
CADD Tech	\$ 60.00	36	\$	2,160.00
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	9,330.00

Task 4 Sub-Total \$ 19,370.00

Task 5: El Vado Phase 1 Projects EV5 and EV7 LOMR Feasibility Evaluation				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	1	\$	140.00
Project Manager	\$ 125.00	8	\$	1,000.00
Project Engineer	\$ 105.00	25	\$	2,625.00
Designer	\$ 90.00	2	\$	180.00
CADD Tech	\$ 60.00	18	\$	1,080.00
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	5,025.00

Task 6: Public Involvement Support				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	0	\$	-
Project Manager	\$ 125.00	8	\$	1,000.00
Project Engineer	\$ 105.00	8	\$	840.00
Designer	\$ 90.00	8	\$	720.00
CADD Tech	\$ 60.00	24	\$	1,440.00
Clerical / Administration	\$ 50.00	2	\$	100.00
Sub-Total			\$	4,100.00

Task 7: Additional Services				
Sub-tasks 7.1: Water Modification Plans				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	0	\$	-
Project Manager	\$ 125.00	2	\$	250.00
Project Engineer	\$ 105.00	0	\$	-
Designer	\$ 90.00	0	\$	-
CADD Tech	\$ 60.00	0	\$	-
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	250.00

Sub-task 7.2: Sewer Protection or Modification Plans				
Personnel	Rate*	Hours		Fee
Project Principal	\$ 140.00	0	\$	-
Project Manager	\$ 125.00	8	\$	1,000.00
Project Engineer	\$ 105.00	0	\$	-
Designer	\$ 90.00	0	\$	-
CADD Tech	\$ 60.00	0	\$	-
Clerical / Administration	\$ 50.00	0	\$	-
Sub-Total			\$	1,000.00

Sub-task 7.3: Detention Basin Landscape and Fencing Plans			
Personnel	Rate*	Hours	Fee
Project Principal	\$ 140.00	0	\$ -
Project Manager	\$ 125.00	4	\$ 500.00
Project Engineer	\$ 105.00	0	\$ -
Designer	\$ 90.00	0	\$ -
CADD Tech	\$ 60.00	0	\$ -
Clerical / Administration	\$ 50.00	0	\$ -
Sub-Total			\$ 500.00
Sub-task 7.4: Pre-bid Services			
Personnel	Rate*	Hours	Fee
Project Principal	\$ 140.00	0	\$ -
Project Manager	\$ 125.00	10	\$ 1,250.00
Project Engineer	\$ 105.00	10	\$ 1,050.00
Designer	\$ 90.00	5	\$ 450.00
CADD Tech	\$ 60.00	5	\$ 300.00
Clerical / Administration	\$ 50.00	0	\$ -
Sub-Total			\$ 3,050.00
Sub-task 7.5: Flood Hazard Mapping for 10-year Storm			
Personnel	Rate*	Hours	Fee
Project Principal	\$ 140.00	2	\$ 280.00
Project Manager	\$ 125.00	5	\$ 625.00
Project Engineer	\$ 105.00	40	\$ 4,200.00
Designer	\$ 90.00	2	\$ 180.00
CADD Tech	\$ 60.00	28	\$ 1,680.00
Clerical / Administration	\$ 50.00	0	\$ -
Sub-Total			\$ 6,965.00
Task 7 Sub-Total			\$ 11,765.00
<b>TOTAL CMG LABOR</b>			<b>\$ 106,885.00</b>
* Includes overhead at (127)% of labor and profit at (10)% of labor and overhead.			
II. CONTINGENCY			
Owner's Contingency (Sub-task 7.6)			\$ 20,000.00
<b>TOTAL CONTINGENCY</b>			<b>\$ 20,000.00</b>
III. ESTIMATE OF CMG DIRECT EXPENSES			
Report Reproduction			\$ 100.00
Construction Document Reproduction			\$ 350.00
General large format scanning & plotting			\$ 100.00
General in-house photocopying			\$ 300.00
<b>TOTAL CMG DIRECT EXPENSES</b>			<b>\$ 850.00</b>
IV. OTHER SUBCONSULTANT SERVICES			
Supplemental Engineering Services			
Kimley-Horn & Associates, Inc.			\$ 216,324.00
Surveying Services - Ashby Surveying & Drafting, Inc.			\$ 19,019.00
Utility Mapping - Cardno			\$ 17,000.00
Geotechnical & Environmental - Ninyo & Moore			\$ 17,965.00
Environmental - Ecoplan			\$ 4,116.00
Public Relations Services			
Kaneen Advertising & Public Relations, Inc.			\$ 4,975.00
<b>TOTAL OTHER SUBCONSULTANT SERVICES</b>			<b>\$ 279,399.00</b>
<b>TOTAL NOT-TO-EXCEED PROJECT COST</b>			<b>\$ 407,134.00</b>

# Kimley»»Horn

April 2, 2018

Jerry Curless  
CMG Drainage Engineering  
3555 N. Mountain Ave. Tucson, AZ 85719  
520 882-4244

**RE: *El Vado Wash Improvements (AWBMS EV5) - Scope and Fee Calculation***

Dear Mr Curless:

Kimley-Horn is pleased to submit this Scope and Fee Calculation to CMG Drainage Engineering (CMG) to provide engineering services for the Pima County Regional Flood Control District (District). The document is organized as follows:

- Exhibit A (Scope of Work)
- Exhibit B (Derivation of Cost Proposal)
- Sub-consultant's Individual Scope of Work and Cost Derivation Sheets

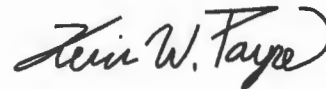
The rates provided in Exhibit B were negotiated with the QCL contract (SFQ No. 117707) and also utilized in Kimley-Horn's previous QCL assignments. We look forward to beginning work on this important assignment. Please contact Kevin Payne at (520) 352-8624 or [kevin.payne@kimley-horn.com](mailto:kevin.payne@kimley-horn.com) regarding any questions on this Scope of Work and fee calculation submittal.

Sincerely,

*Kimley-Horn*



Rick P. Solis, P.E.  
*Project Principal-in-Charge*



Kevin W. Payne, P.E., CFM  
*Project Manager*



**EXHIBIT "A" (5 PAGES)**  
**SCOPE OF SERVICES**  
**AWBMS Improvements – EV5, EV7**

**CONSULTANT SCOPE OF SERVICES FOR DESIGN**

During the term of this Contract, Kimley-Horn ("Consultant") shall perform professional services for Pima County Regional Flood Control District ("District") in connection with the above referenced project. This scope of services shall be used to plan, conduct, and complete the Consultant's work on the project.

**BACKGROUND AND ASSUMPTIONS**

This scope of work and cost proposal are based upon discussions with CMG Drainage Engineering and District staff beginning in November 2017.

The District has requested construction documents be prepared for improvement project EV5 and EV7 in the Airport Wash (South) Basin Management Study. The proposed improvements will assist in relieving flooding and all-weather access problems caused by the El Vado Wash. The project includes improvements to ***Santa Clara Ave, Calle Medina, and Calle Sevilla.***

***Santa Clara Ave*** improvements consist of a new box culvert crossing of the El Vado Wash. We assume that the box culvert along with headwalls and wingwalls will utilize standard details and structural design or calculations are not required. We also assume that the culvert will be long enough to accommodate sidewalk, but no sidewalk improvements are included in this project.

***Calle Medina*** (between Santa Clara Avenue and I-19) improvements will consist of a reconstruction of the street (between existing curbs) to include an inverted crown section and valley gutter.

***Calle Sevilla*** improvements will consist of a new storm drain flowing west from Basconia Avenue to Pinta Avenue along with a storm drain/open channel flowing north along Pinta Avenue between Calle Sevilla and Calle Medina.

The ***Santa Clara Ave*** improvements will daylight into a proposed detention basin at the southwest corner of Calle Medina and Santa Clara Avenue. Construction documents for the proposed detention basin will be prepared by CMG Drainage Engineering (CMG) and are specifically excluded from Kimley-Horn's scope of work. Hydrologic and hydraulic analysis and documentation for all improvements will be completed by CMG. Kimley-Horn will coordinate with CMG on infrastructure design/sizing.

Both the ***Calle Medina*** and ***Calle Sevilla*** improvements will daylight into the ADOT box culverts immediately west of Calle Medina and will drain the proposed detention basin at the southwest corner of Calle Medina and Santa Clara Avenue. We assume that proposed improvement will not impact existing sewer, thus sewer modification design or plans are specifically excluded. Traffic control will be the responsibility of the contractor, and is specifically excluded.

A detailed scope of services is provided below:

## **1 PROJECT MANAGEMENT - \$31,093**

The Consultant will provide project management throughout the project duration, which includes meetings with the District/stakeholders, CMG coordination, District coordination, subconsultant coordination, schedule and budget management, internal management of resources to complete the project, and Quality Assurance /Quality Control (QA/QC). The scope of work and cost proposal account for six (6) project update meetings, one (1) project kickoff meeting (see Task 2), and four (4) submittal review meetings (see Tasks 3&4).

This scope of work assumes that the District will coordinate design efforts with the City of Tucson. No meetings with the City of Tucson are anticipated. The scope of work and cost proposal assume an 18-month design schedule.

## **2 PROJECT INITIATION AND INVESTIGATION - \$12,928 (Consultant Labor Only - does not include Subconsultant Fees)**

This phase consists of work activities related to completing project initiation, surveys, and utility, geotechnical, and environmental investigations.

Project initiation shall consist of a project kickoff meeting, coordinated with the District, CMG, as well as key subconsultants and stakeholders.

Project investigation includes up to two (2) site visits along with coordination with the District, Pima County Survey, subconsultants, and utility companies.

### **2.1 Survey**

Survey(s) will be provided in accordance with the 2013 Roadway Design Manual (RDM)

ASHBY SURVEYING AND DRAFTING will establish Vertical (NAVD88) and Horizontal control for the project with ties/conversions to NAD83 HARN, AZ State Plane Central GRID coordinates. ASHBY SURVEYING AND DRAFTING will also provide right-of-way surveys for the project area along with a boundary survey for the Hope Methodist Church parcel(s).

PIMA COUNTY SURVEY will complete a field survey of all above ground utility appurtenances, hardscape, and all other features necessary to provide a 1' contour interval topographic survey of the entire project area. The level of detail shall be enough to confirm existing locations and conditions and support the subsequent detailed design activities.

Upon completion of 60% design, CONSULTANT will coordinate with ASHBY SURVEYING AND DRAFTING on preparation of legal descriptions for right-of-way/easement acquisitions or parcel split of Hope Methodist Church parcel(s). A detailed subconsultant scope is attached.

### **2.2 Utility Mapping**

Consultant will complete a Blue Stake for Design ticket and prepare utility base mapping from information provided by utility companies and Pima County Survey.

An allowance of \$17,000 is included for underground utility explorations including potholes and sewer manhole dips.

## 2.3 Geotechnical

NINYO & MOORE will complete geotechnical investigations to support detailed design activities. A detailed subconsultant scope is attached.

## 2.4 Environmental

NINYO & MOORE will complete a Phase 1 Environmental Site Assessment for the Hope Methodist Church parcel. A detailed subconsultant scope is attached.

ECOPLAN will prepare an Environmental Compliance Document in support of the ADOT Encroachment Permit.

## 3 30% CONCEPT PHASE - \$12,316

Consultant will prepare 30% concept design for the *Santa Clara Ave*, *Calle Medina*, and *Calle Sevilla* improvements. Concept design will be limited to plan view for *Calle Medina*. An alignment and profile will be generated for the *Santa Clara Ave* and *Calle Sevilla* improvements to evaluate slope of the box culvert/storm drain, cover, and potential utility conflicts. Consultant will prepare a roll plot to present the 30% design. Consultant will prepare a 30% Cost Estimate for the *Santa Clara Ave*, *Calle Medina*, and *Calle Sevilla* improvements. Consultant will attend a 30% Concept Meeting to present the Roll-Plot and Cost Estimate. Construction documents will not be prepared during this phase. This phase does not include a submittal to utilities or agencies other than the District.

## 4 CONSTRUCTION DOCUMENTS - \$91,920 (Sum of subtasks)

Consultant will prepare construction documents for the *Santa Clara Ave*, *Calle Medina*, and *Calle Sevilla* improvements in accordance with PCRFC, PCDOT, and/or COT guidelines, standards, and procedures. 60% and 100% Final documents will be submitted to the District, City of Tucson, ADOT, and utilities. Construction documents for the proposed detention basin will be prepared by CMG Drainage Engineering (CMG) and are specifically excluded from Kimley-Horn's scope of work. 60% and 100% Documents will be submitted to utilities for clearances. For each of the submittals, Consultant will provide a comment response letter and attend a submittal review meeting with the project team. Submittal review meetings are considered in addition to those in Task 1.

### 4.1 60% Phase - \$47,547

Consultant will prepare 60% Plans, Special Provisions, and Cost Estimate for the *Santa Clara Ave*, *Calle Medina*, and *Calle Sevilla* improvements. Plans will be at 1"= 20' and the cost estimate will utilize Pima County bid item numbers. A Stormwater Pollution Prevention Plan (SWPPP) and BMP sheets will be prepared at 60% and will cover the entire project, including the proposed detention basin, along with the *Santa Clara Ave*, *Calle Medina*, and *Calle Sevilla* improvements. Along with the SWPPP and BMP sheets, irrigation and seeding design will be completed for ground cover/erosion control within the

proposed detention basin. Plantings/landscape plans for beautification is considered an additional service under task 5.3.

#### **4.2 100% Final PS&E - \$44,373**

Consultant will prepare 100% Final Plans, Special Provisions, and Cost Estimate based upon 60% comments.

### **5 ADDITIONAL SERVICES - \$66,067 (Sum of subtasks)**

Additional services are speculative in nature as the need for them, and the ultimate level of effort to be required is unknown. Therefore, relative budgets for each of these potential tasks have been identified, but may be further defined, and or modified, should the need for them or other efforts arise as part of the overall scope of work.

#### **5.1 Water Modification Plans - \$26,649**

As needed, Consultant will prepare water modification plans due to impacts to existing potable water lines within the project. For budgeting purposes, we assume a maximum of 240 hours total for Task 5.1, which include up to two (2) coordination meetings with the utility. After receiving comments on the 60% water modification plans, consultant will notify CMG and the District if 240-hour allowance will be sufficient to complete the water modification.

#### **5.2 Sewer Protection or Modification Plans - \$19,956**

As needed, Consultant will prepare sewer protection details to protect existing sewer in-place or sewer modification plans due to impacts to the existing sewer lines within the project. For budgeting purposes, we assume a maximum of 180 hours total for Task 5.2, which include up to two (2) coordination meetings with the utility. After receiving comments on the 60% sewer modification plans, consultant will notify CMG and the District if 180-hour allowance will be sufficient to complete the sewer modification.

#### **5.3 Landscape/Fence Plans - \$11,503**

As needed, Consultant will prepare landscape plans for the detention basin design. The Landscape Plans will include plantings along the detention basin slopes, irrigations plans, and fencing details. Multi-use features including but not limited playgrounds, sports equipment, trails, sidewalks, etc. are specifically excluded. For budgeting purposes, we assume a maximum of 85 hours total for Task 5.3.

#### **5.4 Pre-Bid Services - \$7,959**

As needed, Consultant will assist the District with Pre-Bid Services which may include but are not limited to the following. For budgeting services, we assume a maximum of 60 hours for Task 5.4:

- Attending pre-bid meetings
- Assisting in the preparation of addendums
- Addressing questions on the plans and specifications
- Bid evaluations

**EXCLUSIONS**

- Detention/Retention Basin Design
- Drainage Analysis/Documentation
- Culvert Structural Design/Structural Calculations
- New Sidewalk
- Traffic Control Plans
- Drainage Report/Statement
- CLOMR/LOMR
- Public Relations
- Environmental services/clearances other than those outlined in Task 2.4
- Post-Design services
- Record Drawings (As-Builts)

**FEE**

Fees are provided for each task and sub-task above. These fees are provided for budgeting purposes only and do not include expenses. See Exhibit B for a complete Fee Derivation.

**Airport Wash - EV5, EV7**  
**30% - 100% Design**  
**Fee Derivation**  
 Kimley-Horn and Associates, Inc.  
 April 2, 2018

<u>Estimated Direct Labor (Tasks 1-3)</u> Classification	Estimated Work	Hourly Labor	
	Hours	Rate	Costs
Project Principal	24	\$63.93	\$1,534.32
Project Manager	216	\$58.81	\$12,702.96
Senior Professional	172	\$47.56	\$8,180.32
Project Engineer/Senior Analyst	269	\$39.46	\$10,614.74
Junior Analyst	384	\$28.70	\$11,020.80
Admin	36	\$36.09	\$1,299.24
Clerical	42	\$20.93	\$879.06
<b>Direct Labor</b>	<b>1143</b>	<b>Total Labor Cost:</b>	<b>\$46,231</b>

Overhead (Audited Overhead Rate) @ 191.53% \$88,547

Profit (Direct Labor + Overhead) x 10% \$13,478

**Total Labor Fee (Tasks 1-3) \$148,257**

**Estimated Additional Services (Task 4)**

**Additional Services Labor Fee (Task 5) \$66,067**

**Estimated Direct Expenses**

(Listed by item - NO MARKUP)

Type	Costs
REPRODUCTIONS	\$ 2,000
<b>Total Estimated Direct Expenses:</b>	<b><u>\$2,000</u></b>

**Estimated Outside Services and Consultants**

(Listed by item - NO MARKUP)

Subconsultant	Service	Costs
Ashby Surveying	Boundary, R/W surveys + legal descriptions	\$ 19,019
EcoPlan	Environmental for ADOT Encroachment	\$ 4,116
Ninyo & Moore	Geotech	\$ 13,100
Ninyo & Moore	Phase 1 ESA	\$ 4,865
Cardno	Utility Potholes/Dips (Allowance)	\$ 17,000

Notes: **Total of Subconsultants \$58,100**

**TOTAL FEE: \$274,424**

**Airport Wash - EV5, EV7  
30% - 100% Design  
Estimate of Work Hours**

Task No.	Description	Project Principal	Project Manager	Senior Professional	Project Engineer/ Senior Analyst	Junior Analyst	Admin Support I	Admin Support II	Total
<b>1.0</b>	<b>Project Management</b>								
	Coordination	0	18	9	18	9	0	0	54
	Project Meetings	4	18	3	12	12	0	0	49
	Invoicing/Progress Reports	0	18	0	0	0	36	18	72
	Schedule Management	0	9	0	0	0	0	4	13
	QA/QC	12	8	8	0	0	0	0	28
	<b>Hours Subtotal</b>	<b>16</b>	<b>71</b>	<b>20</b>	<b>30</b>	<b>21</b>	<b>36</b>	<b>22</b>	<b>216</b>
<b>2.0</b>	<b>Project Initiation and Investigation</b>								
	Project Initiation/Kick-off	0	5	3	5	0	0	2	15
	Site Visits	0	4	4	8	8	0	0	24
<b>2.1</b>	<b>Survey</b>								
	Coordinate Project Survey (Pima County Survey)	0	2	0	4	0	0	0	6
<b>2.2</b>	<b>Utility Mapping</b>								
	Bluestake for Design and Utility Base Mapping	0	2	0	8	20	0	0	30
	Coord Utility Locations (Potholes/Dips)	0	2	0	4	0	0	0	6
<b>2.3</b>	<b>Geotechnical</b>								
	Coord with Geotech Sub	0	2	0	4	0	0	0	6
<b>2.4</b>	<b>Environmental</b>								
	Coord with Environmental Subs	0	4	0	8	0	0	0	12
	<b>Hours Subtotal</b>	<b>0</b>	<b>21</b>	<b>7</b>	<b>41</b>	<b>28</b>	<b>0</b>	<b>2</b>	<b>99</b>
<b>3.0</b>	<b>Concept Phase</b>								
	Design + Roll Plot	2	12	2	18	30	0	2	66
	Cost Estimate	2	4	0	8	8	0	0	22
	Review Meeting	0	2	0	4	4	0	0	10
	<b>Hours Subtotal</b>	<b>4</b>	<b>18</b>	<b>2</b>	<b>30</b>	<b>42</b>	<b>0</b>	<b>2</b>	<b>98</b>
<b>4.0</b>	<b>Construction Documents</b>								
<b>4.1</b>	<b>60% Phase</b>								
	Cover Sheet	1	0	1	0	4	0	0	5
	Design Sheets + Typical Sections + Pavement Structural Sections	1	0	1	0	6	0	0	9
	Special Details (5 sheets)	5	0	10	10	28	0	0	60
	Geometric Control (4 sheets)	4	0	2	0	25	0	0	31
	Calle Medina Plan/Profile (20-scale, 3-sheets)	3	0	2	4	13	0	0	26
	Calle Sevilla Storm Drain Plan/Profile (20-scale, 3-sheets)	3	0	4	6	15	0	0	35
	Santa Clara RCBC Plan/Profile (1 sheet)	1	0	1	2	8	0	0	16
	BMP Plans (4 sheets)	4	0	2	10	22	0	0	34
	Irrigation and Seeding	0	0	10	0	15	0	0	25
	Special Provisions	0	2	2	4	0	0	2	10
	Cost Estimate	0	2	2	5	5	0	0	14
	SWPPP Book	0	2	24	0	0	0	2	28
	QA/QC	2	4	4	2	0	0	0	12
	Utility Submittal / Coord	0	4	0	10	0	0	2	16
	ADOT Submittal / Coord	0	10	0	10	0	0	2	22
	Submittal Review Meeting	0	2	0	4	4	0	0	10
	Coord R/W and Easement Acquisitions (Ashby)	0	2	0	4	0	0	0	6
	Coord Legal Descriptions and Maps (Ashby)	0	2	0	4	0	0	0	6
	Response to comments	0	2	0	5	5	0	0	12
	<b>Hours Subtotal</b>	<b>2</b>	<b>55</b>	<b>74</b>	<b>88</b>	<b>150</b>	<b>0</b>	<b>8</b>	<b>377</b>
<b>4.2</b>	<b>Final (100%) PS&amp;E (Bid Docs)</b>								
	Cover Sheet	1	0	1	0	4	0	0	5
	Design Sheets + Typical Sections + Pavement Structural Sections	1	0	1	0	6	0	0	9
	Special Details (5 sheets)	5	0	10	10	28	0	0	60
	Geometric Control (4 sheets)	4	0	2	0	25	0	0	31
	Calle Medina Plan/Profile (20-scale, 3-sheets)	3	0	2	4	13	0	0	26
	Calle Sevilla Storm Drain Plan/Profile (20-scale, 3-sheets)	3	0	4	6	15	0	0	35
	Santa Clara RCBC Plan/Profile (1 sheet)	1	0	1	2	8	0	0	16
	BMP Plans (4 sheets)	4	0	2	10	22	0	0	34
	Irrigation and Seeding	0	0	5	0	8	0	0	13
	Special Provisions	0	2	2	4	0	0	2	10
	Cost Estimate	0	2	2	5	5	0	0	14
	SWPPP Book	0	2	24	0	0	0	2	28
	QA/QC	2	4	4	2	0	0	0	12
	Utility Submittal / Coord	0	4	0	10	0	0	2	16
	ADOT Submittal / Coord	0	10	0	10	0	0	2	22
	Submittal Review Meeting	0	2	0	4	4	0	0	10
	Response to comments	0	2	0	5	5	0	0	12
	<b>Hours Subtotal</b>	<b>2</b>	<b>51</b>	<b>69</b>	<b>80</b>	<b>143</b>	<b>0</b>	<b>8</b>	<b>353</b>
	<b>Hours Total</b>	<b>24</b>	<b>216</b>	<b>172</b>	<b>269</b>	<b>384</b>	<b>36</b>	<b>42</b>	<b>1143</b>
<b>5.0</b>	<b>Additional Services</b>								
<b>5.1</b>	<b>Water Modification Plans</b>								
	60%	2	2	12	24	50	0	6	96
	90%	2	2	12	24	50	0	6	96
	Final	1	1	6	12	25	0	3	48
	<b>Hours Subtotal</b>	<b>5</b>	<b>5</b>	<b>30</b>	<b>60</b>	<b>125</b>	<b>0</b>	<b>15</b>	<b>240</b>
<b>5.2</b>	<b>Sewer Protection/Modification</b>								
	60%	2	2	8	16	40	0	4	72
	90%	2	2	8	16	40	0	4	72
	Final	1	1	4	8	20	0	2	36
	<b>Hours Subtotal</b>	<b>5</b>	<b>5</b>	<b>20</b>	<b>40</b>	<b>100</b>	<b>0</b>	<b>10</b>	<b>180</b>
<b>5.3</b>	<b>Landscape and Fencing</b>								
	Planting Plans	1	0	2	15	0	0	0	27
	Irrigation Plans	1	0	0	15	0	0	0	25
	Planting and Irrigation Details	2	0	0	10	0	0	0	15
	Fencing Details	1	0	4	6	8	0	0	18
	<b>Hours Subtotal</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>46</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>85</b>
<b>5.4</b>	<b>Pre-Bid Services</b>								
		0	12	12	16	20	0	0	60
	<b>Hours Subtotal</b>	<b>10</b>	<b>28</b>	<b>87</b>	<b>162</b>	<b>253</b>	<b>0</b>	<b>25</b>	<b>565</b>





Via E-mail: Kevin.Payne@kimley-horn.com

December 22, 2017

Mr. Kevin W. Payne, P.E., CFM  
Kimley-Horn and Associates, Inc.  
333 East Wetmore Road, Suite 280  
Tucson, AZ 85705

**RE: El Vado Wash Improvements  
Supplemental Survey to Airport Wash Phase 2 Study**

Dear Mr. Payne:

Pursuant to our recent meeting at your office and your request for a proposal to provide professional land surveying and drafting services for the above referenced project, the following is the scope of work, as we understand it, along with our proposed fees.

**Right-of-Way Surveys:**

- Perform the necessary research, calculations, field work and drafting to determine the location of existing public right-of-ways for the following locations:
  - (A) **West Calle Medina**
    - From the East I-19 Frontage Road, easterly to South Baconia Avenue to South Santa Clara Avenue (≈ 1,300 feet)
  - (B) **West Calle Sevilla**
    - From the East I-19 Frontage Road easterly to South Basconia Avenue (≈ 700 feet)
  - (C) **South Basconia Avenue**
    - From West Calle Aragon northerly to West Calle Sevilla to West Calle Medina (≈ 660 feet)
  - (D) **West Calle Aragon**
    - From South Basconia Avenue easterly to South Santa Clara Avenue (≈ 600 feet)
  - (E) **South Santa Clara Avenue**
    - From West Calle Aragon northerly to West Calle Castile (≈ 870 feet)
  - (F) **South Pinta Avenue**
    - From West Calle Aragon to West Calle Castile (≈ 1,600 feet)

- (i) **Initial Research & Calculations** **\$2,300.00**
- Recorded deeds
  - Recorded subdivision plats
  - Records of surveys
  - Assessor's maps
  - City of Tucson plans
  - ADOT right-of-way plans
  - Calculations for theoretical property corners to facilitate searches by survey crew(s)
- 20.0 Hrs. (RLS) @ \$115.00/Hr. = \$2,300.00
- (ii) **Field Surveys** **\$6,000.00**
- Search for and field locate street survey monuments  
Search for and field locate property corner monuments
  - Search for and field locate relevant property corner survey monuments
  - Search for and field locate ADOT right-of-way survey monuments
- 40.0 Hrs. 2 Person GPS Survey Crew @ \$150.00/Hr.  
= \$6,000.00
- (iii) **Final Right-of-Way Lines** **\$7,424.00**
- Calculations to determine current right-of-way lines based on research and field located survey monuments
  - Drafting of right-of-way lines, monuments lines and theoretical sidelines of parcels
- 32.0 Hrs. (RLS) @ \$115.00/Hr. = \$3,680.00  
48.0 Hrs. Survey Tech @ \$78.00/Hr = \$3,744.00
- (iv) **Parcel Split of Pima County APN 138-40-2860** **\$3,294.50**
- Field survey of existing property corners for the parent parcel is included in (ii) above
  - Pima County Survey Department will provide Ashby an AutoCAD drawing of existing improvements on the parcel
  - Based on found survey monuments Ashby will calculate the boundary for the parent parcel
  - Based on input from others, the interior lines of the parcel split will be calculated

- A drawing will be produced showing the parcel split boundaries, easements affecting the parent parcel (as documented in a current status report from a local title company) and existing improvements as provided to Ashby by Pima County
- Legal descriptions for the two (2) new parcels will be calculated, written and sealed
- Property corners will be set for the parcel split and missing corners for the parent parcel will be set
- A record of survey will be produced and filed with the Pima County Recorder, per State of Arizona Boundary Law

**Field Surveys**

- Setting property corners
- 4.0 Hrs. @ \$150.00/Hr. = \$600.00

**Calculations, Legal Descriptions and Drafting**

8.0 Hrs. (RLS) @ \$115.00/Hr. = \$920.00

16.0 Hrs. Survey Tech @ \$78.00/Hr = \$1,248.00.

1.5 Hrs. Clerical @ \$55.00/Hr. = \$82.50

- Printing of mylar for recording \$20.00
- Recording fee \$24.00
- Status report (estimated) \$400.00

**TOTAL: \$19,018.50**

Thank you for contacting Ashby Surveying & Drafting, Inc. We look forward to assisting you on another successful Kimley-Horn project.

Sincerely,  
**Ashby Surveying & Drafting, Inc.**



T. Wayne Ashby, R.L.S.  
President/Director of Survey

TWA:kaa

FILE: S:\#1 - CLERICAL FILES (FREQUENT)\#01 PROPOSALS\Clients\Kimley-Horn\El Vado Wash Improvements.docx





March 23, 2018  
Proposal No. 12TUC02-00549

Mr. Kevin W. Payne, P.E., CFM  
Kimley-Horn & Associates, Inc.  
333 East Wetmore Road, Suite 280  
Tucson, Arizona 85705

Subject: Proposal to Perform Geotechnical and Environmental Services  
El Vado Wash Improvements  
Tucson, Arizona

Dear Mr. Payne:

Ninyo & Moore is pleased to submit this proposal to perform geotechnical and environmental services for subject project. This proposal is based on the information that we received from your office and our subsequent conversation. It outlines our scope of services, assumptions, anticipated schedule and estimated fees for this phase of work.

## **SITE/PROJECT DESCRIPTION**

The project site is located within a residential subdivision near the southeast corner of Interstate 19 and Valencia Road in Tucson, Arizona. We understand that the new drainage improvements in this area will include:

- Improved storm drains;
- Improved roadway of Medina Road with inverted crown, curb and gutter;
- A reinforced concrete box culvert (RCBC) below Calle Sevilla with an invert approximately 5 feet below the current grades and a headwall at Basconia Avenue; and
- An approximately 6-foot deep retention/detention basin with earthen side slopes, to be constructed on the northern and western portions of Pima County Assessor Parcel Number 138-04-2860.

## **SCOPE OF SERVICES**

### **Task 1 – Geotechnical Services**

The scope of geotechnical services for this phase of the project is outlined below:

- Review available topographic information, soil surveys, geologic literature, and aerial photographs of the project area.

- Apply for and obtain an excavation permit from the City of Tucson.
- Conduct a site visit to select and mark out the proposed exploration locations.
- Contact Arizona 811 to evaluate utility locations prior to drilling.
- Arrange for traffic control measures.
- Drill up to four borings in accordance with the following schedule:
  - Two borings for the proposed Medina Road improvements that will extend up to 5 feet below ground surface (bgs); and
  - Two borings for the proposed RCBC below Calle Sevilla that will extend up to 15 feet bgs.

The borings are proposed to be advanced with a two-wheel drive, truck-mounted drill rig equipped with hollow-stem augers. The borings will be terminated at the target depth or refusal on very dense/cemented deposits, whichever occurs first.

- Collect soil samples in the borings at 2.5- to 5.0-foot intervals using American Society for Testing and Materials (ASTM) D-1586 (standard penetration test with split-barrel sampling of soils) and D-3550 (ring-lined barrel sampling of soils) for laboratory testing and analysis. Ninyo & Moore personnel will log the borings in general accordance with the Unified Soil Classification System (USCS) and American Society for Testing and Materials (ASTM) D 2488 by observing cuttings and split-spoon samples. The ring samples will be trimmed in the field, wrapped in plastic bags, and placed in moisture-tight cylindrical plastic containers, while the SPT samples will be placed in resealable bags to help preserve their natural moisture. Bulk samples will also be placed in large plastic bags. The soil samples will be transported to a Ninyo & Moore laboratory for testing.
- Core the existing asphaltic concrete (AC) pavement at two locations on Medina Road.
- Perform one double ring infiltrometer test within the future retention basin area.
- Perform laboratory testing to evaluate the on-site soils characteristics for representative soil samples. The proposed laboratory tests will include in-situ density and moisture content, gradation, Atterberg limits, consolidation (response-to-wetting), electrical resistivity, pH, and soluble sulfates and chlorides contents.
- Prepare a geotechnical evaluation report to include logs of the exploratory borings and results of the laboratory testing. The report will be sealed by a Professional Engineer licensed in the State of Arizona and will include the following:
  - Site vicinity map and boring plan map;
  - Description of work scope, laboratory, and field procedures;
  - Encountered subsurface soil and groundwater conditions;
  - Excavation characteristics of on-site soils;
  - Recommendations for shoring;
  - Earthwork factors;

- Potential for re-use of on-site soils;
- Recommendations for temporary and permanent slopes.
- Subgrade preparation recommendations for pavements and the RCBC;
- Recommendations for special soil conditions such as expansive, collapsible, or highly compressible soils;
- Allowable net bearing pressures for shallow foundations and recommended dimensions and depths;
- Estimated settlements (total and differential) for the recommended foundations;
- Recommended new pavement sections;
- Stabilized water infiltration rate.
- Recommendations relative to site drainage; and
- Discussion of soil corrosivity to steel and concrete.

## **Task 2 –Environmental Site Assessment**

A Phase I ESA will be conducted on the property designated as the area for an approximately 3-foot deep retention/detention basin with earthen side slopes. The property represents the northern and western portions of a 5.40 acre parcel known as Pima County Assessor Parcel Number 138-04-2860. The parcel is currently owned by the Hope Methodist Church, and is located at 6720 and 6740 S. Santa Clara Avenue, in Tucson, Arizona. The area to be assessed is primarily undeveloped land surrounding the church structures and asphalt-paved parking area. The developed portion of the church property outside of the area proposed for the new retention/detention basin will not be included in this assessment.

The scope of services for this Phase I ESA is consistent with the ASTM International (ASTM) 2013 guidance (Designation Number E1527-13). Furthermore, the proposed scope of services is consistent with United States Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) Rule. The objective of this Phase I ESA is to evaluate whether past or current activities have resulted in “recognized environmental conditions,” as defined in ASTM E1527-13. The scope of environmental services for this phase of the project is outlined below:

### **Physical Review of Site Facilities and Practices**

- Review readily available maps and reports pertaining to the Site. The client is requested to provide copies of relevant documents they may have in their possession.

- Conduct interviews with readily available former and current Site owners regarding the environmental status of the Site.
- Perform a Site reconnaissance to visually assess areas of possibly contaminated surficial soil or surface water, improperly stored hazardous materials, possible sources of polychlorinated biphenyls, and possible risks of contamination from activities at the Site and/or adjacent properties.
- Document utility connections at the Site, if any.

## **Assessment of Past and Present Site Usage**

- Review lease records for the Site, if provided by the client or owner, to evaluate probable past Site uses and their possible impact on the current environmental status of the Site.
- Review information provided by the client, including a completed ASTM user questionnaire.
- Review of previous environmental reports for the Site, if available and if provided by the client or owner.
- Identify previous and existing uses of the Site by reviewing historical records and regulatory documents.
- Review readily available historical documents, including aerial photographs (Site and adjacent properties), Sanborn Insurance Maps (Site and available adjacent properties), Building Department Records (Site only), Reverse City Directories (Site and available adjacent properties), and internet or similar information-based source as appropriate.
- Review readily available local regulatory agency files for the Site. Requests will be made to the County Environmental Services Department, and the local Fire and Building Departments.
- Review readily available regulatory agency databases for the Site and for properties located within a specified radius of the Site. The purpose of this review is to evaluate the possible environmental impact to the Site. Databases will identify locations of known hazardous waste generators, landfills, facilities with reported leaking underground storage tanks (LUSTs) and/or registered underground storage tanks (USTs), and Federal and State Superfund sites. ASTM/AAI search radii will be utilized.
- Conduct interviews with past owner(s) and tenant(s) of the Site, if contact information is provided, and interviews are readily available. Ninyo & Moore's attempts to contact previous owners and tenants will be documented in the Phase I ESA report.
- Obtain and review an environmental lien search report for the Site, and summarize the findings in the Phase I ESA report.



## Evaluation of Site Characteristics

- Review available topographic, soil, geologic, and hydrologic information, including depth to groundwater for indications of surface and subsurface characteristics of the Site.
- Document manmade features at the Site, including USTs, aboveground storage tanks, sumps, surface impoundments, septic tanks, oil/water separators, transformers, water wells, drywells, and storm drains.
- Observe surface drainage, cracking in concrete slabs and foundations, staining, and identify areas of chemical or hazardous material storage.

## Adjacent Property Evaluation

- Evaluate adjacent properties for the potential to contaminate the Site. If during the course of this Phase I ESA, adjacent properties are determined to have the potential to impact the Site, Ninyo & Moore will notify the client regarding the potential need to perform portions of Tasks 1, 2, and/or 3 on the adjacent suspect properties.

## Recommendations and Report of Findings

- Prepare a Phase I ESA report documenting findings and providing opinions and recommendations regarding possible environmental impacts at the Site. Color photographs and a Site diagram will be provided in the report.
- A signed Adobe PDF copy of the final report (including appendices and attachments) will be provided. Hard copy reports are not included in the scope or work or proposed compensation, but can be provided for an additional fee.

## ASSUMPTIONS

We have made the following assumptions in the preparation of this proposal:

- Ninyo & Moore will have unrestricted access to the Site, and the field work will be performed during normal working hours.
- The site is accessible to normal, two-wheel drive, truck-mounted drilling equipment, and site access will be granted.
- Traffic control measures will consist of shoulder and/or travel lanes closures.
- The work can be accomplished using hollow-stem augers operating at a normal rate of penetration.
- If auger refusal or groundwater is encountered we will terminate the drilling and notify your office.
- Boreholes in pavement will be backfilled with the drilling spoils and patched with a cold AC patch. Boreholes in unpaved areas and the infiltration test pit will be backfilled with excavated soils.

- The infiltrometer test will be performed at a depth not greater than 6 feet below existing grade.
- Some disturbance should be expected as a result of our field work.

## SCHEDULING

We are prepared to initiate this project immediately upon receiving your authorization to proceed. We anticipate issuing a geotechnical report within about five to six weeks from the date of authorization. Preliminary recommendations can be provided about one week after the fieldwork is done.

## FEE ESTIMATE

We propose to perform the work scope described above for a lump sum fee of \$17,965.00 (Seventeen Thousand Nine Hundred Sixty-Five Dollars) as detailed below:

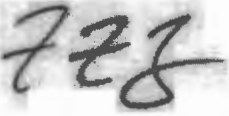
- Task No. 1 – Geotechnical Services: \$13,100.00; and
- Task No. 2 – Phase I Environmental Site Assessment: \$4,865.00.

These estimated fees are based on the scope of services presented above and our understanding of the project. Any additional services not included in the aforementioned scope will be charged on a time and materials basis in accordance with our current schedule of fees.

Ninyo & Moore appreciates the opportunity to submit this proposal and looks forward to working with you on this project.

Respectfully submitted,  
**NINYO & MOORE**

  
Marek J. Kasztalski, PE,  
Senior Geotechnical Engineer

  
Fred Narcaroti  
Principal/Tucson Office Manager

MJK/FFN/jom

Distribution: (1) Addressee (via e-mail)



**EcoPlan Associates, Inc.**  
*Environmental Science & Resource Economics*

December 27, 2017  
*Revised January 8, 2018*

Kevin Payne, P.E., CFM  
Kimley-Horn  
333 East Wetmore Road, Suite 280  
Tucson, Arizona, 85705

RE: El Vado Wash, ADOT Encroachment Permit  
EcoPlan Proposal No.: 17-01167

Dear Mr. Payne:

EcoPlan Associates, Inc. (EcoPlan) is pleased to submit this revised proposal for environmental services for the above-referenced project.

We have included a revised scope of work, assumptions and cost estimate in this proposal for your review and approval based on our communications with Melissa Reuter (Arizona Department of Transportation (ADOT) Tucson District Environmental Coordinator). We estimate the total cost of our services will be \$4,116.00. Invoices will be submitted monthly for work completed to date.

Please contact me at 520-624-4326, extension 126 if you have any questions. Thank you for your time and consideration.

Sincerely,

Ron van Ommeren  
Senior Vice President

Enclosures: As noted



**EcoPlan Associates, Inc.**  
*Environmental Science & Resource Economics*

**SCOPE OF WORK**  
**El Vado Wash, ADOT Encroachment Permit**  
**EcoPlan Proposal No.: 17-01167**

The Pima County Regional Flood Control District (RFCD) is planning to undertake drainage improvements to serve a neighborhood east of Interstate 19 (I-19) and south of Valencia Road in the City of Tucson, Pima County, Arizona. The drainage work includes a new storm drain and channel adjacent to the I-19 Northbound exit ramp at Valencia Road. Construction access and improvements are expected to fall within ADOT right-of-way (ROW) and requires the RFCD obtain an Encroachment Permit from the ADOT Southcentral District Permits Section. The following scope reflects those tasks needed to support the environmental elements of the encroachment permit. This scope does not address offsite work outside of the ADOT ROW.

**Task 1: Project Management / Coordination**

EcoPlan will maintain communication through phone and email with the applicable parties including Kimley-Horn and Associates (KHA), RFCD, ADOT Permits, and ADOT Environmental Planning Group. This task includes reviewing ADOT requirements and review of project plans provided by KHA.

**Task 2: Biological Impact Assessment**

EcoPlan will review previous biological evaluation prepared by ADOT for the I-19 Valencia Road Traffic Interchange area and pertinent databases (Arizona Game and Fish Department On-line Tool and U.S. Fish and Wildlife Service Information, Planning and Conservation tool) to document the absence of any threatened or endangered species or critical habitat in the project area. EcoPlan will prepare summary biological findings to be included in the environmental compliance document.

**Task 3: Cultural Resources**

The area of potential effects (APE) for this project is understood to include the ADOT ROW adjacent to the I-19 noise wall along the northbound off ramp. A preliminary review of cultural records indicates the APE has been surveyed for cultural resources through ADOT project I-19; San Xavier Road to I-10 (H5105 01L) and consultation completed in 2007. No cultural resources were found during previous survey of the APE at the northbound off-ramp. The nearest site is located adjacent to the northwest quadrant of the Valencia TI about 1,000 feet from the RFCD project area. No new survey will be required. EcoPlan will prepare a summary of cultural resource findings to be included in the environmental clearance document. EcoPlan will prepare a consultation initiation form (CIF) to assist the ADOT Historic Preservation Team (HPT) with consultation. EcoPlan will not draft the consultation letters.

**Task 4: Environmental Compliance Document**

EcoPlan will prepare the environmental compliance documentation to be included in the Encroachment Permit application. This document will include a brief summary of the findings for each environmental topic and supporting memorandums as required. The draft document will be provided to KHA for review and comment and revisions made for submission to ADOT Southcentral District.



**EcoPlan Associates, Inc.**  
*Environmental Science & Resource Economics*

### **ASSUMPTIONS**

#### **El Vado Wash, ADOT Encroachment Permit EcoPlan Proposal No.: 17-01167**

Assumptions used to generate this scope of work and cost estimate are summarized below. Should additional services be required that are not described in this scope of work, EcoPlan will provide a supplemental scope and cost.

- Attendance at the project status meeting is not required.
- A detailed Biological Evaluation or Biological Review is not required due to the limited scope and previous studies conducted for ADOT.
- No additional cultural survey is required.
- ADOT Historic Preservation Team will conduct Section 106 consultation, if required.
- Environmental Analysis will include only those project elements which fall within the ADOT ROW.
- No asbestos testing will be required for removal or modification of an ADOT drainage structure. If testing is required, KHA will arrange through others to conduct the work.
- EcoPlan will not draft the consultation letters.



## Cost Estimate Worksheet

Prepared for: Kimley-Horn and Associates

Project Name: El Vado Wash Encroachment Permit

EcoPlan # 17-01167

Task Description	Environmental Coordinator	Environmental Planner	Senior Biologist	Cultural Project Director	Cultural Crew Chief	Senior Quality Control Specialist/Editor	Senior GIS Graphics Specialist	Total Hours	Total Costs
Billing Rate	\$152.46	\$57.83	\$107.77	\$85.61	\$70.10	\$102.51	\$85.43		
<b>Project Meetings</b>									
Task 1: Project Management/Coordination	2	0	0	0	0	0	0	2	\$ 304.92
Task 2: Biological Impact Assessment	0	4	2	0	0	0	0	6	\$ 446.86
Task 3: Cultural Resources	1	0	0	3	16	4	2	26	\$ 2,111.79
Task 4: Environmental Compliance Document	2	6	0	0	0	2	2	12	\$ 1,027.78
<b>Subtotal:</b>	5	10	2	3	16	6	4	46	\$ 3,891.35
<b>Total Hours:</b>	5	10	2	3	16	6	4	46	
<b>Labor Subtotal:</b>									<b>\$ 3,891.35</b>
<b>Direct Expenses</b>									
Arizona State Museum Fees									
ASM Site File Review Fee ( 1 square mile @ \$75/square mile of search area)									\$ 75.00
AZSITE Fee (\$150)									\$ 150.00
<b>Total Direct Expenses:</b>									<b>\$ 225.00</b>
<b>Total Cost:</b>									<b>\$ 4,116.00</b>



**El Vado Wash Drainage Improvements**  
 Cost Estimate - Assumes 12 Months

**ESTIMATE OF MANHOURS**

2/14/2018

<u>Task</u>	<u>Project Principal/Manager</u>	<u>Designer/Artist</u>	<u>Public Relations Coordinator</u>	<u>Clerical</u>	<u>Total Hours</u>	<u>Total Labor Costs</u>	<u>Direct Expenses</u>	<u>Total Costs</u>
	\$120	\$85	\$95	\$45				
1. Coordination - Neighborhood Association, Public Meeting, and Elected Officials - Assumes coordination briefing, meeting attendance and site visits as needed.	7	0	2	2	11	\$1,120	\$ 25.00	\$ 1,145.00
2. Team Meetings - Assumes attendance at twelve (12) monthly 2 hour project team meetings.	24	0	10	0	34	\$3,830	\$ -	\$ 3,830.00
<b>TOTAL</b>	31	0	12	2	45	\$4,950	\$ 25.00	\$ 4,975.00





### El Vado Wash Drainage Improvements

Cost Estimate - Assumes 12 Months

#### ESTIMATE OF DIRECT COSTS

TASK DESCRIPTION	PRINTING	POSTAGE/MAILING LIST	ROOM RENTAL/ REFRESHMENTS	MEETING MATERIALS / DISPLAY BOARDS/COMMENT FORMS/FACT SHEETS	MISCELLANEOUS / COLOR COPIES	DIRECT TOTAL
1. Coordination - Neighborhood Association, Public Meeting, and Elected Officials - Assumes coordination briefing, meeting attendance and site visits as needed.	0	0	0	0	25	25
2. Team Meetings - Assumes attendance at twelve (12) monthly 2 hour project team meetings.	0	0	0	0	0	0
<b>TOTAL</b>	0	0	0	0	25	25



**BLANKET ADDITIONAL INSURED  
AND  
LIABILITY EXTENSION ENDORSEMENT**

This endorsement modifies insurance provided under the following:

BUSINESSOWNERS LIABILITY COVERAGE FORM  
BUSINESSOWNERS COMMON POLICY CONDITIONS

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**I. BLANKET ADDITIONAL INSURED PROVISIONS**

**A. ADDITIONAL INSURED – BLANKET VENDORS**

Who Is An Insured is amended to include as an additional insured any person or organization (referred to below as vendor) with whom you agreed under a "written contract" to provide insurance, but only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business, subject to the following additional exclusions:

1. The insurance afforded the vendor does not apply to:
  - a. "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;
  - b. Any express warranty unauthorized by you;
  - c. Any physical or chemical change in the product made intentionally by the vendor;
  - d. Repackaging, except when unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;

- e. Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;
  - f. Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;
  - g. Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or
  - h. "Bodily injury" or "property damage" arising out of the sole negligence of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:
    - (1) The exceptions contained in Subparagraphs d. or f.; or
    - (2) Such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products.
- 2. This insurance does not apply to any insured person or organization, from whom you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.
  - 3. This provision 2. does not apply to any vendor included as an insured by an endorsement issued by us and made a part of this Policy.
  - 4. This provision 2. does not apply if "bodily injury" or "property damage" included within the "products-completed operations hazard" is excluded either by the provisions of the Policy or by endorsement.

**B. MISCELLANEOUS ADDITIONAL INSUREDS**

- 1. **Who Is An Insured** is amended to include as an insured any person or organization (called additional insured) described in paragraphs 3.a. through 3.j. below whom you are required to add as an additional insured on this policy under a "written contract".
- 2. However, subject always to the terms and conditions of this policy, including the limits of insurance, we will not provide the additional insured with:
  - a. A higher limit of insurance than required by such "written contract";
  - b. Coverage broader than required by such "written contract" and in no event greater than that described by the applicable paragraph a. through k. below; or
  - c. Coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard." But this paragraph c. does not apply to the extent coverage for such liability is provided by paragraph 3.j. below.

Any coverage granted by this endorsement shall apply only to the extent permitted by law.

- 3. Only the following persons or organizations can qualify as additional insureds under this endorsement:

**a. Controlling Interest**

Any persons or organizations with a controlling interest in you but only with respect to their liability arising out of:

- (1) such person or organization's financial control of you; or
- (2) Premises such person or organization owns, maintains or controls while you lease or occupy these premises;

provided that the coverage granted to such additional insureds does not apply to structural alterations, new construction or demolition operations performed by or for such additional insured.

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**b. Co-owner of Insured Premises**

A co-owner of a premises co-owned by you and covered under this insurance but only with respect to the co-owners liability for "bodily injury", "property damage" or "personal and advertising injury" as co-owner of such premises.

**c. Grantor of Franchise**

Any person or organization that has granted a franchise to you, but only with respect to such person or organization's liability for "bodily injury", "property damage", or "personal and advertising injury" as grantor of a franchise to you.

**d. Lessor of Equipment**

Any person or organization from whom you lease equipment, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused in whole or in part by your maintenance, operation or use of such equipment, provided that the "occurrence" giving rise to such "bodily injury" or "property damage" or the offense giving rise to such "personal and advertising injury" takes place prior to the termination of such lease.

**e. Lessor of Land**

Any person or organization from whom you lease land, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" arising out of the ownership, maintenance or use of that specific part of the land leased to you, provided that the "occurrence" giving rise to such "bodily injury" or "property damage" or the offense giving rise to such "personal and advertising injury", takes place prior to the termination of such lease. The insurance hereby afforded to the additional insured does not apply to structural alterations, new construction or demolition operations performed by, on behalf of or for such additional insured.

**f. Lessor of Premises**

An owner or lessor of premises leased to you, or such owner or lessor's real estate manager, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" arising out of the ownership, maintenance or use of such part of the premises leased to you, and provided that the "occurrence" giving rise to such "bodily injury" or "property damage" or the offense giving rise to such "personal and advertising injury", takes place prior to the termination of such lease. The insurance hereby afforded to the additional insured does not apply to structural alterations, new construction or demolition operations performed by, on behalf of or for such additional insured.

**g. Mortgagee, Assignee or Receiver**

A mortgagee, assignee or receiver of premises but only with respect to such mortgagee, assignee, or receiver's liability for "bodily injury", "property damage" or "personal and advertising injury" arising out of the ownership, maintenance, or use of a premises by you.

This insurance does not apply to structural alterations, new construction or demolition operations performed by, on behalf of or for such additional insured.

**h. State or Political Subdivisions**

A state or government agency or subdivision or political subdivision that has issued a permit or authorization, but only with respect to such government agency or subdivision or political subdivision's liability for "bodily injury", "property damage" or "personal and advertising injury" arising out of:

- (1) The following hazards in connection with premises you own, rent, or control and to which this insurance applies:
  - (a) The existence, maintenance, repair, construction, erection, or removal of advertising signs, awnings, canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoistaway openings, sidewalk vaults, street banners, or decorations and similar exposures; or
  - (b) The construction, erection, or removal of elevators; or
  - (c) The ownership, maintenance or use of any elevators covered by this insurance; or

(2) The permitted or authorized operations performed by you or on your behalf. But the coverage granted by this paragraph does not apply to:

- (a) "Bodily injury", "property damage" or "personal and advertising injury" arising out of operations performed for the state or government agency or subdivision or political subdivision; or
- (b) "Bodily injury" or "property damage" included within the "products-completed operations hazard."

With respect to this provision's requirement that additional insured status must be requested under a "written contract", we will treat as a "written contract" any governmental permit that requires you to add the governmental entity as an additional insured.

**i. Trade Show Event Lessor**

With respect to your participation in a trade show event as an exhibitor, presenter or displayer, any person or organization whom you are required to include as an additional insured, but only with respect to such person or organization's liability for "bodily injury", "property damage", or "personal and advertising injury" cause by:

- a. Your acts or omissions; or
- b. Acts or omissions of those acting on your behalf;

in the performance of your ongoing operations at the trade show premises during the trade show event.

**j. Other Person or Organization**

Any person or organization who is not an additional insured under paragraphs a. through i. above. Such additional insured is an insured solely for "bodily injury", "property damage" or "personal and advertising injury" for which such additional insured is liable because of your acts or omissions.

The coverage granted by this paragraph does not apply to any person or organization:

- (1) For "bodily injury," "property damage," or "personal and advertising injury" arising out of the rendering or failure to render any professional services;
- (2) For "bodily injury" or "property damage" included in the "products-completed operations hazard." But this provision (2) does not apply to such "bodily injury" or "property damage" if:
  - (a) It is entirely due to your negligence and specifically results from your work for the additional insured which is the subject to the "written contract"; and
  - (b) The "written contract" requires you to make the person or organization an additional insured for such "bodily injury" or "property damage"; or
- (3) Who is afforded additional insured coverage under another endorsement attached to this policy.

**C. ADDITIONAL PROVISIONS PERTINENT TO ADDITIONAL INSURED COVERAGE**

With respect only to additional insured coverage provided under paragraphs A. and B. above:

1. The **BUSINESSOWNERS COMMON POLICY CONDITIONS** are amended to add the following to the Condition entitled **Other Insurance**:

This insurance is excess of all other insurance available to an additional insured whether primary, excess, contingent or on any other basis. However, if a "written contract" requires that this insurance be either primary or primary and noncontributing, then this insurance will be primary and non-contributory relative solely to insurance on which the additional insured is a named insured.

2. Under **Liability and Medical Expense Definitions**, the following definition is added:

"Written contract" means a written contract or agreement that requires you to make a person or organization an additional insured on this policy, provided the contract or agreement:

- a. Is currently in effect or becomes effective during the term of this policy; and
- b. Was executed prior to:

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- (1) The "bodily injury" or "property damage"; or
  - (2) The offense that caused the "personal and advertising injury";
- for which the additional insured seeks coverage.

## **II. LIABILITY EXTENSION COVERAGES**

It is understood and agreed that this endorsement amends the **Businessowners Liability Coverage Form**. If any other endorsement attached to this policy amends any provision also amended by this endorsement, then that other endorsement controls with respect to such provision, and the changes made by this endorsement to such provision do not apply.

### **A. Bodily Injury – Expanded Definition**

Under **Liability and Medical Expenses Definitions**, the definition of "Bodily injury" is deleted and replaced by the following:

"Bodily injury" means physical injury, sickness or disease sustained by a person, including death, humiliation, shock, mental anguish or mental injury by that person at any time which results as a consequence of the physical injury, sickness or disease.

### **B. Broad Knowledge of Occurrence**

Under **Businessowners Liability Conditions**, the Condition entitled **Duties In The Event of Occurrence, Offense, Claim or Suit** is amended to add the following:

Paragraphs **a.** and **b.** above apply to you or to any additional insured only when such "occurrence," offense, claim or "suit" is known to:

- (1) You or any additional insured that is an individual;
- (2) Any partner, if you or an additional insured is a partnership;
- (3) Any manager, if you or an additional insured is a limited liability company;
- (4) Any "executive officer" or insurance manager, if you or an additional insured is a corporation;
- (5) Any trustee, if you or an additional insured is a trust; or
- (6) Any elected or appointed official, if you or an additional insured is a political subdivision or public entity.

This paragraph applies separately to you and any additional insured.

### **C. Estates, Legal Representatives and Spouses**

The estates, heirs, legal representatives and spouses of any natural person insured shall also be insured under this policy; provided, however, coverage is afforded to such estates, heirs, legal representatives and spouses only for claims arising solely out of their capacity as such and, in the case of a spouse, where such claim seeks damages from marital common property, jointly held property, or property transferred from such natural person insured to such spouse. No coverage is provided for any act, error or omission of an estate, heir, legal representative or spouse outside the scope of such person's capacity as such, provided however that the spouse of a natural person Named Insured and the spouses of members or partners of joint venture or partnership Named Insureds are insureds with respect to such spouses' acts, errors or omissions in the conduct of the Named Insured's business.

### **D. Legal Liability – Damage To Premises**

1. Under **B. Exclusions, 1. Applicable to Business Liability Coverage**, Exclusion **k. Damage To Property**, is replaced by the following:

#### **k. Damage To Property**

"Property damage" to:

1. Property you own, rent or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of



such property for any reason, including prevention of injury to a person or damage to another's property;

2. Premises you sell, give away or abandon, if the "property damage" arises out of any part of those premises;
3. Property loaned to you;
4. Personal property in the care, custody or control of the insured;
5. That particular part of any real property on which you or any contractors or subcontractors working directly or indirectly in your behalf are performing operations, if the "property damage" arises out of those operations; or
6. That particular part of any property that must be restored, repaired or replaced because "your work" was incorrectly performed on it.

Paragraph 2 of this exclusion does not apply if the premises are "your work" and were never occupied, rented or held for rental by you.

Paragraphs 1, 3, and 4, of this exclusion do not apply to "property damage" (other than damage by fire or explosion) to premises:

- (1) rented to you;
- (2) temporarily occupied by you with the permission of the owner, or
- (3) to the contents of premises rented to you for a period of 7 or fewer consecutive days.

A separate limit of insurance applies to Damage To Premises Rented To You as described in Section D – Liability and Medical Expenses Limits of Insurance.

Paragraphs 3, 4, 5, and 6 of this exclusion do not apply to liability assumed under a sidetrack agreement.

Paragraph 6 of this exclusion does not apply to "property damage" included in the "products-completed operations hazard."

2. Under **B. Exclusions, 1. Applicable to Business Liability Coverage**, the following paragraph is added, and replaces the similar paragraph, if any, beneath paragraph (14) of the exclusion entitled **Personal and Advertising Injury**:

Exclusions c, d, e, f, g, h, i, k, l, m, n, and o, do not apply to damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner or to the contents of premises rented to you for a period of 7 or fewer consecutive days. A separate limit of insurance applies to this coverage as described in **Section D. Liability And Medical Expenses Limits Of Insurance**.

3. The first Paragraph under item 5. **Damage To Premises Rented To You Limit** of the section entitled **Liability And Medical Expenses Limits Of Insurance** is replaced by the following:

The most we will pay under Business Liability for damages because of "property damage" to any one premises, while rented to you or temporarily occupied by you with the permission of the owner, including contents of such premises rented to you for a period of 7 or fewer consecutive days, is the Damage to Premises Rented to You limit shown in the Declaration.

#### **E. Personal and Advertising Injury – Discrimination or Humiliation**

1. Under **Liability and Medical Expenses Definitions**, the definition of "personal and advertising injury" is amended to add the following:
  - h. Discrimination or humiliation that results in injury to the feelings or reputation of a natural person, but only if such discrimination or humiliation is:
    - (1) Not done intentionally by or at the direction of:
      - (a) The insured; or

- (b) Any "executive officer," director, stockholder, partner, member or manager (if you are a limited liability company) of the insured; and
  - (2) Not directly or indirectly related to the employment, prospective employment, past employment or termination of employment of any person or person by any insured.
2. Under **B. Exclusions, 1. Applicable to Business Liability Coverage**, the exclusion entitled **Personal and Advertising injury** is amended to add the following additional exclusions:
- (15) **Discrimination Relating to Room, Dwelling or Premises**  
Caused by discrimination directly or indirectly related to the sale, rental, lease or sub-lease or prospective sale, rental, lease or sub-lease of any room, dwelling or premises by or at the direction of any insured.
  - (16) **Employment Related Discrimination**  
Discrimination or humiliation directly or indirectly related to the employment, prospective employment, past employment or termination of employment of any person by any insured.
  - (17) **Fines or Penalties**  
Fines or penalties levied or imposed by a governmental entity because of discrimination.
3. This provision (**Personal and Advertising Injury – Discrimination or Humiliation**) does not apply if **Personal and Advertising Injury Liability** is excluded either by the provisions of the Policy or by endorsement.

**F. Personal and Advertising Injury - Broadened Eviction**

Under **Liability and Medical Expenses Definitions**, the definition of "Personal and advertising injury" is amended to delete Paragraph c. and replace it with the following:

- c. The wrongful eviction from, wrongful entry into, or invasion of the right of private occupancy of a room dwelling or premises that a person or organization occupies committed by or on behalf of its owner, landlord or lessor.

**G. Waiver of Subrogation – Blanket**

We waive any right of recovery we may have against:

- a. Any person or organization with whom you have a written contract that requires such a waiver.

All other terms and conditions of the Policy remain unchanged.

**POLICY NUMBER**  
B 6019986231

**INSURED NAME AND ADDRESS**  
C M G Drainage Engineering, Inc  
3555 N MOUNTAIN AVE  
TUCSON, AZ 85719

**PROPERTY COVERAGE**

**LIMIT OF INSURANCE**

The following deductible applies unless a separate deductible is shown on the Schedule of Locations and Coverage.

Deductible: \$250

Business Income and Extra Expense Coverage  
Business Income and Extra Expense

12 Months Actual Loss Sustained

Business Income and Extra Expense - Dependent Properties

\$10,000

Employee Dishonesty

\$25,000

Forgery and Alteration

\$25,000

**LIABILITY COVERAGE**

**LIMIT OF INSURANCE**

Liability and Medical Expense Limit - Each Occurrence

\$1,000,000

Medical Expense Limit -- Per Person

\$10,000

Personal and Advertising Injury

\$1,000,000

Products/Completed Operations Aggregate

\$2,000,000

General Aggregate

\$2,000,000

Damage To Premises Rented To You

\$300,000

**Hired Auto Liability**

**\$1,000,000**

**Nonowned Auto Liability**

**\$1,000,000**



**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**WAIVER OF OUR RIGHT TO RECOVER  
FROM OTHERS ENDORSEMENT**

**Policy Number:** 59 WEC KZ6992

**Endorsement Number:**

**Effective Date:** 08/02/17 Effective hour is the same as stated on the Information Page of the policy.

**Named Insured and Address:** CMG DRAINAGE ENGINEERING INC

3555 N. MOUNTAIN AVE  
TUCSON, AZ 85719

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule.

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

**SCHEDULE**

ANY PERSON OR ORGANIZATION  
FROM WHOM YOU ARE REQUIRED  
BY WRITTEN CONTRACT OR  
AGREEMENT TO OBTAIN THIS  
WAIVER OF RIGHTS FROM US.

Countersigned by \_\_\_\_\_  
Authorized Representative