



BOARD OF SUPERVISORS AGENDA ITEM REPORT
CONTRACTS / AWARDS / GRANTS

☐ Award ☒ Contract ☐ Grant

Requested Board Meeting Date: 04/07/20

* = Mandatory, information must be provided

or Procurement Director Award ☐

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

Borderland Construction Company, Inc. (Headquarters: Tucson, AZ)

***Project Title/Description:**

Design Build Services For Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)

***Purpose:**

Award: Contract No. CT-WW-20-272. This award of contract is recommended to the highest qualified Design-Build team in the amount of \$2,550,104.43 for a contract term of 04/07/20 to 06/30/23 for Phase I design and pre-construction services for the Continental Ranch Regional Pump Station Force Main Augmentation project. County intends to negotiate with Design-Builder regarding scope, schedule, general conditions, construction fees, and other elements of the Guaranteed Maximum Price (GMP) for construction services and incorporate into this Contract by Amendment. Administering Department: Regional Wastewater Reclamation.

***Procurement Method:**

Solicitation for Qualifications No. SFQ-PO-2000008 was conducted in accordance with A.R.S. § 34-603 and Pima County Board of Supervisors Policy D 29.1. Two (2) responsive statements of qualifications were received and evaluated by a seven (7) member committee using qualifications and experience-based selection criteria. Based upon the evaluation of the respondents' written representations of their qualifications and necessary due diligence, a short list of two (2) respondents were invited to interviews. As a result of the combined scoring of the written statements of qualifications and interviews, the highest qualified Design-Build team is recommended for award.

Attachments: Notice of Recommendation for Award and Contract.

***Program Goals/Predicted Outcomes:**

This project will provide additional capacity for the conveyance of wastewater pumped from the Continental Ranch Pump Station to the Ina Road Treatment Facility (Tres Rios WWF).

***Public Benefit:**

This Program will allow for continued sewer service availability for development in the Continental Ranch and surrounding areas. This program will also minimize public exposure by decreasing the potential for sanitary sewer overflows in the vicinity of the program. The program will also provide a redundant force main to be used during cleaning and repairs of the other parallel force mains.

***Metrics Available to Measure Performance:**

Reduction of sanitary sewer overflows. Flow data compared to the capacity of the conveyance line.

***Retroactive:**

No

*TO: CIB- 3.25.20
Ver. - 1
Pg. - 188*

Procure Dept 03/25/20 PM 01:42

Contract / Award Information

Document Type: CT Department Code: WW Contract Number (i.e.,15-123): 20-272
Effective Date: 04/07/20 Termination Date: 06/30/23 Prior Contract Number (Synergen/CMS):
☒ Expense Amount: \$* 2,550,104.43 ☐ Revenue Amount: \$

*Funding Source(s) required: Regional Wastewater Reclamation Department Obligations

Funding from General Fund? ☐ Yes ☒ No If Yes \$ %

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

If Yes, 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 22-10.

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: Keith E. Rogers *Keith E. Rogers* 03-12-20 *3/13/2020*

Department: Procurement *Mag...* 3/13/2020 Telephone: 724-3542

Department Director Signature/Date: *[Signature]* 3/16/2020

Deputy County Administrator Signature/Date: *[Signature]* 3/18/2020

County Administrator Signature/Date: *[Signature]* 3/18/2020
(Required for Board Agenda/Addendum Items)



MARCH 11, 2020

NOTICE OF RECOMMENDATION FOR AWARD

The Pima County Procurement Department - Design & Construction Division hereby issues formal notice to respondents to **Solicitation No. SFQ-PO-2000008 – Design Build Services For Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)**; that the following listed respondent will be recommended for award as indicated below. The award action is scheduled to be performed by the Pima County Board of Supervisors on or after the regularly scheduled meeting **April 7, 2020**.

RECOMMENDED:

Borderland Construction Company, Inc.

OTHER FINAL-LISTED TEAMS:

KE&G Construction, Inc.

NOTE: Information regarding this solicitation will be disclosed in accordance with A.R.S. § 34-603(H).

/s/ Keith E. Rogers

Keith E. Rogers, CPPB
Procurement Officer

Date: March 11, 2020

This notice is in compliance with Pima County Procurement Code.

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PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT

PROJECT: Design-Build Services – Continental Ranch Regional Pump Station
Force Main Augmentation (3CFS15)

CONTRACTOR: Borderland Construction Company, Inc.
P.O. Box 27406
Tucson, AZ 85726-7406

CONTRACT NO.: CT-WW-20-272

AMOUNT: \$2,550,104.43

FUNDING: Regional Wastewater Reclamation Department Obligations

DESIGN-BUILD CONTRACT

1. Parties, Background and Purpose.

- 1.1. Parties. This Contract is between Pima County, a body politic and corporate of the State of Arizona ("County"), and Borderland Construction Company, Inc. ("Design-Builder"). County and Design-Builder may also be individually as a "Party" or collectively as the "Parties."
- 1.2. History. County previously issued Solicitation for Qualifications (SFQ) No. SFQ-PO-2000008 (hereinafter referred to as the "Solicitation") seeking a Design-Build services provider, the documents, amendments, requirements and specifications of which are all incorporated into this Contract by reference.
- 1.3. Design-Builder Selection. Design-Builder was selected by the County through the evaluation process described in the Solicitation.
- 1.4. Purpose. The Parties desire to enter into this Contract to effect the completion of the Project on a **Guaranteed Maximum Price** ("GMP") basis.

2. Effective Date, Term, and Schedule.

- 2.1. Effective Date. The Effective Date of this Contract is the date last signed below.
- 2.2. Term. Unless otherwise terminated or extended, in writing, pursuant to other provisions of this Contract, the Term of this Contract shall commence April 7, 2020 and terminate June 30, 2023.
- 2.3. Scheduled Major Milestones. Design-Builder provided County with a Preliminary Schedule covering the planning, design, and construction of the Project which schedule is attached hereto as Exhibit A. That schedule contemplates Phase 1 completion within 529 Days of the Phase 1 Notice to Proceed; with Phase 2 completion thereafter.

3. Scope of Services.

- 3.1. This Contract is a Design-Build Contract for, engineering, and construction services (collectively, the "Work") for the Project, as more fully set forth in the following documents which are attached hereto and which are integral part of this Contract: Exhibit A – Preliminary Schedule (1 page); Exhibit B – Phase I Scope of Services and Fee Schedule (12 pages); Appendix "A" – Project Scope of Work (4 pages); Appendix "B" Design-Builder General Scope of Work (47 pages); Appendix "C" – Technical Specifications (6 pages); Appendix "D" – Design-Builder Special Conditions (18 pages); Appendix "E" – Design-Builder General Conditions (55 pages); Appendix "F" – Supplemental Provisions – Construction Costing (5 pages); Appendix "G" – Glossary of Terms and Conditions (10 pages). Also incorporated into this Contract by

reference are the Pima Association of Governments Standard Specifications for Public Improvements.

- 3.2. Work under this Contract will proceed in two phases: Phase 1 - Design and Pre-Construction Services; and Phase 2 – Construction Services. The initial Contract covers only the Phase 1 portion of the Work as that is defined in the Scope. Prior to any Design-Builder work on Phase 2, Design-Builder will deliver to County a proposed GMP, or multiple GMPs, if construction is divided into multiple phases.
- 3.3. With respect to the Phase 2 – Construction GMP, Design-Builder acknowledges that the Construction Documents may be incomplete at the time the Design-Builder delivers the GMP proposal, and that the Construction Documents may not be completed until after commencement of the construction phase of the Work. Nevertheless, the GMP proposal shall include all costs for the Work required by the completed Construction Documents, and if the GMP proposal is accepted by the County, the Design-Builder shall be entitled to no increase in the GMP if the Work required by the completed Construction Documents: (i) is required by the Contract for Design-Build Construction; (ii) is reasonably inferable from the incomplete documents; (iii) is consistent with the County's programmatic goals and objectives; (iv) is consistent with the County's Design and Construction Standards and the general industry standards for completion of the Work; (v) is not a substantial enlargement of the scope of Work; or (vi) substantially conforms to the nature, type, kind, or quality of Work depicted in the incomplete documents.
- 3.4. If a GMP proposal is unacceptable to the County, the County will promptly notify the Design-Builder in writing. Within fourteen (14) calendar days of such notification, the County and Design-Builder will meet to discuss and resolve any differences, inconsistencies, or misunderstandings and to negotiate recommended adjustments to the Work and/or to the proposed GMP.
- 3.5. The County may, at its sole discretion and based upon its sole judgment: (i) indicate its acceptance of a GMP proposal; (ii) reject a GMP proposal; (iii) terminate the Project; or (iv) proceed to construct the Project using a party or parties other than the Design-Builder.
- 3.6. If the County rejects a GMP proposal, neither party shall have any further obligation pursuant to this Contract.
- 3.7. If the County accepts a GMP proposal, the parties will complete and execute an amendment to this Contract, and the County will issue a written Notice to Proceed to the Design-Builder establishing the date the next phase is to commence (the "Phase Commencement Date"). The Design-Builder shall not expend any monies for the new phase prior to receipt of such Notice to Proceed.
4. **Key Personnel.** Design-Builder will employ suitably trained and skilled professional personnel to perform all services under this Contract. Prior to changing any key personnel, especially those key personnel County identified in Design-Builder's Statement of Qualifications relied upon in making this Contract, Design-Builder will obtain the approval of County.
5. **Compensation and Payment.**
 - 5.1. **Rates.** County will pay Design-Builder at the rates set forth in Exhibit B during the Term of the Contract.
 - 5.2. **Maximum Payment Amount.** County's total payments to Design-Builder for Phase 1 Work, including sales taxes (if applicable), in the not to exceed amount of \$2,550,104.43.
 - 5.3. **Sales Taxes.** The payment amounts or rates in Exhibit C do not include sales taxes. Design-Builder may invoice County for sales taxes that Design-Builder is required to pay on goods supplied to the County under this Contract. Design-Builder will show sales taxes as a separate line item on invoices.

- 5.4. Timing of Invoices. Design-Builder will invoice County on a monthly basis unless a different billing period is set forth in Appendix B, Design-Builder General Scope of Work. County must receive invoices no more than 30 days after the end of the billing period in which Design-Builder delivered the invoiced products or services to County. County may refuse to pay for any product or service for which Design-Builder does not timely invoice the County and, pursuant to A.R.S. § 11-622(C), will not pay for any product or service invoiced more than 6-months late.
- 5.5. Design-Builder will cite the Contract number on all invoices. The pre-printed terms and conditions on the purchase order form do not apply to Work performed under this Contract, which is to be governed solely by the terms of this Contract, including all attached and referenced documents.
- 5.6. County may, at any time during the Term and during the retention period set forth in Section 30 below, question any payment under this Contract. If County raises a question about the propriety of a past payment, Design-Builder will cooperate with County in reviewing the payment. County may set-off any overpayment against amounts due to Design-Builder under this or any other contract between County and Design-Builder. Design-Builder will promptly pay to County any overpayment that County cannot recover by set-off.
- 5.7. Design-Builder will not perform work in excess of the GMP without prior authorization by a written Change Order executed by County's Board of Supervisors or Procurement Director pursuant to the Pima County Procurement Code. Work performed in excess of the GMP without a written and properly approved Change Order is done at Design-Builder's own risk.
- 5.8. Price Guarantees.
 - 5.8.1. Upon acceptance by County of a GMP pursuant to Section 3.8 of this Contract, the Design-Builder guarantees that the sum of: (i) the actual Cost of the Work; (ii) Design-Builder's Contingency; (iii) Design-Builder's Staffing Costs; (iv) General Conditions Cost; and (v) Design-Builder's Overhead and Profit, will not exceed the amount set forth in the agreed upon GMP. All costs or expenses that would cause this sum to exceed the GMP will be borne by the Design-Builder unless adjusted by a County approved Change Order.
 - 5.8.2. Upon acceptance by County of a GMP pursuant to Section 3.8 of this Contract, the Design-Builder guarantees that the actual Cost of the Work, Design-Builder's Staffing Costs, General Conditions Cost, and Design-Builder's Overhead and Profit will not exceed the guaranteed maximum for each such category and that all costs or expenses that would cause any of these individual categories to exceed the guaranteed maximum for each such category in the agreed upon GMP will be borne by the Design-Builder unless adjusted by a County approved change order.
 - 5.8.3. Upon acceptance by County of a GMP pursuant to Section 3.8 of this Contract, the Design-Builder certifies that: all factual unit costs supporting the GMP proposal are accurate, complete, and current at the time of negotiations; and that any other factual unit costs that may be furnished to the County in the future to support any additional amounts that may be authorized will also be accurate and complete. Payments to the Design-Builder will be reduced if the County determines such amounts were included due to materially inaccurate, incomplete, or non-current factual unit costs.
 - 5.8.4. Upon acceptance by County of a GMP pursuant to Section 3.8 of this Contract the Design-Builder guarantees that, to the extent the accepted GMP includes contingency, Design-Builder will not use that contingency unless use has been specifically approved by County by Change Order prior to expenditure by the Design-Builder.

6. Insurance. The Insurance Requirements contained in Article 6, Paragraph 6.02, of Appendix E - EJCDC Design-Builder General Conditions are superseded by this Section 6, Insurance.

The Insurance Requirements including coverage scope and limits are considered by Pima County to be minimum requirements. Design-Builder's insurance shall be placed with companies licensed in

the State of Arizona and the insureds shall have an "A.M. Best" rating of not less than A- VII. Pima County in no way warrants that the minimum insurer rating is sufficient to protect the Design-Builder from potential insurer insolvency.

6.1 Minimum Scope and Limits of Insurance

Design-Builder shall procure and maintain, until all contractual obligations have been discharged, the insurance coverage with limits of liability not less than stated below.

6.1.1 Commercial General Liability (CGL): Occurrence Form

6.1.1.1 Design-Builder shall maintain CGL and, if necessary, commercial umbrella insurance with a total limit of not less than \$2,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project described in the scope of work for this contract

6.1.1.2 CGL insurance shall be written on ISO occurrence form CG 00 01 12 07 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

6.1.1.3 Design-Builder's CGL policy shall not be restricted in scope by the attachment of endorsements such as the subcontractor exception.

6.1.1.4 Pima County shall be included as an insured under the CGL, using ISO additional insured endorsements CG 20 10 and CG 20 37 or their equivalent, including coverage for Pima County with respect to liability arising out of the completed operations of Design-Builder.

6.1.2 Business Automobile Liability: Coverage to include Bodily Injury and Property Damage (Form CA 00 01) 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 each accident.

6.1.3 Workers' Compensation (WC) and Employers' Liability: Statutory requirements and benefits for Workers' Compensation. In Arizona, WC coverage is compulsory for employers of one or more employees. Employer's Liability coverage- \$1,000,000 each accident and each person - disease.

6.1.4 Professional Liability (Errors and Omissions) Insurance: This insurance is required when the Design-Builder's CGL insurance excludes coverage of the Design-Builder's professional error and omission exposures. The policy limits shall be not less than \$2,000,000 Each Claim and \$2,000,000 Annual Aggregate. The insurance policy shall cover professional misconduct or negligent acts of anyone performing any professional services under this contract.

6.1.5 Claim-Made Insurance Coverage: If any part of the Required Insurance is written on a claims-made basis, any policy retroactive date must precede the effective date of this Contract, and Design-Builder must maintain such coverage for a period of not less than three (3) years following Contract expiration, termination or cancellation.

6.2 Additional Insurance Requirements

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

- 6.2.1 **Additional Insured:** The General Liability and Business Automobile Liability Policies shall each be endorsed to include Pima County, 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 Design-Builder.
- 6.2.2 **Subrogation:** The General Liability, Business Automobile Liability and Workers' Compensation Policies shall each contain a waiver of subrogation endorsement in favor of Pima County, and its departments, districts, boards, commissions, officers, officials, agents, and employees for losses arising from work performed by or on behalf of the Design-Builder.
- 6.2.3 **Primary Insurance:** The Design-Builder's policies shall stipulate that the insurance afforded the Design-Builder shall be primary and that any insurance carried by Pima County, its agents, officials, or employees shall be excess and not contributory insurance.
- 6.2.4 **Subcontractors' Insurance.** Design-Builder shall cause each subcontractor employed by Design-Builder to purchase and maintain insurance of the type specified above. When requested by Pima County, Design-Builder shall furnish copies of certificates of insurance evidencing coverage for each subcontractor.

6.3 Coverage Verification Requirements

- 6.3.1 **Evidence of Insurance:** All certificates and endorsements, as required by this written agreement, are to be received and approved by the appropriate County Department before work commences and thereafter upon renewal or replacement of each certified coverage. Design-Builder shall furnish Pima County with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth above.
- 6.3.2 **Certificate of Insurance:** All certificates shall include the Pima County project or contract number and project description on the certificate. All certificates shall provide for 30 days written notice to Pima County prior to the cancellation of any insurance referred to therein, except 10-days prior notice is sufficient when the cancellation is for non-payment of a premium.
- 6.3.3 **Maintaining Insurance:** Failure to maintain the required insurance may result in termination of this contract at Pima County's option. If Design-Builder fails to maintain the insurance as set forth herein, Pima County shall have the right, but not the obligation, to purchase said insurance at Design-Builder's expense.
- 6.3.4 **No Representation of Coverage Adequacy:** By requiring insurance herein, Pima County does not represent that coverage and limits will necessarily be adequate to protect Design-Builder, and such coverage and limits shall not be deemed as a limitation on Design-Builder's liability under the indemnities granted to Pima County in this contract

6.4 Approval and Modifications

The Pima County Risk Manager may approve a modification of the Insurance Requirements without the necessity of a formal Contract amendment, but the approval must be in writing.

Neither the County's failure to obtain a required insurance certificate or endorsement, the County's failure to object to a non-complying insurance certificate or endorsement, or the County's receipt of any other information from the Design-Builder, its insurance broker(s) and/or insurer(s), constitutes a waiver of any of the Insurance Requirements or the Design-Builder's obligation to maintain such insurance.

6.4.1 Down-the-hole Coverage

6.4.1.1 Limits of coverage \$1,000,000 per occurrence

6.4.2 Design-Builders Pollution Liability

6.4.2.1 Design-Builder shall maintain in force for the full period of this contract insurance covering losses caused by pollution incidents that arise from the operations of the Design-Builder described under the scope of services of this contract.

6.4.2.2 Cover shall apply to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims. The policy of insurance affording these required coverages shall be written in an amount of at least \$1,000,000 per claim, with an annual aggregate of at least \$2,000,000.

6.4.2.3 Certificate of Insurance shall identify if policy is written on an occurrence or claims-made basis.

6.4.2.4 The policy of insurance as required in this section shall include as an insured the Owner, officers, and employees.

6.4.2.5 If the scope of services as defined in this contract includes the disposal of any hazardous or nonhazardous materials from the job site, the Design-Builder must furnish to the Owner evidence of pollution liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting waste under this contract. Coverage certified to the Owner under this Section for the disposal facility insurance must be maintained in minimum amounts of \$1,000,000 per loss, with an annual aggregate of at least \$5,000,000.

6.4.3 Builder's Risk - Installation Floater

6.4.3.1 Amount equal to the Contract Completed Value \$ TBD

6.4.3.2 Pima County, Design-Builder, subcontractor and any others with an insurable interest in the work **shall be Insureds** on the policy.

6.4.3.3 The Installation Floater must provide coverage from the time the equipment/material becomes the responsibility of the Design-Builder and shall continue without interruption during the installation, including any time during which the equipment/material is being transported to the installation site, or awaiting installation, whether on or off site.

6.4.3.4 Coverage shall be written on an "all risks" coverage on a "replacement cost basis without optional deductibles", replacement cost basis as well as coverage for losses that may occur during equipment testing.

6.4.3.5 Design-Builder shall be responsible for repairing damage to the work and other property not insured if the damage is caused "in whole or in part" by the Design-Builder or any subcontractors.

- 6.4.3.6 Policy shall be endorsed such that the insurance shall not be canceled or lapse because of any partial use by the County.
- 6.4.3.7 Policy shall be maintained until whichever of the following shall first occur: (1) final payment has been made; or, (2) until no person or entity, other than the County, has an insurable interest in the property required to be covered.
- 6.4.3.8 Policy shall contain a waiver of subrogation endorsement in favor of Pima County, and its departments, districts, boards, commissions, officers, officials, agents, and employees for losses arising from work performed by or on behalf of the Design-Builder.
- 6.4.3.9 Design-Builder is responsible for the payment of all deductibles under the Installation Floater policy.

7 Payment and Performance Bonds. The Payment and Performance Bonds Requirements contained in Article 6, Paragraph 6.01 of Appendix E - EJCDC Design-Builder General Conditions are superseded by this Section 7, Payment and Performance Bonds.

As required by A.R.S. §§ 34-610 and 34-611 and, as a condition precedent to receiving a Notice to Proceed for any new construction phase of the Work, Design-Builder will deliver to County the Performance Bond and the Payment Bond, each in an amount equal to the portion of the GMP attributable to that phase of the construction work, as financial security for the faithful performance and payment of its Design- Build Period obligations hereunder. The Design-Builder will provide for an increase in the Performance Bond and the Payment Bond to reflect any GMP adjustments, as a condition of its entitlement to the GMP adjustment.

- 7.1 The Performance Bond and the Payment Bond must be substantially in the form set forth in **Attachment 5** hereto and must be issued by a surety company: (1) verified by the County having a rating of "A-" in the latest revision of the A.M. Best Company's Insurance Report; (2) be listed in the United States Treasury Department's Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsurance Companies"; and (3) holding a certificate of authority to transact surety business in the State of Arizona, issued by the Director of the Department of Insurance.
- 7.2 The Performance Bond and the Payment Bond shall be released only upon the achievement of Final Completion by the Company. In no event shall the Performance Bond or the Payment Bond serve as a limitation on the liability of the Design-Builder under this Contract.
- 7.3 Design-Builder's failure to maintain the Performance Bond and Payment Bond in the required amounts throughout the construction phases of this Contract will constitute material breach of this Contract.

8 Indemnification. The Indemnification Requirements contained in Article 7, Paragraph 7.19 of Appendix E - EJCDC Design-Builder General Conditions are superseded by this Section 8, Indemnification.

To the fullest extent permitted by law, Design-Builder will defend, indemnify, and hold harmless Pima County and any related taxing district, and the officials and employees of each of them (collectively, "County Indemnitees") from and against any and all claims, actions, liabilities, and Losses and Expenses (including reasonable attorney fees) (collectively, "Claims") arising out of actual or alleged injury of any person (including death) or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, by any act or omission of Design-Builder or any of Design-Builder's directors, officers, agents, employees, volunteers, or subcontractors. This indemnity includes any claim or amount arising or recovered under the Workers' Compensation Law or arising out of the failure of Design-Builder to conform to any federal, state, or local law, statute, ordinance,

rule, regulation, or court decree. The County Indemnitees will, in all instances, except for Claims arising solely from the acts or omissions of the County Indemnitees, be indemnified by Design-Builder from and against any and all Claims. Design-Builder is responsible for primary loss investigation, defense, and judgment costs for any Claim to which this indemnity provision applies. This duty to indemnify will survive the expiration or termination of this Contract.

- 9 Design-Builder's Performance.** Design-Builder is responsible for the professional quality, technical accuracy, timely completion, and the coordination of all its efforts and other services furnished by Design-Builder under this Contract. Without additional compensation, Design-Builder will correct or revise any errors, omissions, or other deficiencies in all products of its efforts and other services provided. This will include resolving any deficiencies arising out of the willful or negligent acts or omissions of Design-Builder found during or after the course of the services performed by or for Design-Builder under this Contract, to the extent that such willful or negligent errors, omissions, and acts fall below the standard of care and skill that a professional Design-Builder in Arizona would exercise under similar conditions. Design-Builder is responsible for these corrections or revisions regardless of County having knowledge of or condoning/accepting the products or the services. Any such resolution of deficiencies shall be at no cost to County.

10 Excusable Delays

10.1 Neither Party shall be liable to the other nor deemed in default under this Contract if and to the extent that such Party's performance is prevented or delayed by reason of an Uncontrollable Circumstance.

10.2 For purposes of this Contract, Uncontrollable Circumstance means any act, event, or condition that: (1) is beyond the reasonable control of the party relying on it as a justification for not performing an obligation or complying with any condition required of such party under this Contract; and (2) materially expands the scope of, interferes with, delays, or increases the cost of performing the party's obligations under this Contract, to the extent that such act, event, or condition is not the result of the intentional or negligent act, error, or omission, failure to exercise reasonable diligence, or breach of this Contract on the part of the party claiming the occurrence of an Uncontrollable Circumstance.

10.3 Excusable Delays shall not include late performance by a subcontractor unless the delay arises out of an Uncontrollable Circumstance. The time of completion shall be extended, by a Change Order, for a period of time equal to the time the cause prevented the delayed Party from performing in accordance with this Contract.

- 11 Liquidated Damages.** Design-Builder agrees to achieve Substantial Completion within the number of Days specified in Section 2.2, above (the "Time"). Design-Builder's failure to reach Substantial Completion within the Time will substantially harm the County. Because damages resulting from such a failure cannot be calculated with any degree of certainty, the Parties agree that if the Work is not Substantially Complete within the Time (as may be amended through written Change Orders), Design-Builder will pay to County as Liquidated Damages, and not a penalty, \$1,290.00 for each calendar day elapsing between the Agreed Date for Substantial Completion and the date Substantial Completion is actually achieved. The Parties further agree that the daily Liquidated Damages amount is fair, reasonable, and not subject to later challenge.

- 12 Unilateral Change Directive.** County may issue a Unilateral Change Directive to Design-Builder at any time during the term of the Contract. Upon receipt of a Unilateral Change directive, Design-Builder will promptly proceed with the performance of any change in the Work as instructed and will promptly advise the County in writing of the Design-Builder's agreement (or disagreement) with any price, performance, or schedule relief, if any, as may be proposed by the County in the Unilateral Change Directive. No Unilateral Change Directive will be binding on either Party unless it has been approved by the County Board of Supervisors or, if authorized, the Procurement Director. A Unilateral

Change Directive that is signed by Design-Builder and approved by the County Board of Supervisors or Procurement Director reflecting the Scope of Work and any price, schedule, or performance relief, if any, will be deemed a Change Order.

13 Suspension/Termination for Convenience

13.1 Suspension by County for Convenience. County may, without cause, order Design-Builder, in writing, to suspend or interrupt the Work in whole or in part for such period of time as the County may determine necessary whenever such suspension or interruption would be in the best interest of the County. If County suspends the Work for convenience, an adjustment shall be made for substantiated increases in the cost of performance of the Contract, if any, including profit on the increased cost of performance, caused by suspension or interruption. No adjustment shall be made to the extent:

- 13.1.1 performance is, was, or would have been so suspended or interrupted by another cause for which the Design-Builder is responsible; or
- 13.1.2 an equitable adjustment is made or denied by County.

13.2 Termination by County for Convenience.

- 13.2.1 The performance of the Work under this Contract may be terminated by County, in whole or in part, in accordance with this clause whenever the County reasonably determines that such termination is in the best interest of County. Any such termination will be effected by delivery to Design-Builder of a written Notice of Termination specifying the extent to which performance of the Work is terminated, and the date upon which such termination becomes effective.
- 13.2.2 If the Contract is terminated by the County as provided herein, County will compensate Design-Builder for any Work performed, and accepted, prior to the termination, together with profit in proportion to the Work performed and accepted. The compensation shall include payment for contractual obligations reasonably incurred prior to termination. No amount will be allowed for: anticipated profit on unperformed Work; or consequential damages to Design-Builder resulting from the termination.
- 13.2.3 Termination of the Contract or any portion thereof by County for convenience will not relieve Design-Builder of its contractual responsibilities for Work completed.

14 Termination for Cause. This Contract may be terminated for cause upon the occurrence of one or more Events of Default:

14.1 Events of Default

- 14.1.1 If Design-Builder fails or neglects to carry out the Work in accordance with the provisions of the Contract Documents, and fails, after ten (10) calendar days written notice from County, to correct such failure or neglect and thereafter diligently pursue the Project to completion;
- 14.1.2 If Design-Builder materially breaches this Contract and fails, after ten (10) days written notice from the County, to correct such breach and thereafter diligently pursue the Project to completion; or
- 14.1.3 If a custodian, trustee or receiver is appointed for Design-Builder, or if Design-Builder becomes insolvent or bankrupt, or makes an assignment for the benefit of creditors, or Design-Builder causes or suffers an order for relief to be entered with respect to it under applicable Federal bankruptcy law or applies for or consents to the appointment of a custodian, trustee or receiver for Design-Builder, or bankruptcy, reorganization, arrangement or insolvency proceedings, or other proceedings for relief under any bankruptcy or similar law or laws for the relief of

debtors, are instituted by or against Design-Builder, and in any of the foregoing cases such action is not discharged or terminated within sixty (60) Days of its institution.

14.2 Remedies of County Upon an Event of Default.

- 14.2.1 Upon an Event of Default, County has the right to terminate this Contract upon an additional seven (7) Days' written notice to Design-Builder provided Design-Builder has not commenced a cure within such seven (7) Day period.
- 14.2.2 Without prejudice to any other rights or remedies of County, County may:
 - 14.2.2.1 Take possession of all data, reports, and work in progress in possession of Design-Builder or to which Design-Builder otherwise has right;
 - 14.2.2.2 Accept assignment of Subcontracts; and
 - 14.2.2.3 Finish the Work by whatever reasonable method County may deem expedient.
- 14.2.3 When the County terminates the Contract as aforesaid, Design-Builder will not be entitled to receive further payment until the Work is finished. If the unpaid balance exceeds costs incurred in finishing the Work, such excess may be paid to Design-Builder, up to the amount due Design-Builder to the date of the termination. If such costs exceed the unpaid balance of the Contract, Design-Builder will pay the difference to County.

15 Dispute Resolution.

- 15.1 In the event of any dispute arising between County and Design-Builder regarding any part of this Contract or the Contract Documents, or the Parties' obligations or performance hereunder, either Party may institute the dispute resolution procedures set forth herein. The Parties shall continue performance of their respective obligations hereunder notwithstanding the existence of a dispute.
 - 15.1.1 The Parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times so as to avoid or minimize disputes or disagreements. If disputes or disagreements do arise, Design-Builder and County each commit to resolving such disputes or disagreements in an amicable, professional, and expeditious manner so as to avoid unnecessary losses, delays, and disruptions to the Work. Design-Builder and County will first attempt to resolve disputes or disagreements at the field level through discussions between Design-Builder's Representative and County's Representative.
 - 15.1.2 Informal Dispute Resolution. Either Party may, from time to time, call a special meeting for the resolution of disputes that would have a material impact on the cost or progress of the Project. Such meeting shall be held at County's offices within three (3) working Days of written request therefor, which request shall specify in reasonable detail the nature of the dispute. The County's Project Manager and Design-Builder's Project Manager will attend the meeting. Such Representatives shall attempt in good faith to resolve the dispute. If unable to resolve the dispute, the Parties may agree to escalation of discussions to a higher level before proceeding to mediation, as described below.
 - 15.1.3 Mediation. If the Parties are unable to resolve the dispute through the special meeting and/or escalation, then either Party may request non-binding mediation. The non-requesting Party may decline the request in its reasonable discretion. If there is concurrence that any matter will be mediated, a mediator, mutually acceptable to the Parties and experienced in design and construction matters as well as in the Design-Build procurement method will be appointed. The Parties will share the cost of the

mediator. The mediator will be given any written statements of the Parties and may review the Site and any relevant documents. The mediator will call a meeting of the Parties within ten (10) working days after his/her appointment, which meeting will be attended by the County's Project Manager and Design-Builder's Project Manager. Such Authorized Representatives shall attempt in good faith to resolve the dispute. During such ten (10) Day period, the mediator may meet with the Parties separately.

- 15.1.4 **Mediation Minutes.** No minutes will be kept with respect to any mediation proceedings and the comments and/or findings of the mediator, together with any written statements prepared, will be non-binding, confidential, and without prejudice to the rights and remedies of any Party. The entire mediation process shall be completed within twenty (20) Working Days of the date upon which the initial special meeting is held, unless the Parties agree otherwise in writing. If the dispute is settled through the mediation process, the decision will be implemented by written agreement signed by the Parties.
 - 15.1.5 **Litigation.** Nothing in this Section will operate to limit, interfere with, or delay the right of either Party to this Contract to commence judicial legal proceedings upon a breach of this Contract by the other Party, whether in lieu of, concurrently with, or at the conclusion on any non-binding litigation.
- 16 No Consequential or Punitive Damages.** In no event will either Party hereto be liable to the other or obligated in any manner to pay to the other any special, incidental, consequential, punitive, or similar damages based upon claims arising out of or in connection with the performance or non-performance of its obligations or otherwise under this Contract, or the material falseness or inaccuracy of any representation made in this Contract, whether such claims are based upon contract, tort, negligence, warranty, or other legal theory; provided, however, that the waiver of the foregoing damages under this Section is intended to apply only to disputes and claims as between the County and the Design-Builder. Nothing in this Section shall limit the obligation of the Design-Builder to indemnify, defend and hold harmless the County Indemnitees for any special, incidental, consequential, punitive, or similar damages payable to third parties resulting from any act or circumstance for which the Design-Builder is obligated to indemnify the County Indemnitees hereunder. In addition, the Parties acknowledge and agree that nothing in this Section will serve as a limitation or defense with respect to any obligation of a party to pay Liquidated Damages specifically provided for under this Contract.
- 17 Laws and Regulations.**
- 17.1 **Compliance with Laws.** Design-Builder will comply with all federal, state, and local laws, rules, regulations, standards, and Executive Orders.
 - 17.2 **Licensing.** Design-Builder warrants that it (directly or through its subcontractors) is appropriately licensed to provide all services required under this Contract and that its subcontractors will be appropriately licensed.
 - 17.3 **Choice of Law; Venue.** The laws and regulations of the State of Arizona govern the rights and obligations of the parties under this Contract. Any action relating to this Contract must be filed and maintained in the appropriate court of the State of Arizona in Pima County.
- 18 Independent Contractor.** Design-Builder is an independent contractor. Neither Design-Builder, nor any of Design-Builder's officers, agents, or employees will be considered an employee of Pima County for any purpose or be entitled to receive any employment-related benefits, or assert any protections, under the Pima County Merit System. Design-Builder is responsible for paying all federal, state, and local taxes on the compensation received by Design-Builder under this Contract and will indemnify, defend, and hold County harmless from any and all liability that County may incur because of Design-Builder's failure to pay such taxes.
- 19 Subcontractors.** Design-Builder is fully responsible for all acts and omissions of its subcontractors, and of persons directly or indirectly employed by Design-Builder's subcontractors, and of persons for

whose acts any of them may be liable, to the same extent that the Design-Builder is responsible for the acts and omissions of its own employees. Nothing in this Contract creates any obligation on the part of County to pay or see to the payment of any money due any subcontractor, except as may be required by law.

- 20 **Assignment.** Design-Builder may not assign its rights or obligations under this Contract, in whole or in part, without the County's prior written approval. County may withhold approval at its sole discretion.
- 21 **Non-Discrimination.** Design-Builder will comply with all provisions and requirements of Arizona Executive Order 2009-09, which is hereby incorporated into this contract, including flow-down of all provisions and requirements to any subcontractors. During the performance of this Contract, Design-Builder 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.
- 22 **Americans with Disabilities Act.** Design-Builder 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.
- 23 **Authority to Contract.** Design-Builder warrants its right and power to enter into this Contract. If any court or administrative agency determines that County does not have authority to enter into this Contract, County will not be liable to Design-Builder or any third party by reason of such determination or by reason of this Contract.
- 24 **Full and Complete Performance.** The failure of either Party to insist, in one or more instances, upon the other Party's full and complete performance under this Contract, or to take any action based on the other Party's failure to fully and completely perform, 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.
- 25 **Cancellation for Conflict of Interest.** This Contract is subject to cancellation for conflict of interest pursuant to A.R.S. § 38-511, the pertinent provisions of which are incorporated into this Contract by reference.
- 26 **Notice.** Any notice required or permitted to be given under this Contract must be in writing and be served by personal delivery or by certified mail upon the other Party as follows:

County:

Jackson Jenkins, Director
Regional Wastewater Reclamation Department
201 N Stone Ave, 8th Floor
Tucson, AZ 85701
Tel: (520) 724-6500
Fax: (520) 724-9635

Design-Builder:

Todd Adams, Vice President
Borderland Construction Company, Inc.
P.O. Box 27406
Tucson, AZ 85726-7406
Tel: (520) 623-0900
Fax: (520) 623-0232

- 27 **Non-Exclusive Contract.** Design-Builder understands that this Contract is nonexclusive and is for the sole convenience of County. County reserves the right to obtain like services from other sources for any reason.
- 28 **Remedies.** Either Party may pursue any remedies provided by law for the breach of this Contract. 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.
- 29 **Encumbrances.** Design-Builder will not directly or indirectly create or permit to be created or to remain, and shall promptly discharge or bond any Encumbrance or Lien arising in relation to the Project or the Design-Build Work. The Design-Builder's Subcontracts with all materialmen, suppliers, and Subcontractors shall provide that the sole recourse for such materialmen, suppliers, and Subcontractors for non-payment shall be against the Payment Bond.
- 30 **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.
- 31 **Books and Records.** Design-Builder 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 County. In addition, Design-Builder will retain all records relating to this Contract for at least five (5) years after its expiration or termination or, if later, until any related pending proceeding or litigation has concluded.
- 32 **Public Records.**
- 32.1 Disclosure. Pursuant to A.R.S. § 39-121 *et seq.*, and A.R.S. § 34-603(H) in the case of construction or Architectural and Engineering services procured under A.R.S. Title 34, Chapter 6, all documents submitted in response to the solicitation resulting in award of this Contract, including, but not limited to, pricing schedules, product specifications, work plans, and any supporting documents, are public records. As such, those documents are subject to release and/or review by the general public upon request, including competitors.
- 32.2 Records Marked Confidential; Notice and Protective Order. If Design-Builder reasonably believes that some of those records contain proprietary, trade-secret, or otherwise-confidential information, Design-Builder must prominently mark those records "CONFIDENTIAL." In the event a public-records request is submitted to County for records marked CONFIDENTIAL, County will notify Design-Builder of the request as soon as reasonably possible. County will release the records 10 business days after the date of that notice, unless Design-Builder, within that period, secured an appropriate order from a court of competent jurisdiction, enjoining the release of the records. County will not, under any circumstances, be responsible for securing such an order, nor will County be in any way financially responsible for any costs associated with securing such an order.
- 33 **Legal Arizona Workers Act Compliance.**
- 33.1 Compliance with Immigration Laws. Design-Builder hereby warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to its employment of its employees, and with the requirements of A.R.S. § 23-214 (A) (together the "State and Federal Immigration Laws"). Design-Builder further ensures that each subcontractor who performs any work for Design-Builder under this Contract likewise complies with the State and Federal Immigration Laws.
- 33.2 Books & Records. County has the right at any time to inspect the books and records of Design-Builder and any subcontractor in order to verify such party's compliance with the State and Federal Immigration Laws.

- 33.3 Remedies for Breach of Warranty. Any breach of Design-Builder's or any subcontractor'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 Design-Builder to penalties up to and including suspension or termination of this Contract. If the breach is by a subcontractor, and the subcontract is suspended or terminated as a result, Design-Builder 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 subcontractor, as soon as possible so as not to delay project completion. Any additional costs attributable directly or indirectly to such remedial action are the responsibility of Design-Builder.
- 33.4 Subcontractors. Design-Builder will advise each subcontractor of County's rights and the subcontractor's obligations under this Section by including a provision in each subcontract substantially in the following form:

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

- 34 **Grant Compliance.** Not Applicable.
- 35 **Israel Boycott Certification.** Pursuant to A.R.S. § 35-393.01, if Design-Builder engages in for-profit activity and has 10 or more employees, and if this Contract has a value of \$100,000.00 or more, Design-Builder certifies it is not currently engaged in, and agrees for the duration of this Contract to not engage in, a boycott of goods or services from Israel. This certification does not apply to a boycott prohibited by 50 U.S.C. § 4842 or a regulation issued pursuant to 50 U.S.C. § 4842.
- 36 **No Third Party Beneficiaries.** Unless explicitly stated otherwise elsewhere in this Contract, no person other than the Parties themselves has any rights or remedies under this Contract.

- 37 **Entire Agreement.** This document constitutes the entire agreement between the Parties pertaining to the subject matter it addresses, and this Contract supersedes all prior or contemporaneous agreements and understandings, whether oral or written.

PIMA COUNTY

Chairman, Board of Supervisors

ATTEST

Clerk of the Board

Date

APPROVED AS TO FORM

Victoria Buchinger
Deputy County Attorney

VICTORIA BUCHINGER
Print DCA Name

3-17-2020
Date

DESIGN-BUILDER

Todd Adams

Authorized Officer Signature

Todd Adams, Vice President

Printed Name and Title

3-18-2020
Date

EXHIBIT "A" PRELIMINARY SCHEDULE (1 page)

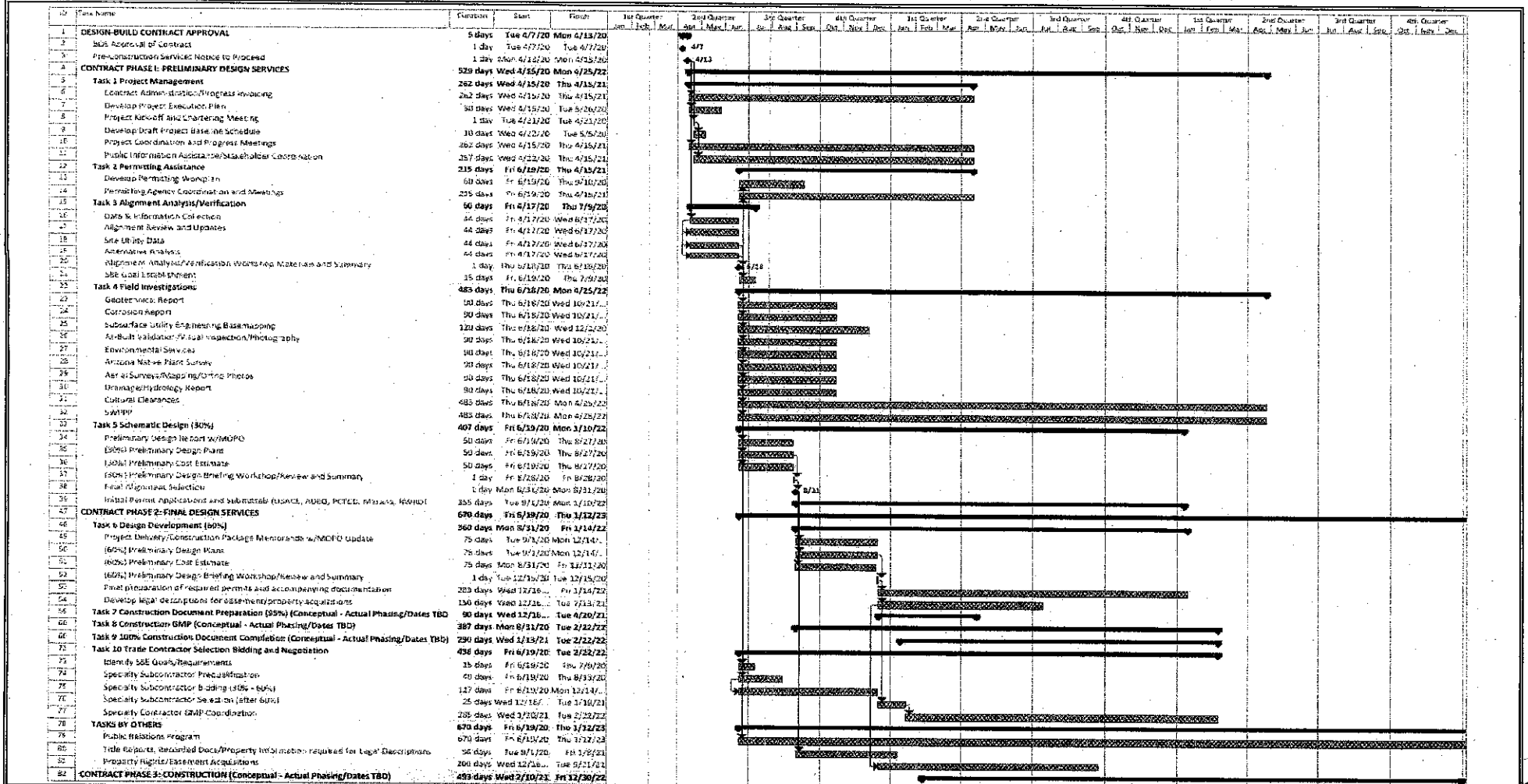
Borderland

DESIGN-BUILD (DB)

PRE-CONSTRUCTION SERVICES CONTRACT

"EXHIBIT A" - ANTICIPATED PRE-CONSTRUCTION SERVICE SCHEDULE

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)
SOLICITATION NO: 2000008PROJECT OWNER: Pima County
DESIGN-BUILDER: Borderland Construction Company, Inc.



DESIGN-BUILD (DB)

PRE-CONSTRUCTION SERVICES CONTRACT

"EXHIBIT B-1" - FEE SUMMARY (BY TASK)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)**SOLICITATION NO:** 2000008**PROJECT OWNER:** Pima County**DESIGN-BUILDER:** Borderland Construction Company, Inc.

DB - Pre-Construction Services Anticipated Tasks/Coordination Efforts:		Amount
Task 1. Project Management	\$	399,751.60
Task 2. Permitting Assistance	\$	58,727.84
Task 3. Alignment Analysis/Verification	\$	164,511.74
Task 4. Field Investigations	\$	841,279.37
Task 5. Schematic Design (30%)	\$	187,509.66
Task 6. Design Development (60%)	\$	219,287.08
Task 7. Construction Document Preparation (95%)	\$	254,393.80
Task 8. Construction GMP	\$	43,652.32
Task 9. Construction Document Completion (100%)	\$	119,109.14
Task 10. Trade Contractor Selection Bidding and Negotiation	\$	31,881.88
Task 11. Owner's Contingency (As-Directed Work)	\$	230,000.00
TOTAL NOT-TO-EXCEED PRE-CONSTRUCTION SERVICES AMOUNT		\$ 2,550,104.43
<i>This fee summary is based on the anticipated man-hours required to complete each of the deliverables identified within Tasks 1-10 of "Appendix B - Design Builder Scope of Work"</i>		
<i>See "Exhibit B-2" for Estimate Fee Schedule (by task, personnel/resource, and anticipated hours)</i>		
<i>Fee Summary is based on an anticipated 12-month Pre-Construction Phase</i>		



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-2" - ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)

SOLICITATION NO: 2000008

PROJECT OWNER: Pima County

DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Borderland/B&F Personnel/Staff Type (Hourly Rate* x Anticipated Hours)									Estimated Totals
			PIC	PM	APM	TM	LE	PS	PE	TE	DIRECT EXP./ SUBCON.	
			\$157.27	\$114.51	\$114.51	\$114.51	\$114.51	\$97.29	\$75.77	\$83.74		
Task 1. Project Management	1.1. Project Execution Plan	1 EA	4.0	8.0	4.0	0.0	0.0	0.0	8.0	0.0	\$ -	\$2,609.36
	1.2 Project Kick-off & Chartering Meeting	1 EA	8.0	4.0	4.0	0.0	0.0	8.0	4.0	0.0	\$ -	\$3,255.64
	1.3.A. Contract Administration	12 MO	12.0	24.0	12.0	0.0	0.0	0.0	36.0	0.0	\$ -	\$ 8,737.32
	1.3.B. Professional Liability Insurance Policy	3 YRS									\$ 75,000.00	\$75,000.00
	1.4 Develop Construction Schedules (30%, 60%, 95%, 4 GMPs)	7 EA	14.0	28.0	14.0	0.0	0.0	14.0	28.0	0.0	\$ -	\$10,494.82
	1.5. Project Coord. & Progress Meetings	12 MO	24.0	24.0	24.0	12.0	0.0	24.0	24.0	0.0	\$ -	\$14,798.52
	1.7.A. Public Information. Assistance/ Stakeholder Coordination	1 LS	12.0	24.0	12.0	0.0	0.0	12.0	24.0	0.0	\$ -	\$8,995.56
	1.7.B. Kaseen Communications	AL*	0.0								\$ 36,930.00	\$36,930.00
	Westland Resources (See Ex. B-4)	1 LS**	0.0								\$ 238,930.38	\$238,930.38
	Task 1. Subtotals			74.00	112.00	70.00	12.00	0.00	58.00	124.00	0.00	-
			\$11,637.98	\$12,825.12	\$8,015.70	\$1,374.12	\$0.00	\$5,642.82	\$9,395.48	\$0.00	\$350,860.38	\$399,751.60
Task 2. Permitting Assistance	2.1.1. Develop Permitting Workplan	1 EA	2.0	8.0	4.0	0.0	0.0	0.0	8.0	0.0	\$ -	\$ 2,294.82
	2.1.2. Develop/Maintain Permit Tracking Log	1 LS	0.0	4.0	2.0	0.0	0.0	0.0	8.0	0.0	\$ -	\$ 1,293.22
	2.2. Payment of Application Costs and Permitting Fees	AL*									\$ 35,000.00	\$ 35,000.00
	2.3. Permitting Agency Coord. & Meetings	6 EA	8.0	12.0	6.0	0.0	0.0	0.0	6.0	0.0	\$ -	\$ 3,773.96
	Westland Resources (See Ex. B-4)	1 LS**									\$ 16,365.84	\$ 16,365.84
	Task 2. Subtotals			10.00	24.00	12.00	0.00	0.00	0.00	22.00	0.00	-
			\$1,572.70	\$2,748.24	\$1,374.12	\$0.00	\$0.00	\$0.00	\$1,666.94	\$0.00	\$51,365.84	\$58,727.84



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-2" - ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)
SOLICITATION NO: 2000008
PROJECT OWNER: Pima County
DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Borderland/B&F Personnel/Staff Type (Hourly Rate* x Anticipated Hours)								DIRECT EXP./ SUBCON.	Estimated Totals
			PIC	PM	APM	TM	LE	PS	PE	TE		
			\$157.27	\$114.51	\$114.51	\$114.51	\$114.51	\$97.29	\$75.77	\$83.74		
Task 3. Alignment Analysis/ Verification	3.2. As-Built Validation	1 LS	0.0	8.0	4.0	0.0	0.0	0.0	16.0	0.0	\$ -	\$ 2,586.44
	3.5.1 Preliminary Plan View Maps	1 LS	0.0	8.0	4.0	0.0	0.0	0.0	16.0	0.0	\$ -	\$ 2,586.44
	3.5.2. Prel. Construction Cost Est.	1 LS	4.0	6.0	2.0	0.0	24.0	0.0	24.0	60.0	\$ -	\$ 11,136.28
	3.5.3 Prelim. identification of anticipated permits	1 LS	4.0	4.0	2.0	0.0	0.0	0.0	4.0	0.0	\$ -	\$ 1,619.22
	3.5.4 Prelim. ID of anticipated property rights/easement needs	1 LS	4.0	4.0	2.0	0.0	0.0	4.0	4.0	0.0	\$ -	\$ 2,008.38
	3.5.5. Alignment Anal./Verif. workshop materials & summary	1 EA	8.0	6.0	4.0	0.0	0.0	0.0	6.0	0.0	\$ -	\$ 2,857.88
	3.5.6. Preliminary Design Report	1 LS	4.0	8.0	4.0	0.0	0.0	0.0	8.0	0.0	\$ -	\$ 2,609.36
	Westland Resources (See Ex. B-4)	1 LS**									\$ 139,107.74	\$ 139,107.74
	Task 3. Subtotals		24.00	44.00	22.00	0.00	24.00	4.00	78.00	60.00	-	\$164,511.74
			\$3,774.48	\$5,038.44	\$2,519.22	\$0.00	\$2,748.24	\$389.16	\$5,910.06	\$5,024.40	\$139,107.74	\$164,511.74
Task 4. Field Investigations	4.1. Geotechnical Report	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	4.2. Corrosion Report	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	4.3.1. SUE Basemapping Coordination	1 LS	0.0	16.0	16.0	0.0	0.0	0.0	40.0	0.0	\$ -	\$ 6,695.12
	4.3.2. SUE - Utility Pathoing	AL*									\$ 200,000.00	\$ 200,000.00
	4.6. Arizona Native Plant Survey	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	4.7. Survey and Mapping	1 LS	0.0	8.0	4.0	0.0	0.0	0.0	16.0	0.0	\$ -	\$ 2,586.44
	4.8. Drainage/Hydrology Report	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	4.9. Cultural Clearances	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	Westland Resources (See Ex. B-4)	1 LS**									\$ 631,997.81	\$ 631,997.81
			0.00	24.00	20.00	0.00	0.00	0.00	56.00	0.00	-	\$841,279.37
			\$0.00	\$2,748.24	\$2,290.20	\$0.00	\$0.00	\$0.00	\$4,243.12	\$0.00	\$831,997.81	\$841,279.37



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-2" - ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)
SOLICITATION NO: 2000008
PROJECT OWNER: Pima County
DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Borderland/B&F Personnel/Staff Type (Hourly Rate* x Anticipated Hours)									Estimated Totals	
			PIC	PM	APM	TM	LE	PS	PE	TE	DIRECT EXP./ SUBCON.		
			\$157.27	\$114.51	\$114.51	\$114.51	\$114.51	\$97.29	\$75.77	\$83.74			
Task 5. Schematic Design (30%)	5.2.1. (30%) Preliminary Design Plans - Constructability Review	1 LS	2.0	4.0	2.0	4.0	0.0	8.0	8.0	8.0	\$ -	\$ 3,514.04	
	5.2.2. Preliminary Identification of project disturbance area (for establishment of necessary easements)	1 LS	2.0	8.0	4.0	0.0	0.0	4.0	8.0	0.0	\$ -	\$ 2,683.98	
	5.5. Preliminary Design Report	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -	
	5.6. (30%) Prelim. Cost Estimate	1 LS	6.0	8.0	4.0	4.0	40.0	0.0	24.0	60.0	\$ -	\$ 14,199.06	
	5.8. Preliminary MOPO DM	1 LS	2.0	8.0	4.0	2.0	0.0	0.0	8.0	0.0	\$ -	\$ 2,523.84	
	5.9.1. (30%) Review Comment responses and Workshop Minutes	1 LS	4.0	4.0	2.0	0.0	0.0	4.0	4.0	0.0	\$ -	\$ 2,008.38	
	5.9.2. Final Alignment Selection	1 LS	4.0	8.0	4.0	0.0	0.0	8.0	8.0	0.0	\$ -	\$ 3,387.68	
	Westland Resources (See Ex. B-4)	1 LS**									\$ 159,192.68	\$ 159,192.68	
	Task 5. Subtotals			20.00	40.00	20.00	10.00	40.00	24.00	60.00	68.00	-	\$187,509.66
			\$3,145.40	\$4,580.40	\$2,290.20	\$1,145.10	\$4,580.40	\$2,334.96	\$4,546.20	\$5,694.32	\$159,192.68	\$187,509.66	
Task 6. Design Development (60%)	6.1. (60%) Preliminary Design Plans - Constructability Review	1 LS	2.0	4.0	2.0	4.0	0.0	8.0	8.0	8.0	\$ -	\$ 3,514.04	
	6.5. (60%) Prelim. Cost Estimate	1 LS	6.0	8.0	4.0	4.0	32.0	0.0	24.0	48.0	\$ -	\$ 12,278.10	
	6.6. Project Delivery/Construction Package Memoranda	1 LS	1.0	2.0	1.0	1.0	0.0	0.0	4.0	0.0	\$ -	\$ 918.39	
	6.7. Updated MOPO DM	1 LS	1.0	2.0	1.0	1.0	0.0	0.0	4.0	0.0	\$ -	\$ 918.39	
	6.8. (60%) Review Comment responses and Workshop Minutes	1 LS	4.0	4.0	2.0	0.0	0.0	4.0	4.0	0.0	\$ -	\$ 2,008.38	
	Westland Resources (See Ex. B-4)	1 LS**									\$ 199,649.78	\$ 199,649.78	
	Task 6. Subtotals			14.00	20.00	10.00	10.00	32.00	12.00	44.00	56.00	-	\$219,287.08
				\$2,201.78	\$2,290.20	\$1,145.10	\$1,145.10	\$3,664.32	\$1,167.48	\$3,333.88	\$4,689.44	\$199,649.78	\$219,287.08



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-2" - ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)
SOLICITATION NO: 2000008
PROJECT OWNER: Pima County
DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Borderland/B&F Personnel/Staff Type (Hourly Rate* x Anticipated Hours)								DIRECT EXP./ SUBCON.	Estimated Totals
			PIC	PM	APM	TM	LE	PS	PE	TE		
			\$157.27	\$114.51	\$114.51	\$114.51	\$114.51	\$97.29	\$75.77	\$83.74		
Task 7. Construction Document Preparation (95%)	7.1. (95%) Plans (up to four phases) - Constructability Review	1 LS	2.0	4.0	2.0	2.0	0.0	0.0	8.0	0.0	\$ -	\$ 1,836.78
	7.4. (95%) Cost Estimate (up to 4 phases)	4 EA	12.0	16.0	8.0	16.0	80.0	0.0	48.0	120.0	\$ -	\$ 29,314.20
	7.5. Updated MOPO (up to four phases)	4 EA	4.0	16.0	8.0	4.0	0.0	0.0	16.0	0.0	\$ -	\$ 5,047.68
	7.6. 95% Review Comment responses and Workshop Minutes	4 EA	4.0	4.0	4.0	0.0	0.0	4.0	4.0	0.0	\$ -	\$ 2,237.40
	Westland Resources (See Ex. B-4)	1 LS**									\$ 215,957.74	\$ 215,957.74
	Task 7. Subtotals		22.00	40.00	22.00	22.00	80.00	4.00	76.00	120.00	-	\$254,393.80
			\$3,459.94	\$4,580.40	\$2,519.22	\$2,519.22	\$9,160.80	\$389.16	\$5,758.52	\$10,048.80	\$215,957.74	\$254,393.80
Task 8. Construction GMP	8.0.1. GMP for Material Procurement	1 LS	4.0	8.0	4.0	4.0	16.0	0.0	40.0	40.0	\$ -	\$ 10,673.80
	8.0.2. GMPs for Construction (up to 4 phases)	4 EA	12.0	32.0	24.0	16.0	80.0	0.0	48.0	120.0	\$ -	\$ 32,978.52
	Westland Resources (See Ex. B-4)	1 LS**									\$ -	\$ -
	Task 8. Subtotals		16.00	40.00	28.00	20.00	96.00	0.00	88.00	160.00	-	\$43,652.32
			\$2,516.32	\$4,580.40	\$3,206.28	\$2,290.20	\$10,992.96	\$0.00	\$6,667.76	\$13,398.40	\$0.00	\$43,652.32
Task 9. Construction Document Completion (100%)	9.1.1. (100%) Plans/Docs (up to four phases)	4 EA	4.0	8.0	8.0	16.0	32.0	0.0	32.0	60.0	\$ -	\$ 15,406.76
	9.1.2. Final (100%) Construction Cost (Reconcile GMPs to 100% plans)	4 EA	8.0	16.0	8.0	16.0	16.0	0.0	16.0	16.0	\$ -	\$ 10,222.88
	9.3. Final Design Report	4 EA	2.0	8.0	4.0	2.0	0.0	0.0	8.0	0.0	\$ -	\$ 2,523.84
	9.4. Final MOPO DM	4 EA	2.0	8.0	4.0	2.0	0.0	0.0	8.0	0.0	\$ -	\$ 2,523.84
	Westland Resources (See Ex. B-4)	1 LS**									\$ 88,431.82	\$ 88,431.82
	Task 9. Subtotals		16.00	40.00	24.00	36.00	48.00	0.00	64.00	76.00	-	\$ 119,109.14
			\$2,516.32	\$4,580.40	\$2,748.24	\$4,122.36	\$5,496.48	\$0.00	\$4,849.28	\$6,364.24	\$ 88,431.82	\$ 119,109.14



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-2" - ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)
SOLICITATION NO: 2000008
PROJECT OWNER: Pima County
DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Borderland/B&F Personnel/Staff Type (Hourly Rate* x Anticipated Hours)								Estimated Totals
			PIC	PM	APM	TM	LE	PS	PE	TE	
			\$157.27	\$114.51	\$114.51	\$114.51	\$114.51	\$97.29	\$75.77	\$83.74	
Task 10. Trade Contractor Selection Bidding and Negotiation	10.1. Establish SBE Goals/Requirements (prior to 30%)	1 LS	4.0	8.0	2.0	0.0	0.0	0.0	4.0	0.0	\$ 2,077.26
	10.2. Specialty Subcontractor Prequalification	1 LS	4.0	8.0	4.0	2.0	0.0	0.0	24.0	0.0	\$ 4,050.70
	10.3.1. Specialty Subcontractor Bidding (30% - 60%)	1 LS	4.0	8.0	4.0	6.0	16.0	0.0	4.0	16.0	\$ 6,165.34
	10.3.2. Specialty Subcontractor Selection (30% - 60%)	1 LS	2.0	8.0	4.0	6.0	12.0	0.0	4.0	16.0	\$ 5,392.76
	10.6.1. Specialty Contractor GMP Coord.	1 LS	2.0	8.0	2.0	2.0	12.0	0.0	4.0	8.0	\$ 4,035.78
	Westland Resources (See Ex. B-4)	1 LS**									\$ 10,160.04
	Task 10. Subtotals		16.00	40.00	16.00	16.00	40.00	0.00	40.00	40.00	\$ 31,881.88
Task 11. Owner's Contingency	10.1. As-Directed Work	1 LS									\$ 230,000.00
	Task 11. Subtotals		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$ 230,000.00
			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$ 230,000.00
TOTAL ESTIMATED SERVICES (TASKS 1-11)											\$ 2,550,104.43
TOTAL EST. BL/B&F HOURS - BY STAFF TYPE (TASKS 1-11)			212.00	424.00	244.00	126.00	360.00	102.00	652.00	580.00	-
TOTAL ESTIMATED BL/B&F COST - BY STAFF TYPE (TASKS 1-11)			\$33,341.24	\$48,552.24	\$27,940.44	\$14,428.26	\$41,223.60	\$9,923.58	\$49,402.04	\$48,569.20	\$ 2,276,723.83

*See "Exhibit B-3" for Personnel Rate Schedule and As-Needed, As-Directed Allowance Summary

**See "Exhibit B-4" for Westland Resources Proposal

Fee Summary is based on an anticipated 12-month Pre-Construction Phase and completion of the deliverables identified within Tasks 1-10 of "Appendix B - Design Builder Scope of Work"

COST TYPE SUMMARY	
BORDERLAND/B&F SUBTOTAL (TASKS 1-10)	\$ 348,380.60
WESTLAND RESOURCES SUBTOTAL (TASKS 1-10)	\$ 1,699,793.83
AS-NEEDED, AS-DIRECTED ALLOWANCE SUBTOTAL (TASKS 1, 2, 4)**	\$ 271,930.00
OWNERS CONTINGENCY SUBTOTAL (TASK 11)	\$ 230,000.00
TOTAL ESTIMATED SERVICES (TASKS 1-10)	\$ 2,550,104.43

Borderland

DESIGN-BUILD (DB) PRE-CONSTRUCTION SERVICES CONTRACT "EXHIBIT B-3" - PERSONNEL RATE SCHEDULE

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)
SOLICITATION NO: 2000008
PROJECT OWNER: Pima County
DESIGN-BUILDER: Borderland Construction Company, Inc.

Borderland/B&F Staff Type	Labor (L) (\$/Hr)	Equipment (E) (\$/Hour)	L + E (\$/Hour)	OH* (9.33%) (\$/Hour)	L + E + OH (\$/Hour)	Fee (5%) (\$/Hour)	Unit Price (\$/Hour)
Takeoff Engineer (TE)	\$40.00	\$0.00	\$40.00	\$3.73	\$43.73	\$2.19	\$ 45.92
Project Foreman (PF)	\$48.94	\$24.00	\$72.94	\$6.81	\$79.75	\$3.99	\$ 83.74
Safety Manager (SM)	\$50.63	\$12.00	\$62.63	\$5.84	\$68.47	\$3.42	\$ 71.89
Project Engineer (PE)	\$54.00	\$12.00	\$66.00	\$6.16	\$72.16	\$3.61	\$ 75.77
Project Superintendent (PS)	\$60.75	\$24.00	\$84.75	\$7.91	\$92.66	\$4.63	\$ 97.29
Lead Estimator (LE)	\$87.75	\$12.00	\$99.75	\$9.31	\$109.06	\$5.45	\$ 114.51
Trade Manager (Concrete)	\$87.75	\$12.00	\$99.75	\$9.31	\$109.06	\$5.45	\$ 114.51
Assistant Project Manager (APM)	\$87.75	\$12.00	\$99.75	\$9.31	\$109.06	\$5.45	\$ 114.51
Project Manager (PM)	\$87.75	\$12.00	\$99.75	\$9.31	\$109.06	\$5.45	\$ 114.51
Principal In Charge (PIC)	\$125.00	\$12.00	\$137.00	\$12.78	\$149.78	\$7.49	\$ 157.27

*Overhead (OH) Rate is a 5-year average based on audited financial statements, prepared in accordance with GAAP.

WESTLAND RESOURCES - DESIGN TASK SUMMARY

Task No	Sub-Task Description	Not-to-Exceed Amount (\$)
Task 1	Project Management	\$ 238,930.38
Task 2	Permitting Assistance	\$ 16,365.84
Task 3	Alignment Analysis/Verification	\$ 139,107.74
Task 4	Field Investigations	\$ 631,997.81
Task 5	Schematic Design (30%)	\$ 159,192.68
Task 6	Design Development (60%)	\$ 199,649.78
Task 7	Construction Document Preparation (95%)	\$ 215,957.74
Task 8	Construction GMP	\$ -
Task 9	100% Construction Document Completion	\$ 88,431.82
Task 10	Trade Contractor Selection Bidding & Negotiation	\$ 10,160.04
Westland Resources Subtotal		\$ 1,699,793.83

For detailed breakdown of Westland Resources Tasks, See Exhibit B-4

AS-NEEDED, AS-DIRECTED ALLOWANCE SUMMARY

Task No./Description	Sub-Task Description	Not-to-Exceed Amount (\$)
1. Project Management	1.7.B. Public Information Assistance - Kaneen Communications	\$ 36,930.00
2. Permitting Assistance	2.2. Permit Applications Costs and Permitting Fees	\$ 35,000.00
4. Field Investigations	4.3.2. Subsurface Utility Engineering (Potholing existing utilities)	\$ 200,000.00
AS-NEEDED, AS-DIRECTED Allowance Subtotal		\$ 271,930.00

Specific allowance tasks will be identified and mutually agreed upon on an as-needed and as-directed (by Pima County) basis



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-4" - WESTLAND RESOURCES ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)

SOLICITATION NO: 2000008

PROJECT OWNER: Pima County

DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Westland Resources Personnel/Staff Type (Hourly Rate x Anticipated Hours)									Estimated Totals
			SPC	PC	SPM	SC-PM II	SP-LIII/PM-I	SP-LII	SP-LI	P-LIII	DIRECT EXP./ SUBCON.	
			\$264.48	\$199.96	\$173.86	\$151.20	\$131.46	\$114.33	\$99.41	\$86.44		
Task 1. Project Management	1.1 - Project Execution Plan	1 LS	0.0	16.0	32.0	0.0	0.0	80.0	0.0	8.0	\$ -	\$ 18,600.80
	1.2 - Project Kick-Off and Chartering Meeting	1 LS	0.0	6.0	6.0	0.0	0.0	0.0	10.0	0.0	\$ -	\$3,237.02
	1.3 - Contract Administration	1 LS	0.0	32.0	232.0	0.0	0.0	0.0	20.0	0.0	\$ 5,115.00	\$53,837.44
	1.4 - Project Schedule and Controls	1 LS	0.0	40.0	106.0	0.0	0.0	0.0	58.0	0.0	\$ -	\$32,193.34
	1.5 - Project Coordination and Progress Meetings	1 LS	0.0	164.0	208.0	0.0	26.0	0.0	234.0	39.0	\$ -	\$99,007.38
	1.6 - Quality Assurance/Quality Control Management	1 LS	12.0	22.0	34.0	12.0	0.0	0.0	4.0	0.0	\$ -	\$15,696.16
	1.7 - Public Information Assistance	1 LS	0.0	10.0	12.0	16.0	0.0	0.0	0.0	0.0	\$ -	\$6,505.12
	1.8 - Construction Cost Estimating/GMP Reviews	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$0.00
	1.9 - Project Closeout	1 LS	0.0	12.0	20.0	0.0	0.0	0.0	40.0	0.0	\$ -	\$9,853.12
	Task 1. Subtotals		12.00	302.00	650.00	28.00	26.00	80.00	366.00	47.00	-	\$238,930.38
		\$3,173.76	\$60,387.92	\$113,009.00	\$4,233.60	\$3,417.96	\$9,146.40	\$36,384.06	\$4,062.68	\$5,115.00	\$238,930.38	
Task 2. Permitting Assistance	2.1 - Permitting Workplan	1 LS	0.0	10.0	40.0	0.0	0.0	24.0	40.0	8.0	\$ -	\$ 16,365.84
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	Task 2. Subtotals		0.00	10.00	40.00	0.00	0.00	24.00	40.00	8.00	-	\$16,365.84
			\$0.00	\$1,999.60	\$6,954.40	\$0.00	\$0.00	\$2,743.92	\$3,976.40	\$691.52	\$0.00	\$16,365.84



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-4" - WESTLAND RESOURCES ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)
SOLICITATION NO: 2000008
PROJECT OWNER: Pima County
DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Westland Resources Personnel/Staff Type (Hourly Rate x Anticipated Hours)									Estimated Totals
			SPC	PC	SPM	SC-PM II	SP-LIII/PM-I	SP-LII	SP-LI	P-LIII	DIRECT EXP./ SUBCON.	
			\$264.48	\$199.96	\$173.86	\$151.20	\$131.46	\$114.33	\$99.41	\$86.44		
Task 3. Alignment Analysis/ Verification	3.1 - Data & Information Collection	1 LS	0.0	4.0	20.0	0.0	0.0	10.0	10.0	0.0	\$ -	\$ 6,414.44
	3.2 - As-Built Validation/ Development	1 LS	0.0	6.0	12.0	0.0	4.0	10.0	20.0	0.0	\$ -	\$ 6,943.42
	3.3 - Alignment Review and Updates	1 LS	0.0	22.0	32.0	0.0	52.0	52.0	0.0	0.0	\$ -	\$ 22,743.72
	3.4 - Site Utility Data	1 LS	0.0	48.0	312.0	0.0	40.0	0.0	132.0	16.0	\$ -	\$ 83,605.96
	3.5 - Alternatives Analysis	1 LS	0.0	14.0	30.0	0.0	28.0	32.0	32.0	10.0	\$ -	\$ 19,400.20
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	Task 3. Subtotals		0.00	94.00	406.00	0.00	124.00	104.00	194.00	26.00	-	\$139,107.74
		\$0.00	\$18,796.24	\$70,587.16	\$0.00	\$16,301.04	\$11,890.32	\$19,285.54	\$2,247.44	\$0.00	\$139,107.74	
Task 4. Field Investigations	4.1 - Geotechnical	1 LS									\$ 163,900.00	\$ 163,900.00
	4.2 - Corrosion	1 LS									\$ 8,861.00	\$ 8,861.00
	4.3 - Subsurface Utility Engineering	1 LS	0.0	32.0	140.0	0.0	120.0	0.0	120.0	0.0	\$ -	\$ 58,443.52
	4.4 - Visual Inspection & Photos	1 LS	0.0	2.0	24.0	0.0	18.0	36.0	30.0	0.0	\$ 90.00	\$ 14,127.02
	4.5 - Environmental Services	1 LS	3.0	4.0	39.0	0.0	3.5	18.0	0.0	70.0	\$ 1,143.00	\$ 18,095.67
	4.6 - Arizona Native Plant Survey	1 LS	0.0	0.0	505.0	0.0	0.0	0.0	0.0	356.0	\$ 6,239.00	\$ 124,810.94
	4.7 - Survey and Mapping	1 LS								531.5	\$ 157,592.00	\$ 203,531.48
	4.8 - Drainage/Hydrology Report	1 LS									\$ 27,528.00	\$ 27,528.00
	4.9 - Cultural Resource Services	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	4.10 - SWPPP	1 LS	0.0	0.0	0.0	0.0	52.0	46.0	0.0	7.0	\$ -	\$ 12,700.18
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	Task 4. Subtotals		3.00	38.00	708.00	0.00	193.50	100.00	150.00	964.46	-	\$631,997.81
		\$793.44	\$7,598.48	\$123,092.88	\$0.00	\$25,437.51	\$11,433.00	\$14,911.50	\$83,368.00	\$365,363.00	\$631,997.81	



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-4" - WESTLAND RESOURCES ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)
SOLICITATION NO: 2000008
PROJECT OWNER: Pima County
DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Westland Resources Personnel/Staff Type (Hourly Rate x Anticipated Hours)									Estimated Totals
			SPC	PC	SPM	SC-PM II	SP-LIII/PM-I	SP-LII	SP-LI	P-LIII	DIRECT EXP / SUBCON.	
			\$264.48	\$199.96	\$173.86	\$151.20	\$131.46	\$114.33	\$99.41	\$86.44		
Task 5. Schematic Design (30%)	5.1 - Design Submittals	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	5.2 - Civil Design	1 LS	0.0	28.0	196.0	0.0	350.0	76.0	60.0	12.0	\$ -	\$ 101,377.40
	5.3 - 30% Hydraulics Analysis	1 LS	0.0	16.0	78.0	0.0	12.0	62.0	48.0	0.0	\$ -	\$ 30,198.10
	5.4 - Structural Analysis	1 LS									\$ 5,346.00	\$ 5,346.00
	5.5 - 30% Design Report	1 LS	0.0	6.0	16.0	0.0	0.0	16.0	16.0	8.0	\$ -	\$ 8,092.88
	5.6 - 30% Construction Cost Est.	1 LS	0.0	5.0	14.0	0.0	18.0	20.0	20.0	0.0	\$ -	\$ 10,074.92
	5.7 - Pre-Purchased Equip./Mat.	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	5.8 - Updated MOPO DM	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	5.9 - 30% Workshop Meeting	1 LS	0.0	6.0	8.0	0.0	0.0	0.0	10.0	6.0	\$ -	\$ 4,103.38
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
Task 5. Subtotals			0.00	61.00	312.00	0.00	380.00	174.00	154.00	26.00	-	\$159,192.68
			\$0.00	\$12,197.56	\$54,244.32	\$0.00	\$49,954.80	\$19,893.42	\$15,309.14	\$2,247.44	\$5,346.00	\$159,192.68
Task 6. Design Development (60%)	6.1 - Civil Design	1 LS	0.0	51.0	258.0	0.0	500.0	100.0	90.0	12.0	\$ 105.00	\$ 142,366.02
	6.2 - Final Hydraulics Analysis	1 LS	0.0	12.0	56.0	0.0	12.0	40.0	24.0	0.0	\$ -	\$ 20,672.24
	6.3 - Structural Design	1 LS									\$ 12,474.00	\$ 12,474.00
	6.4 - 60% Design Report	1 LS	0.0	6.0	20.0	0.0	0.0	20.0	20.0	6.0	\$ -	\$ 9,470.40
	6.5 - 60% Construction Cost Est.	1 LS	0.0	6.0	14.0	0.0	20.0	20.0	20.0	0.0	\$ -	\$ 10,537.80
	6.6 - Project Del./Const. Package	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	6.7 - Updated MOPO DM	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	6.8 - 60% Workshop Meeting	1 LS	0.0	6.0	8.0	0.0	0.0	0.0	12.0	4.0	\$ -	\$ 4,129.32
											\$ -	\$ -
	Task 6. Subtotals			0.00	81.00	356.00	0.00	532.00	180.00	166.00	22.00	-
			\$0.00	\$16,196.76	\$61,894.16	\$0.00	\$69,936.72	\$20,579.40	\$16,502.06	\$1,901.68	\$12,639.00	\$199,649.78



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-4" - WESTLAND RESOURCES ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)

SOLICITATION NO: 2000008

PROJECT OWNER: Pima County

DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Westland Resources Personnel/Staff Type (Hourly Rate x Anticipated Hours)									Estimated Totals
			SPC	PC	SPM	SC-PM II	SP-LIII/PM-I	SP-LII	SP-LI	P-LIII	DIRECT EXP./ SUBCON.	
			\$264.48	\$199.96	\$173.86	\$151.20	\$131.46	\$114.33	\$99.41	\$86.44		
Task 7. Construction Document Preparation (95%)	7.1 - Civil Design	1 LS	0.0	44.0	271.0	0.0	650.0	100.0	80.0	12.0	\$ -	\$ 161,786.38
	7.2 - Structural Design	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ 12,474.00	\$ 12,474.00
	7.3 - 95% Design Report	1 LS	0.0	5.0	28.0	0.0	0.0	22.0	22.0	10.0	\$ -	\$ 11,434.56
	7.4 - 95% Construction Cost Est.	1 LS	0.0	27.0	46.0	0.0	24.0	44.0	20.0	0.0	\$ -	\$ 23,570.24
	7.5 - Updated MOPO DM	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	7.6 - 95% Workshop Meeting	1 LS	0.0	6.0	8.0	0.0	0.0	0.0	12.0	4.0	\$ -	\$ 4,129.32
	7.7 - Construction Cost Est. Reconciliation	1 LS	0.0	4.0	6.0	0.0	2.0	4.0	0.0	0.0	\$ -	\$ 2,563.24
											\$ -	\$ -
	Task 7. Subtotals		0.00	86.00	359.00	0.00	676.00	170.00	134.00	26.00	-	\$215,957.74
		\$0.00	\$17,196.56	\$62,415.74	\$0.00	\$88,866.96	\$19,436.10	\$13,320.94	\$2,247.44	\$12,474.00	\$215,957.74	
Task 8. Construction GMP	8.0 - GMPs 1-5 Review	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	Task 8. Subtotals		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	\$0.00
			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



**DESIGN-BUILD (DB)
PRE-CONSTRUCTION SERVICES CONTRACT**

"EXHIBIT B-4" - WESTLAND RESOURCES ESTIMATED FEE SCHEDULE (BY TASK, PERSONNEL/RESOURCE, AND ANTICIPATED HOURS)

Date Prepared: 03/04/2020

PROJECT NAME: Continental Ranch Regional Pump Station Force Main Augmentation (3CFS15)

SOLICITATION NO: 2000008

PROJECT OWNER: Pima County

DESIGN-BUILDER: Borderland Construction Company, Inc.

Task Description		Qty	Westland Resources Personnel/Staff Type (Hourly Rate x Anticipated Hours)									Estimated Totals
			SPC	PC	SPM	SC-PM II	SP-LIII/PM-I	SP-LII	SP-LI	P-LIII	DIRECT EXP / SUBCON.	
			\$264.48	\$199.96	\$173.86	\$151.20	\$131.46	\$114.33	\$99.41	\$86.44		
Task 9. Construction Document Completion (100%)	9.1 - Final Design Construction Documents	1 LS	0.0	26.0	136.0	0.0	175.0	56.0	40.0	12.0	\$ -	\$ 63,265.58
	9.2 - Structural Design	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ 5,346.00	\$ 5,346.00
	9.3 - Final Design Report	1 LS	0.0	4.0	12.0	0.0	0.0	4.0	12.0	4.0	\$ -	\$ 4,882.16
	9.4 - Updated MOPO DM	1 LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	9.5 - ADEQ Permitting	1 LS	0.0	20.0	24.0	0.0	8.0	0.0	28.0	32.0	\$ 165.00	\$ 14,938.08
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	Task 9. Subtotals		0.00	50.00	172.00	0.00	183.00	60.00	80.00	48.00	-	\$ 88,431.82
		\$0.00	\$9,998.00	\$29,903.92	\$0.00	\$24,057.18	\$6,859.80	\$7,952.80	\$4,149.12	\$ 5,511.00	\$ 88,431.82	
Task 10. Trade Contractor Selection Bidding and Negotiation	10 - Trade Contractor Selection Bidding and Negotiation	1 LS	0.0	20.0	24.0	0.0	0.0	0.0	20.0	0.0	\$ -	\$ 10,160.04
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$ -	\$ -
	Task 10. Subtotals		0.00	20.00	24.00	0.00	0.00	0.00	20.00	0.00	-	\$ 10,160.04
		\$0.00	\$3,999.20	\$4,172.64	\$0.00	\$0.00	\$0.00	\$1,988.20	\$0.00	\$ -	\$ 10,160.04	
TOTAL ESTIMATED SERVICES (TASKS 1-10)												\$ 1,699,793.83
TOTAL ESTIMATED WESTLAND HOURS - BY STAFF TYPE (TASKS 1-10)			15.00	742.00	3027.00	28.00	2114.50	892.00	1304.00	1167.46	-	-
TOTAL ESTIMATED WESTLAND COST - BY STAFF TYPE (TASKS 1-10)			\$3,967.20	\$148,370.32	\$526,274.22	\$4,233.60	\$277,972.17	\$101,982.36	\$129,630.64	\$100,915.32	\$ 406,448.00	\$ 1,699,793.83

APPENDIX "A"

PROJECT SCOPE OF WORK (4 pages)

SCOPE OF SERVICES FOR: CONTINENTAL RANCH REGIONAL PUMP STATION FORCE MAIN AUGMENTATION

Background

Pima County Regional Wastewater Reclamation Department (RWRD) owns and operates the Continental Ranch Regional Pump Station (CRRPS) located at 10050 North Coachline Boulevard in Marana, Arizona. The CRRPS is located approximately one half mile east of Silverbell Road, halfway between Twin Peaks Road and Avra Valley Road.

The facility serves the area downstream of the Tres Rios Wastewater Reclamation Facility (WRF), that being roughly from Ina Road north along both sides of Silverbell Road to one-half mile south of Avra Valley Road west of Interstate 10 and the area west of Camino de Oeste and east of an extension of Blue Bonnet Road east of Interstate 10. The main population in the area is concentrated in the Continental Ranch area east of Silverbell Road with the major future expansion expected to be between Camino de Oeste and Interstate 10. This area expansion involves large parcels of State Land whose release for development is dependent upon the State Land Department.

The CRRPS delivers wastewater to the Tres Rios WRF by means of an 18-inch diameter High Density Polyethylene Pipe (HDPE) force main routed generally along the west bank of the Santa Cruz River to Cortaro Road, to Silverbell Road, to Ina Road and then along the south side of Ina Road to the Tres Rios WRF. The majority of the route, approximately 4 miles north of Cortaro Road, is in an utility easement along the riverside park, close to residential areas. The remaining pipeline, approximately 3 miles, is in the public rights-of-way of Cortaro Road, Silverbell Road and Ina Road ending at the WRF. During construction of the 18-inch force main at the crossing of the Santa Cruz River south of Ina Road, two 48-inch diameter sleeves were installed. The southern sleeve contains the 18-inch force main currently in use. The northern sleeve contains a 24-inch HDPE pipe for the future force main.

The 18-inch diameter force main installed in 1998 was designed to convey the following flows:

- Minimum = 500 gallons per minute (gpm)
- Average (Average Dry Weather Flow - ADWF) = 2,000 gpm
- Maximum (Peak Wet Weather Flow - PWWF) = 4,000 gpm

At the time the force main was designed, space for an additional force main was set aside parallel to the 18inch force main. The force main was considered Phase 2 of the CRRPS development and would be constructed when flows approached the 4,000gpm.

Several CRRPS basin studies have been done over the years:

- Cella-Barr 198
- CDM 1994
- Stantec 2002
- Presidio 2008, updated 2012
- WestLand Resources, 2019

In March 2019 an alignment study was completed by WestLand Resources (Appendix A). The WestLand study analyzed three potential alignments. Each of the three alignments follow the same route for approximately 15,500 feet from the CRRPS and then diverge near Cortaro Farms Road. From Cortaro Farms Road to the Tres Rios WRF, Alignment A follows Silverbell Road, Alignment B crosses the Santa Cruz River and generally follows Business Park Drive, while Alignment C follows the Chuck Huckelberry Loop multi-use path along the west bank of the Santa Cruz River.

Need Statement:

The addition of two new force mains will add capacity, operational flexibility and redundancy to the pump station operations.

The existing 18-inch force main was designed to convey 4,000 gpm. Flow monitoring during wet weather events in the last few years have shown several instances where the flow has reached between 2,500 and 3,000 gpm (75% of design flow). One event spiked a flow greater than 3,250 gpm. In addition to this CIP project, RWRD is actively working to minimize Infiltration and Inflow (I&I) to the CRPPS, however the sewer basin for this pump station is large and I&I will always need to be a consideration in our expansion plans.

System Description and Components

This project consists of design and construction of two force mains from the Continental Ranch Pump Station to The Ina Road Treatment Facility. The project will be in two phases, as identified below.

The Project is to be designed and constructed in two Phases using the Design-Build delivery method.

Phase I: Design and Preconstruction Services, Prepare design to between 60% to 100% complete, as defined in **Appendix A - Project Scope of Work**. Prepare a Guaranteed Maximum Price (GMP) proposal(s).

Phase II: Complete design, construction and post-construction tasks complete, as defined in **Appendix A - Project Scope of Work**. Prepare a Guaranteed Maximum Price (GMP) proposal(s).

System Design Requirements

The force main conveyance system design will be based on the general features outlined above and described fully in the Project Technical Requirements. The design will be completed and detailed to provide an operational and fully functional conveyance system after construction. Design submittals will be made to RWRD at 30 percent, 60 percent, 90 percent and 100 percent of design. The Project Technical Requirements describe the design requirements and design submission requirements.

The Design-Build (DB) team will have monthly meetings with RWRD. The DB will be responsible for the project schedule and monthly updates along with construction cost estimates from project initiation through construction completion.

Should the DB and Pima County fail to negotiate a Guaranteed Maximum Price; the DB will be required to complete the design to the 100% level for competitive bidding.

System Performance Requirements

The Continental Ranch Pump Station Force Main Augmentation Project will be designed to reliably convey the following sewage flows:

ADWF = 4,295 gpm or 6,184,800 gpd
PDWF = 6,713 gpm or 9,666,720 gpd
PWWF = 9,153 gpm or 13,180,320 gpd

Construction Requirements

A General Contractor, appropriately licensed by the State of Arizona will perform all the work necessary to provide a complete and operational sewage conveyance. All work will be in locations approved by RWRD and in compliance with all current local, state and federal codes. All permits for construction will be the responsibility of the DB. All onsite equipment, materials and supplies will be kept in areas designated by RWRD for that purpose. All personnel will enter the construction site through approved access points after following security processes and procedures.

The Contractor will prepare a project schedule from project initiation through construction completion. The first schedule will be submitted at the first monthly meeting. The schedule will be updated at least monthly throughout the project. Construction cost estimates will be prepared and included in the 30 percent, 60 percent, 90 percent and 100 percent of design submittals. When requested by RWRD, the Contractor will prepare a Guaranteed Maximum Price (GMP) for the construction and testing. The GMP will be based on an "open-book" bidding process from qualified subcontractors.

Project Schedule Requirements

The DB shall submit a proposed project schedule to the County within 30 days after the contract date for review and comment by the County. The schedule shall include a defined work calendar designating which days of the week will be workdays and dates of all scheduled non-workdays. The schedule shall encompass the entire Design-Build Period.

The schedule shall consist of, but not be limited to, the following:

- All design and permitting activities and milestones to be achieved in the design-build period.
- All construction activities and milestones to be achieved in the design-build period.
- Sequence of design-build work and the time of commencement and completion of each part.
- All design deliverables and the sequence for their review by the County.
- All permitting deliverables and the sequence for their review by the County.
- Sitework.
- Excavation.
- Shutdowns and tie-ins.
- Concrete placement (pour and cure time).
- Backfill and compacting.
- Major equipment installations.
- Order and delivery dates for all County furnished equipment.
- All testing.
- Record drawings and warranties.
- Final inspections and final punch list.

The schedule will highlight the milestones and critical dates for the successful design, construction and substantial completion December 31, 2022.

The schedule shall show, for each activity, the number of person-days of efforts, by month, over the duration of the design-build period. Further, the DB shall show each type of critical construction equipment used, number of pieces of each type of equipment used, and where such equipment will be used. In developing the schedule, the

DB shall be responsible for assuring that Subcontractor work at all tiers, as well as its own work, is included in the schedule.

The schedule shall show the sequence and interdependence of activities required for complete performance of the design-build work. The DB shall be responsible for assuring that all design-build work sequences are logical, activity durations are reasonable based on their scope and the resources allocated for them and that the schedule reflects a coordinated plan of the design-build work.

Failure by the DB to include any element of design-build work required for proper performance of the DB's obligations under the contract shall not excuse the DB from completing all design-build work within the Design-Build period.

The DB shall meet with the County within 7 days after the County's receipt of the DB's proposed schedule for a joint review to identify any corrections or adjustments to the proposed schedule. Within 7 days of such joint review meeting, the DB shall submit a final schedule incorporating the County's comments into the proposed schedule. The finalization of the schedule shall be a precondition to the establishment of the construction date.

The final schedule shall be updated on a monthly basis to show progress until final completion has been achieved. The final schedule shall be used for the evaluation of any design-build period extension request(s) made by the DB once the final schedule has been established.

In the event the Design-Builder fails to define any element of design-build work, activity or logic, such omission or error, when discovered by the Design-Builder or County, shall be corrected by the Design-Builder in the next monthly progress schedule and the Design-Builder shall provide notice to the County of the proposed amendment(s) with the submission of the monthly progress report. The schedule shall be utilized in the preparation of and submitted with progress payments.

End of Appendix "A" – Project Scope of Work

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APPENDIX "B"

DESIGN-BUILDER GENERAL SCOPE OF WORK (47 pages)

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- Task 1.4 – Project Schedule and Controls
- Task 1.5 – Project Coordination and Progress Meetings
- Task 1.6 – Quality Assurance/Quality Control Management
- Task 1.7 – Public Information Assistance
- Task 1.8 – Construction Cost Estimating/Guaranteed Maximum Price Reviews
- Task 1.9 – Project Closeout
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Task 4.9 – Cultural Resource Services

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Task 5 – Schematic Design (30%)

Task 5.1 – Design Submittals

Task 5.2 – Civil Design

Task 5.3 – Hydraulics

Task 5.4 – Structural Analysis

Task 5.5 – 30% Design Report

Task 5.6 – Provide 30% Construction Cost Estimate

Task 5.7 – Pre-purchased Equipment and Materials

Task 5.8 – Preliminary MOPO Design Memorandum

Task 5.9 – 30% Workshop Meeting

Task 5 – Deliverables

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Task 6 – Design Development (60%)

Task 6.1 – Civil Design

Task 6.2 – Hydraulics

Task 6.3 – Structural Design

Task 6.4 – 60% Design Report

Task 6.5 – 60% Construction Cost Estimate

Task 6.6 – Project Delivery/Construction Package Analysis

Task 6.7 – Updated MOPO Design Memorandum

Task 6.8 – 60% Workshop Meeting

Task 6 – Deliverables

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Task 7.1 – Civil Design

Task 7.2 – Structural Design

Task 7.3 – 95% Design Report

Task 7.4 – Provide 95% Construction Cost Estimate

Task 7.5 – Updated MOPO Design Memorandum

Task 7.6 – 95% Workshop Meeting

Task 7.7 – Construction Cost Estimate Reconciliation

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Task 8 – Deliverables

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PROJECT DESCRIPTION

This scope of work describes the general services to be provided by the Design-Builder for the design and construction of the Continental Ranch Regional Pump Station Second and Third Force Main. A separate document, entitled "Technical Specifications," describes the key components of the Work as well as County technical requirements for the Work. The Technical Specifications define what will be done and the General Scope of Work defines how it will be done.

It is envisioned that the Project Delivery Work will be accomplished in three phases: Phase 1 - Preliminary Design Services; Phase 2 - Final Design Services; and Phase 3 - Construction Services. Each phase will have a specific list of work products and deliverables. Also, each phase will include design review workshops with County's and Design-Builder's personnel at critical design milestones.

This Project does not include, at this time, the following additional work elements:

- Excavations or other mitigation measures required to preserve or relocate historic resources. Design-Builder will fence off any designated areas to prohibit any access or disturbance of any kind if historic resources are in or close to the work area. All other efforts pertaining to the discovery of cultural resources will be addressed in a separately negotiated scope of work. If cultural sites are found and cannot be mitigated by alignment, a mitigation plan will be required for design.
- Real Property consultant services required for the acquisition of temporary and/or permanent easements required to construct, operate, and/or maintain the new facilities. Pima County Real property will handle the TCE and permanent easement acquisitions internally. Title Reports and other record documentation needed for legal descriptions is to be provided by Pima County
- Design Professional's Role During and After Construction - Westland's post design role/fee will be specifically scoped at the time of GMP development (to be included in each phase as permitted)
- Scope and fee for any flow management plans is not currently provided. This will be included within the applicable GMPs.

DESIGN PHASES SCOPE OF WORK

The following key assumptions were made in the development of the Scope of Work for design and in estimating level of effort. With the exception of the final review, the Project team will continue the design effort during formal reviews of deliverables by Pima County and regulatory agencies.

- County will provide one round of compiled review comments to the Design-Builder for each deliverable submitted for review.
- The design will be based on the federal, state, and local codes and standards in effect at the start of the Project.
- County's design standards will be used.
- The drawings will follow the Design-Builder's CAE/ CAD standards. AutoCAD will be used to develop the drawings. At the conclusion of design, County will be given a 24"x 36" sized set of original signature drawings and an electronic set of drawings in pdf format. In addition, the County will be given a copy of the Design Documents on compact disk (CD-R) in AutoCAD format.

The design will be carried out using a five-milestone Design Delivery approach:

1. Alignment Analysis/Verification [TASK 3]
2. Schematic Design (30%) [TASK 5]
3. Design Development (60%) [TASK 6]
4. Construction Document Development (95%) [TASK 7]
5. Construction Document Completion (100%) [TASK 9]

PROJECT DELIVERY PHASE 1 – PRELIMINARY DESIGN SERVICES

Task 1 Project Management

The purpose of this task is to manage, coordinate, and lead the Design-Builder's activities and perform administration of Project design services. The Design-Builder will perform the following subtasks described below as part of Task 1.

Task 1.1 – Project Execution Plan

Within 60 days of the Notice to Proceed, a Project Execution Plan will be prepared to guide the direction of the Design-Builder team. It will include descriptions of the roles and responsibilities of team members, communication plan, cost and schedule control procedures, document control, change management, and other Project management requirements. Also, the plan will define the CAD/CAE software standards, graphic standards, file naming conventions and standards, and other graphic standards. Design-Builder will utilize standards developed by the County as a basis for this element of the Plan. In addition, the Plan will include a Quality Management Plan and a Project Health and Safety Plan applicable to the Design-Builder Team. The Project Execution Plan will be distributed to the County and design team members.

Task 1.2 – Project Kick-off and Chartering Meeting

Within 60 days of the Notice to Proceed, the Design-Builder will conduct a combined project kick-off and chartering meeting to be held with the County and primary project stakeholders. The purpose of the meeting is to discuss the roles, relationships, and responsibilities of all parties. The draft baseline design schedule will be presented and discussed. The Design-Builder will prepare a meeting summary and will distribute to the attendees.

Task 1.3 – Contract Administration

This task includes activities associated with administration of the Contract and coordination with the County. It will include communications with the County and others as required. In addition, preparation of invoices, oversight of Project staff, administration of contracts with sub-consultants, maintenance of a decision log, and record keeping are included in this task.

Task 1.4 – Project Schedule and Controls

Within 60 days of the Notice to Proceed, the Design-Builder will submit a draft baseline Project Schedule using MS Project, which will be updated on a monthly basis. The initial draft Project Schedule will be cost-loaded for Phase 1 tasks. Upon completion of Phase 1 and approval to proceed with Phase 2, a new cost-loaded Project Schedule will be developed for the remainder of the Project. This task also includes the preparation of monthly reports showing the comparison of actual costs and percent complete with planned cost and percent complete. The Design-Builder will also report Project status including the following information:

- Key accomplishments
- Key issues
- Required actions
- Upcoming work and challenges
- Key milestone schedule updates
- Scheduled progress versus actual progress
- Cost summary
- Cost (budget, accrued, Projection, variance)

Task 1.5 – Project Coordination and Progress Meetings

On a bi-weekly basis, for a one-year period, the Design-Builder will conduct Project design progress meetings between the County and Design-Builder's project team members to discuss design elements of the Project. Meeting agendas will be prepared and distributed 2 days prior to the meeting and a meeting minute summary will be prepared and distributed by the Design-Builder within 3 business days following the design Project Coordination and Progress Meeting. In addition, the Design-Builder will conduct monthly progress report and invoice presentation meetings attended by the County to confirm the Design-Builder is meeting the requirements of the County. A summary of meetings will be prepared and distributed by the Design-Builder within 5 business days of the monthly progress report meeting. This task also allocates time for internal Project coordination meetings.

Task 1.6 – Quality Assurance/Quality Control Management

The Design-Builder will provide management of the quality assurance/quality control (QA/QC) aspects of the Project. An internal Project Quality Manager (PQM) will be identified by the Design-Builder and will provide oversight of the QA/QC staff, scheduling of technical reviews, and documenting and adjudicating of review comments from both internal sources and the County. The Quality Management Plan will be prepared as part of the Project Execution Plan.

Task 1.7 – Public Information Assistance

The County is responsible for managing the Public Information Program for the Project. The Design-Builder will assist the County by preparing informational material and attending meetings, if requested. The Design-Builder is not authorized to issue statements or press releases on County's behalf nor is it authorized to issue statement or press releases concerning the Project unless prior approval is given by the County.

Task 1.8 – Construction Cost Estimating/Guaranteed Maximum Price Reviews

The Design-Builder will prepare Construction Cost Estimates as part of the Alignment Analysis/Verification, 30%, 60%, and 95%, milestones. It is assumed that the 95% cost estimates will be advanced to a Guaranteed Maximum Price (GMP) construction contract amendment. In the event that revisions to the plans are required after final permitting and/or preparation of the GMP, a final (i.e. 100%) cost summary/reconciliation will be prepared to reflect actual cost of construction. The Association for the Advancement of Cost Estimating (AACE) recommended practices will be used to develop the cost estimates. Each estimate will be provided within the individual design milestones and included in Task 3 (Alignment Analysis/Verification), Task 5 (30%), Task 6 (60%), Task 7(95%), and Task 9 (100%).

Task 1.9 – Project Closeout

At the completion of design, appropriate Project records will be archived according to County's existing methods and standards.

Task 1 – Deliverables

- 1.1.1. Project Execution Plan [Task 1.1]
- 1.1.2. Project Health and Safety Plan [Task 1.1]
- 1.2.1. Project Kickoff/Chartering Meeting Summary [Task 1.2]
- 1.3.1. Monthly Progress Invoices [Task 1.3]
- 1.4.1. Phase 1 Project Baseline Schedule and Updates [Task 1.4]
- 1.4.2. Phase 2 Project Baseline Schedule and Updates [Task 1.4]
- 1.4.3. Monthly Progress Reports [Task 1.4]
- 1.5.1. Bi-weekly Progress Meeting Agenda and Minutes [Task 1.5]
- 1.6.1. Quality Management Plan [Task 1.6]
- 1.7.1. Public Information Assistance/Stakeholder Coordination [Task 1.7]
- 1.9.1. Project Closeout Records [Task 1.9]

Task 2 – Permitting Assistance

The purpose of this task is to develop a Permitting Workplan for obtaining the various permits, identifying the permits required for construction and operation of the project, preparing the permit applications for the various regulatory agencies, and submitting the permit applications to County for review and signatures where required. The Design-Builder is responsible for identifying, preparing, and submitting the completed applications to the various regulatory agencies and pay all the permit fees, up to the agreed upon allowance amount identified in Task 2.2. For permit activities related to this Project, the Design-Builder will provide five copies of draft and final permit applications and accompanying material. An electronic file in .pdf format will be provided for draft and final submittals. The Design-Builder will develop a Permitting Workplan. The plan will list those permits that are necessary, the appropriate contacts for the permits, the time constraints associated with the permits, and a schedule for application of the permits. In addition to the Permitting Plan, permit applications will be developed, as appropriate, for each agency. In coordination with the County, the Design-Builder will take the lead in submittal of the permit applications.

Task 2.1 – Permitting Workplan

The Design-Builder will prepare a permitting workplan matrix for submittal and review by County. The workplan will include the following elements:

- List of anticipated permits required (including application costs and permit fees)
- Agency contacts
- Time constraints associated with each permit
- Schedule for submittal of permit applications
- Permit expiration dates

Task 2.2 – Allowance for Permitting Fees

On an as-needed, as-directed from Pima County basis, the Design-Builder will pay project specific permitting application/review fees and/or permitting fees up to the agreed upon allowance amount of \$35,000.00. Based on past/similar project permitting, it is assumed that the ADEQ permitting fee will be based on the overall project flows and paid only once, even if construction is geographically phased (i.e. separate construction projects will not influence the overall flows/fee calculations). This ADEQ permitting fee is anticipated to be approximately \$25,000. Additional permitting fees that are anticipated include standard review fees and up to four A312G fees. Once the allowance limit has been met, Pima County will be responsible for any remaining permitting costs.

Task 2.3 – Right-of-Way-Use/Construction Permitting Planning

As part of the pre-construction services, the Design-Builder will coordinate with the Town of Marana to accommodate potential right-of-way use permitting requirements that may impact scope, schedule, and/or budget. Accommodations will be included in projects plans, specifications, cost estimates, and schedules.

In addition, Design-Builder will coordinate closely with RWRD Field Engineering during the design phase to ensure consistent expectations for field activities as required by the RWRD construction permit.

Task 2 – Deliverables

- 2.1.1. Permitting Workplan (Regulatory Applicability and Application/Fee Estimates) [Task 2.1]
- 2.1.2. Permit Matrix Tracking Log (By Agency, Fee, Expiration, etc.) [Task 2.1]
- 2.2.1. Payment of Application Costs and Permitting Fees [Task 2.2]
- 2.3.1 Marana - Right-of-Way Use Permit (Requirement Identification/Coordination) [Task 2.3]
- 2.3.2. PCRWRD Field Engineering Coordination/Construction Permit Planning [Task 2.3]

Task 3 – Alignment Analysis/Verification

The purpose of this task is to verify the preferred dual force main alignment, per the previously prepared Feasibility Study recommendations. The Design-Builder will perform the following subtasks as part of this Task:

Task 3.1 – Data and Information Collection

Information and data needed to formulate design criteria evaluation and proposed alignment verification will be collected and reviewed by the Design-Builder.

Task 3.2 – As-Built Validation/Development

The Design-Builder will obtain as-built information for the Project area, as updated since the feasibility study, and will utilize this information, to develop a set of as-built drawings as required for design and construction of the new facilities. Specific activities will include the following:

- Determine document needs associated with the Project and obtain available information including as-built drawings for roads, sanitary sewers, utilities, storm water drainage structures, rights-of-way, easements, and property lines, and significant topographical features.
- Utilize information obtained in Task 3.1 to validate as-built information as required for the design and construction.
- Develop and prepare as-built drawings for Project. At this stage, focus will be on obtaining and documenting "above ground" information associated with the Project site. Below grade as-built information for site utilities is described separately in Task 4.3, Sub-surface Utility Engineering.

Assumptions:

- The County will provide the Design-Builder with electronic or hard copies of existing as-built drawings for existing County facilities within the Project area.

Task 3.3 – Alignment Review and Updates

A proposed alignment is provided as part of the SFQ documents. This task will include reviewing the proposed site layout, along with locations of existing utilities and roadways and proposed sizing of new and future facilities, including auxiliary facilities, and developing an updated proposed site layout for the Project. The site layout will include, as appropriate, new and existing facilities, roadways, and space allowances for utility corridors and future facilities.

Task 3.4 – Site Utility Data

The Design-Builder will create a design bluestake ticket to contact all surrounding utility companies for base maps and as builts. A letter will be compiled for each utility, requesting their review of the proposed Project. This information, along with any bluestake information and ground survey will be used to create the final base map for design. It is assumed that this bluestake analysis will only be performed for the selected alignment.

This task also includes meetings and site visits with the utility providers to review existing conditions.

Up to two utility relocation plans will also be provided within the task as needed.

Task 3.5 – Alternatives Analysis

Task 3.5.1 – Alternatives Analysis Report

Based on information provided in the RFP/RFQ and further development of facilities criteria, sizing, and layouts in this Task, an alternatives alignment report will be prepared to document the available alignment options, as well to make a recommended alignment for use as the basis of design.

This report will describe the updates that were made to the feasibility study alignments, as well perform a fatal flaw analysis of the available options to assist in the selection of the selected alignment.

A Final Design Report will be completed under Task 9.

Task 3.5.2 – Alternatives Alignment Cost Estimates

The DB team will conduct a high-level cost estimate of the available alignment options. The estimates will be reviewed with the County. Results will be used to assist in the selection of the selected alignment. Construction cost estimating procedures are defined in Task 1.8.

Task 3.5.3 – Alternatives Alignment Workshop Meeting

This DM will provide a summary of the recommended construction packaging and scheduling to achieve the County's goals and regulatory requirements for the project. These recommendations for construction packaging, sequencing, and duration will be coordinated with the County. This task will include attending workshops with County to coordinate these requirements and to develop a DM with recommendations and schedule milestones.

Task 3.6 – Design Criteria Development/Confirmation

The Design-Builder will work with the County to develop updated design criteria for the Project. Design criteria development and confirmation will include:

- Review of all available data, including as-built information and County requirements.
- Develop design criteria, sizing, and general layouts.

This design criteria development information will be summarized within the technical memoranda throughout the project.

Assumptions:

- This task includes one meeting with appropriate County staff to review design criteria that is developed for the Project, which is assumed to take place during a regularly scheduled project update meeting.

Task 3.6.1 – Project Design Standards

Project design standards will comply with County standards. When such standards do not exist, Design-Builder and County will confer as necessary to establish County-approvable standards. These design standards will include standards to be used for drawings and specifications for the Project as well as standards for each discipline, which include County preferences for materials and components.

Task 3.6.2 – Discipline Engineering Design Criteria

DM's will be developed to include the general design criteria for the technical disciplines. In addition to the design criteria to be used for the Project, the applicable codes and standards will be listed that apply to the Project.

Task 3 – Deliverables

- 3.2.1. As-built drawings (above-ground existing conditions) **[Task 3.2]**
- 3.4.1. Existing utility basemap **[Task 3.4]**
- 3.5.1. Preliminary Plan View maps (for evaluation of alignment options) **[Task 3.5]**
- 3.5.2. Preliminary Construction Cost Estimate (for evaluation of alignment options) **[Task 3.5]**
- 3.5.3. Preliminary identification of anticipated permits (for evaluation of alignment options) **[Task 3.5]**
- 3.5.4. Preliminary identification of anticipated property rights/easement needs (for evaluation of alignment options) **[Task 3.5]**
- 3.5.5. Alignment Analysis/Verification presentation/workshop materials and summary **[Task 3.5]**
- 3.6.1. Preliminary Design Report **[Task 3.6]**

Task 4 - Field Investigations

Task 4.1 – Geotechnical

Based upon available information, the scope of work for geotechnical investigations is assumed to consist of the following:

Task 4.1.1 – Site Reconnaissance and Field Exploration

- Using the facility site layout validated in Task 3, the location of soil borings will be determined, identified by their coordinates, and staked on the site.
- Clearance by a Subsurface Utility Engineering (SUE) firm will be obtained by Design-Builder for utilities at the proposed boring locations. A site reconnaissance will be made to evaluate site and access conditions by the SUE and soil boring driller. Cultural Resource (CR) clearances will be provided by others one week minimum prior to any drilling.

- For purposes of estimating cost, it is assumed that there will be 36 borings, spaced approximately 1000' apart, ranging between 15' and 60' in depth.
- The subsurface conditions encountered will be logged by a geologist or geotechnical engineer, and the soils encountered will be identified in accordance with ASTM D 248800, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*. Standard Penetration Tests will be performed in accordance with ASTM D 1586-99, *Standard Test Method for Penetration Tests and Split-Barrel Sampling of Soils* at approximately 5 feet intervals. For soft fine grained soils, relatively undisturbed Shelby tube samples will be obtained for laboratory testing, in general accordance with ASTM D 1587-00, *Standard Practice for Thin-Walled Tube Sampling of Soils for Geotechnical Purposes*. Where the soils is too stiff to use Shelby tube samples, ring samples will be taken in general accordance with ASTM D 3550-84, *Standard Practice for Ring-Lined Barrel Sampling of Soils*.
- Piezometers will be installed at selected locations to determine the groundwater levels in the soil profile. Knowledge of groundwater conditions is important for design as well as for construction planning purposes.
- To aid in corrosion analysis, field resistivity soundings will be performed at various locations at the proposed plant site. The field resistivity soundings will be performed using the Wenner array in accordance with ASTM G57.

Task 4.1.2 – Laboratory Testing

Laboratory tests will be performed on samples obtained from the borings to evaluate certain physical and engineering parameters, including the following:

- One-Dimensional Consolidation (ASTM D 4546)
- Grain Size Distribution (ASTM C 136)
- Percent Passing the No. 200 Sieve (ASTM C 117)
- Atterberg Limits (ASTM D 4318)
- Consolidated Undrained Triaxial Compression Test (ASTM D 4767-02)
- R-Value (ASTM D 2844)
- Swell Potential
- In-Place Moisture and Dry Density
- Chemical Corrosivity Tests including pH, resistivity, and soluble salts.

Task 4.1.3 – Engineering Analysis and Geotechnical Report Preparation

An engineering analysis will be performed to provide the following design parameters, as applicable:

- Allowable bearing pressures for all structures
- Estimated total and differential settlements
- Modulus of subgrade reaction for the design of mat-type foundations
- Coefficient of friction for the design of mat-type foundations or conventional spread footings
- Static lateral earth pressures for unrestrained and restrained subsurface walls such as vault structures including sloping backfill conditions
- Seismically induced lateral earth pressures for unrestrained and restrained subsurface walls such as vault structures including sloping backfill conditions
- Apparent earth pressures for the design of temporary excavation shoring

- Modulus of lateral earth reaction (E') for the design of flexible pipe
- Pipe/soil coefficient of friction
- Lateral earth support and coefficient of friction for pipe thrust blocks
- Seismically induced peak horizontal ground accelerations
- Non-dedicated asphalt concrete and Portland cement concrete pavements
- Dedicated off-site half street asphalt concrete pavements

A geotechnical report will be prepared to include summaries of the above, and of the boring logs.

Task 4.2 – Corrosion

As needed, the Design-BUILDER will perform a soils analysis and corrosion control evaluation of the Project site. If required, investigations will include:

1. Soil study analysis of 1 location: Tres Rios structure.
2. Soil study consists of receiving 1 gallon bag of soil at proposed pipe depth at approx. pipe depth.
3. Lab testing (saturated soil resistivity, pH, sulfates, chlorides and moisture).
4. On-site soil resistivities at 5-foot, 10-foot and 15-foot depths for soil corrosivity at 1 boring site.
5. Analysis of soil test results and design corrosion monitoring and sacrificial cathodic protection systems.
6. Design of sacrificial cathodic protection systems for steel casings and Tres Rios pipe.
7. Design details, table with corrosion test station locations and specifications.
8. Review plans and specs. at 60%, 90% and 100%
9. Analysis will be performed by a NACE International certified Cathodic Protection Specialist.

Task 4.3 – Subsurface Utility Engineering

Design-BUILDER will map all underground utilities within all potential excavation areas at the Project site. This utility mapping will include developing base maps using existing record drawings and other existing information. Vacuum potholing and other locating methods will be used as needed to determine more exact utility locations for existing underground utilities. For purposes of estimating cost, it is assumed that up to 200 potholes) will be required for potholing. Once identified, the location of utilities will be surveyed and shown on the Project mapping. A Subsurface Utility Engineering firm may be used as needed for locating existing subsurface utilities.

Pothole maps will be created to assist in the location of the desired potholes.

Assumptions:

- This task includes up to 200 potholes) of a subsurface utility company at the Project site for potholing and surveying subsurface utilities.

Task 4.4 – Visual Inspection and Photography

The Design-BUILDER will perform a visual inspection of the proposed construction site and will determine if there are any concerns affecting the design or construction process. A written narrative documenting the results of this task will be provided to the County.

The Design-BUILDER will also take interior and exterior photographs (as appropriate) of existing above ground facilities. The photographs will be taken with a digital format camera with a minimum 8 MB pixel rating. The photographs should be of sufficient size to clearly identify vegetation, and objects which may come into question during the design and construction of the Project. As an alternate, digital motion pictures with still print capability may be used. The Design-BUILDER will provide County with licensed software and hands-on

instruction, if needed, to view and print the pictures. The digital images (JPEG or MPEG) will be stored on a USB Memory card (2 copies will be supplied to County). Hard copy will be printed only when needed.

Task 4.5 – Environmental Services

Task 4.5.1 – Endangered Species Survey

The DB team will prepare a technical memorandum documenting potential effects to Federally-listed threatened and endangered species, and designated Critical Habitat. Based on our previous experience in the area, it is not anticipated that Project would adversely affect any such species.

The scope of work for preparing this Technical Memorandum includes:

- WestLand will generate species list by accessing on-line databases maintained by the US Fish and Wildlife Service (USFWS) and the Arizona Game and Fish Department (AGFD).
- Coordinating with AGFD and USFWS.
- Preparing a technical memorandum.

Task 4.5.2 – 404 Permitting

The Project is located along portions of the Santa Cruz River and cross channels that convey stormwater flow through residential and park areas. Based on previous experience in this area, the Army Corps of Engineers (Corps) has asserted jurisdiction over these drainages; therefore, disturbance within the ordinary high-water mark (OHWM) for these drainages would require a permit under section 404 of the Clean Water Act (CWA). It is anticipated that work within these channels would be temporary in nature and that the project would qualify for a no-notification Nationwide Permit (NWP) 12 for Utility Line Activities.

The scope of work for obtaining a CWA Section 404 permit for the project includes the following:

- Two field biologists will conduct a one-day survey to document the limits of the OHWM for each drainage crossing.
- A Preliminary Jurisdictional Delineation (PJD) report will be prepared, suitable for submittal to the Corps for concurrence with the delineation.

A document will be prepared that documents the Project's compliance with all terms and conditions of the NWP 12 and of the NWP programming, including general and regional conditions, and 401 Water Quality Certification requirements.

Task 4.5.3 – 408 Permitting

Under 33 USC Section 408 (Section 408), the Corps must grant permission for parties other than the Corps to alter or occupy civil works projects previously constructed by the Corps such as dams, levees, or flood channels. A permit to conduct any work within the footprint of a 408 structure must be submitted to the Corps. While a 408 permit is not initially anticipated for the project, further investigation into existing flood control structures along the project limits is required to rule out the possibility. If ultimately required, the Design-Builder scope of work for obtaining Section 408 clearance includes:

- Prepare the permit application for submittal to the Corps. This is generally reviewed at the LA District of the Corps.

Task 4.6 – Native Plant Protection

Task 4.6.1 – Native Plant Inventory, Riparian Assessment, Site Resource Inventory

Westland shall perform a native plant inventory of protected native plants within the proposed project disturbance limits and shall prepare native plant inventory plans. The plans will include calculations for salvage and mitigation requirements per Pima County standards. For the section of proposed work between Ina Road and Cortaro Farms Road, there exists Riparian Habitat as defined by Pima County. Where the proposed project disturbance limits fall within Riparian Habitat, Westland shall perform assessments of these habitats and shall prepare plans that characterize these areas. These plans will also include calculations for mitigation measures to compensate for disturbances to these areas.

For areas outside of defined Riparian Habitat, Westland will perform a Site Resource Inventory (SRI) as required by the Town of Marana. Since proposed construction of the new pipeline is expected to be limited to areas that are already disturbed, it is assumed that the SRI can be performed with a minimum of effort and that the SRI can be included with the native plant inventory.

Assumptions:

- It is assumed that the contractor shall not disturb riparian habitat within the active/ main channel of the Santa Cruz River. Therefore, no survey of native plants in that area is included in this scope of work.

Task 4.6.2 – Prepare Native Plant Mitigation Plan

The Design-BUILDER will map the Project area. The mapping will be prepared at a horizontal scale of T-40 and will use aerial photography prepared in Task 3.

The Design-BUILDER will consult with the State of Arizona to review the Project area and determine if refinements are required.

Westland Resources shall prepare plans for the installation of plants to mitigate for the loss of those native species removed during construction between Cortaro Road and Ina Road. The plant quantities and species selection shall be based on the Riparian Assessment and the Native Plant Preservation Plan described above. Westland shall also prepare irrigation plans to supply new plants. Plan and profile pavement replacement plans are also included for the Chuck Huckleberry Loop between Ina Road and Cortaro Road. It is anticipated that minor Plant, irrigation, and pathway replacement will be required north of Cortaro Road as well.

Assumptions:

- It is assumed that the limits of disturbance associated with the proposed project will not encroach into the upper flood terraces associated with the Santa Cruz River north of Cortaro Road and east of the Loop bike path. Therefore, plant and irrigation plans to compensate for disturbances to this area are not included in this scope of work. This area includes native trees that were previously installed as mitigation for disturbances created by an earlier project to Waters of the U.S.
- It is assumed that there exist functioning irrigation systems and that the irrigation meter(s), main(s) and controller(s) can be located in the field and re-used for the purposes of this project.
- It is also assumed that existing ramadas will not be impacted, and replacement plans will not be required.

Task 4.7 – Survey and Mapping

The Design-Builder will provide mapping and related services as described below for Project, suitable for final design activities. The Design-Builder will employ a Registered Land Surveyor (RLS), registered in Arizona, to survey and map the improvements to be designed, and/or constructed. The surveying and mapping will be sufficient to establish needed horizontal and vertical control monuments. Existing aerial and ground survey information will be reviewed to determine any additional survey activities needed. Specific activities are limited to the following:

- Establish Control Network: The Design-Builder will perform research, field surveys, and office work necessary to establish the Horizontal and Vertical Project Control Network meeting County standards. The Design-Builder will establish a survey control network which will encompass the Project area. The Project Control Network will also provide the basis of control for the construction phase of the Project. Survey control monuments will be located in areas that will not be disturbed during construction. Survey control monuments set by the RLS will be tagged or stamped.
- Survey monuments (property pins, section corners, witness corners, and bench marks) will be collected during the field survey with a description of the monuments (steel pin, O.I.P., L.C.P., and brass monument in concrete). Benchmarks will be established at 1,000 foot intervals. Elevations will be based on a differential leveling procedures.
- A ground aerial survey will be performed and used to develop a site digital terrain model and existing facilities model, including all existing above grade structures and site features visible to aerial photography.
- Horizontal Control: Control set, at a minimum, semi-permanent monuments nail and shiner, or rebar or better, at newly established control point locations. Accuracy standards will meet the current Pima County Department of Transportation Roadway Design Manual. We will meet with the Pima County Surveyor prior to commencement of the survey to discuss horizontal control and survey techniques and accuracy standards.
- Vertical Control: A control listing of the benchmarks used for the survey control network will be provided to the Design-Builder. The datum which the elevations are to be referenced will be included in the field research data. Set, at a minimum, semi-permanent monuments nail and shiner, or rebar or better, at newly established control point locations. Benchmarks will be established at 1,000 foot intervals. Accuracy standards will meet the current Pima County Department of Transportation Roadway Design Manual. We will meet with the Pima County Surveyor prior to commencement of the survey to discuss vertical control and survey techniques and accuracy standards.
- Arizona State Plane Coordinates: The coordinate system for establishing the Project Control Network will be the North American Datum of 1983 (NAD-83) (1992) adjustment, Arizona State Plane Coordinate System in International feet reported in both grid and ground coordinates. The vertical datum will be North American Vertical Datum of 1988 (NAVD88).

The survey and mapping activities associated with this project are defined as follows:

- Aerial Targets: Design-Builder will set aerial targets for photo-control at locations determined by the aerial mapping firm within the defined Project limits.
- Aerial Photography: Standards will meet the current Pima County Department of Transportation Roadway Design Manual.
- DTM and 1-foot contours - Design Mapping: Standards will meet the current Pima County Department of Transportation Roadway Design Manual.
- Other surveys (other than control surveys), will meet the current Pima County Department of Transportation Roadway Design Manual.

- Planimetric Mapping: Standards will meet the current Pima County Department of Transportation Roadway Design Manual.
- Digital Orthophoto Images: Standards will meet the current Pima County Department of Transportation Roadway Design Manual.
- Locate Utilities: The Design-Builder will locate at grade utilities and other physical obstructions within the Project site. The Design-Builder will also identify locations and elevations of inverts of sanitary sewers (up to 125), storm sewers, and drainage structures.
- Surveying services will be performed under the supervision of a qualified, Arizona registered, professional land surveyor.
- The units of measurement for this Project will be in International Feet.
- Up to 125 manholes will be surveyed for collection of invert elevations

Task 4.7.1 – Legal Descriptions

Pima County Real Property will be responsible for acquiring the new TCE and permanent easements required to construct, operate, and/or maintain the new facilities.

If required, County will furnish, or direct the Design-Builder to obtain at County's expense:

1. Surveys describing physical characteristics, legal limitations, and utility locations for the Project site
2. Written legal description of the Project site.

The surveys and legal information will include, as applicable, grades and lines of streets, alleys, pavements, and adjoining property and structures; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries, and contours of the site; locations, dimensions, and necessary data pertaining to existing buildings, other improvements, and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths.

Design-Builder will provide drawings, legal descriptions and requested other documents to assist in the procurement of necessary easements. Title Reports and other record documentation needed for legal descriptions will be provided by Pima County. Up to 45 legal descriptions will be provided for easements.

Task 4.8 – Drainage/Hydrology Report

The DB will perform:

- Hydrologic analyses of the regulatory watercourse crossings of one selected project alignment relying on accepted Pima County hydrologic data to the extent possible
- Calculate scour depths for the proposed alignment using scour equations from the City of Tucson Drainage Design Standards Manual, based on the results of the aforementioned analyses
- Delineate erosion hazard setbacks for the proposed alignment according to the Pima County Floodplain Ordinance, using previously accepted Pima County delineations to the extent possible
- Summarize Results in One (1) Technical Memorandum
- Assistance in completion of the Floodplain use permit

Task 4.9 – Cultural Resource Services

The proposed alignment crosses an archaeological sensitive area along the Santa Cruz River. Several large archaeological sites such as Las Capas, AZ AA:12:111(ASM), at the Ina Road Treatment Facility and Los Morteros, AZ 12:57(ASM), at the Continental Ranch Community are crossed by the planned forced main. Large parts of each site have been subject to data recovery excavations, however, there is strong potential for intact cultural resources deposits throughout these and other areas that may be impacted by the proposed alignment.

The Design-Builder will coordinate with Pima County's Office of Sustainability and Conservation's Cultural Resources and Historic Preservation Division (OSC).

Design-Builder will:

1. Provide OSC with a shapefile of the proposed project limits that must include all construction work areas, temporary construction easements, other easements, staging areas, etc.
2. Coordinate closely on schedule with OSC to accommodate a cultural resources survey, mitigation and monitoring, as necessary
3. Notify OSC of any changes in the project area through the design process as early as possible
4. Ensure that any special provisions provided by OSC are presented in the final construction plans

OSC will contract a qualified cultural resources consultant for all cultural resources related investigations, as necessary. This will include at minimum a pedestrian survey of the project area that will inform on the location of archaeological sites that intersect the project area, as well as an estimate of the potential for buried cultural deposits that may be impacted by the project. If any archaeological sites are located within the project corridor, OSC will coordinate with the Design-Builder to re-route the sewer line to avoid impacts to the site, if possible. In the event that impacts to the site cannot be avoided, OSC will coordinate and manage any required mitigation services.

Task 4.10 – Storm Water Pollution Prevention Plan

The project area is located within ¼ mile of an impaired reach of the Santa Cruz River, therefore the Stormwater Pollution Prevention Plan (SWPPP) must be submitted to the Arizona Department of Environmental Quality (ADEQ) for review and approval. WestLand will provide a draft and final Arizona Pollutant Discharge Elimination (AZPDES) Construction General Permit (CGP) SWPPP including the required Sampling and Analysis Plan for the project which will meet all local, state and federal requirements. A hard copy will be provided to ADEQ for review once the client approves the draft and WestLand will contact ADEQ to facilitate a review as quickly as possible. Additionally, WestLand will provide a hardcopy for use on the site and a complete PDF will be provided to the necessary parties. The Design-Builder will obtain and pay for the CGP Notice of Intent (NOI) and/or any review fees required by ADEQ and will conduct the required site SWPPP inspections and any monitoring required by ADEQ as part of the construction activities. Up to four SWPPP plans will be created (one for each phase phase). A calculation of best management practices (BMPs) will also be provided.

Task 4 – Deliverables

- 4.1.1. Draft and Final Geotechnical Report **[Task 4.1]**
- 4.2.1. Draft and Final Corrosion Report **[Task 4.2]**
- 4.3.1. Pothole Figures **[Task 4.3]**
- 4.3.2. Draft and Final SUE Basemaps (existing subsurface utility survey) **[Task 4.3]**
- 4.4.1. Digital Photographs (pre-project existing conditions) **[Task 4.4]**
- 4.5.1. Preliminary Jurisdictional Delineation Report **[Task 4.5]**
- 4.5.2. USACE - 404 Permitting **[Task 4.5]**
- 4.5.3. USACE - 408 Permitting **[Task 4.5]**
- 4.5.4. Biological evaluation Report **[Task 4.5]**
- 4.6.1. Draft and Final ANP Survey Results **[Task 4.6]**
- 4.6.2. PCFCD - Riparian Habitat Mitigation **[Task 4.6]**
- 4.6.3. NPPO mitigation plans **[Task 4.6]**
- 4.6.4. Restoration Plans for Chuck Huckleberry Loop and Irrigation **[Task 4.6]**

- 4.7.1. Aerial Targets for photo-control [Task 4.7]
- 4.7.2. Topographic maps per Pima County Department of Transportation Roadway Design Manual Standards. [Task 4.7]
- 4.7.3. Digital orthophotos per Pima County Department of Transportation Roadway Design Manual Standards. [Task 4.7]
- 4.7.4. Survey base AutoCAD drawing [Task 4.7]
- 4.7.5. Up to 45 legal descriptions with sketch [Task 4.7]
- 4.8.1. Final Hydrology Technical Memorandum [Task 4.8]
- 4.8.2. PCFCD - Floodplain Use Permit (as needed) [Task 4.8]
- 4.8.3. Marana - Floodplain Use Permit (as Needed) [Task 4.8]
- 4.9.1. Cultural Clearances [Task 4.9]
- 4.9.2. Map of previously excavated areas that intersect the project corridor [Task 4.9]
- 4.9.3. Final cultural resources inventory report [Task 4.10]
- 4.10.1. AZPDES SWPPP Draft and Final [Task 4.10]

Task 5 – Schematic Design (30%)

The purpose of this task is to use the data and guidelines developed in Task 3, Alignment Analysis/Verification, to develop and evaluate alternative design concepts, and agree upon a single design concept for the Project. The primary products from this task will be a 30% design memorandum, a 30% level Plan set, and an initial 30% level construction cost estimate for the Project.

During the Schematic Design phase, the Design-Builder will develop detail sketches, and preliminary drawings. At the conclusion of this phase of design, a 30% Design Briefing will be held with County. At this briefing, the Design will be used to convey concepts and to solicit input. Meeting minutes will be prepared to capture comments and to document the decisions reached. Specific activities and deliverables from this task are as identified in the subtasks below. During the Schematic Design phase, the Design-Builder will focus on constructability aspects of Project, including facility layouts and construction sequencing.

Task 5.1 – Design Submittals

Task 5.1.1 – Submittal

The Design-Builder will submit to County, with such promptness as to cause no delay in the Design Work, all submittals and drawings required by the Contract or as necessary to illustrate details of the Design Work.

Task 5.1.2 – Submittal Requirements

Each submittal and drawing must be accompanied by a transmittal letter containing a list of the submitted documents and/or of the titles and numbers of the drawings, as appropriate. Each series will be numbered consecutively for ready reference and each submittal and drawing will be marked with the following information:

- Date of submission
- Name of Project
- Location of Project

- Branch of Design Work (specification section)
- Project number
- Name of submitting Design-Builder
- Name of Subcontractors
- Revision number

Task 5.1.3 – Consistency with Technical Specifications

All Subcontractor submittals and drawings will be reviewed by Design-Builder prior to being submitted to County and will bear a written statement by the Design-Builder that the submittals and drawings are consistent with the Technical Specifications or, if not totally consistent, will bear a written statement indicating all deviations from the Technical Specifications. By approving, verifying, and submitting drawings, product data, and similar submittals, the Design-Builder represents that the Design-Builder has determined and verified the information contained within such submittals complies with the requirements of the Technical Specifications. Any submittals or drawings submitted without the statement will be returned for resubmission; the submittals or shop drawings will be considered as not having been submitted, and any delay caused thereby will be the Design-Builder's sole responsibility. This review by Design-Builder of Subcontractor submittals and drawings will not be construed as Design-Builder approval of the design therein except that it will be a representation that the letter accompanying the submittal or drawings does indicate all deviations from the Construction Documents as required by Task 3.6.3.4.

Task 5.1.4 – Identification of Deviations

Design-Builder will include with submittals and drawings, a written statement indicating all deviations from the Technical Specifications. Failure to so notify County of such deviations may be grounds for subsequent rejection of the Design Work. If, in the opinion of County, the deviations are not acceptable, the Design-Builder must furnish the item as specified in accordance with the Technical Specifications. Design-Builder will not be relieved of responsibility for deviations from requirements of the Technical Specifications by County's approval of Drawings, Product Data, or similar submittals unless Design-Builder has specifically informed County in writing of such deviation at the time of submittal and County has given written approval to the specific deviation. The Design-Builder will not be relieved of responsibility for errors or omissions in Drawings, Product Data, or similar submittals by approval thereof.

Task 5.1.5 – Verification of Submittal

By reviewing or submitting submittals and/or drawings, the Design-Builder represents that it has determined and verified availability, field measurements, field construction criteria, materials, catalog numbers, and similar data, or will do so, and that it has checked and coordinated each submittal and/or drawing with the requirements of the Technical Specifications. If any specified material item or part is not available, the Design-Builder will so indicate to County.

Task 5.1.6 – County Review

The County will review and approve submittals and drawings and return them to Design-Builder within five (5) working days of receipt unless otherwise previously agreed in writing. For scheduling purposes, Design-Builder must assume a five (5) working day review period for each submittal or set of drawings. For complex submittals, Design-Builder must assume two five (5) day review cycles. If review and approval are delayed beyond five (5) working days, County will notify Design-Builder in writing stating the reason for the delay. Approval will not relieve the Design-Builder from responsibility for deviations from the Technical Specifications, unless it has been called to County's attention, in writing, at the time of submission. Any modification will be approved only if it is in the interest of County to effect an improvement in the Work and does not increase the GMP or Contract Time(s). Any such modification is subject to all other provisions of

the Technical Specifications and Contract and is without prejudice to any and all rights of County under any surety bonds.

Task 5.1.7 – Response to County Review

If the County returns a submittal or shop drawing to Design-Builder with the notation "rejected", "revise and resubmit", or "approved as noted", Design-Builder, so as not to delay the Work, will promptly submit a submittal or drawing conforming to the requirements of the Technical Specifications and Contract and indicating in writing on the submittal or drawing and on the transmittal what portions of the resubmittal have been altered in order to meet with the approval of the County. Any other differences between the resubmittal and the prior submittal will be indicated on the drawing and on the resubmittal as a special note.

Task 5.1.8 – No Time Extension

No extension of time will be granted to Design-Builder because of its failure to submit submittals or drawings in ample time to allow for review, possible resubmittal, and approval. The Design-Builder will furnish prints of its approved submittals and drawings to all Subcontractors whose work is in any way related to the Work covered by the submittal or drawings.

Task 5.2 – Civil Design

30% civil design efforts will include the following activities:

- Develop site layouts of improvements for the facility developed to 30% level. This includes plan view only drawings for selected alignment
- Identify the locations of underground utilities and incorporate this information into site utility drawings.
- Pothole locations
- Incorporation of Bluestake Data
- Review concepts with Design-Builder quality control reviewers.
- Preliminary layout and location of air release valve vaults
- Preliminary layout and location of pig retrieval structure at discharge location
- Identification of Jack and Bore locations
- Preliminary identification of potential surface restoration elements including impacts to existing roadways, pathways, trails, landscaping, irrigation, walls, drainage structures, utilities, etc.
- Prepare 30% technical specifications.
- Preliminary location of easements (Permanent and temporary)
- Contractor entrance, offices, parking, and staging areas will be defined.

Task 5.3 – Hydraulics

The selected alignment will be reviewed for integration with the existing Continental Ranch lift station pumps, which include pipes material, pressure rating, and inside diameter selections. A system curve will be created for the different pipe options. The system curves will be compared to the existing pump station curves to confirm that the selected pipe will allow for proper pump operation while also meeting capacity requirements. The capacity requirements for the system will be reviewed with the County to determine any updates since the original pump sizing analysis was completed.

Additionally, a preliminary surge analysis will also be completed for the selected alignment to determine if there is a need for a surge tank for the alignment, or if alternative means (i.e. air release valves) can be used to manage system surges. Surge tank design is not included in this scope.

The preliminary location and sizing of air release valves will be determined. Different product options will be selected and reviewed with the County to determine the recommended product for use to minimize operational concerns and public impact.

Task 5.4 – Structural Analysis

The structural engineer will perform a feasibility review for the potential hanging of the new dual force main pipes from the existing Cortaro Road bridge across the Santa Cruz River. Tasks will include the following:

- Review available documentation
- Site visit to identify potential field conflicts
- Perform structural analysis for the potential support framing and corresponding attachment/support of the new dual force main pipes.

Task 5.5 – 30% Design Report

The DB team will update the alternative alignment report to build it around the selected alignment, and incorporate the information collected throughout the 30% design. This will be considered as the 30% design report.

Task 5.6 – Provide 30% Construction Cost Estimate

The DB team will develop a 30% cost estimate based around the 30% design plans. This task includes Design-Builder review of the cost estimate with the County. Construction cost estimating procedures are defined in Task 1.8.

In the event that the cost estimate exceeds the County budget, Design-Builder and County will meet as necessary to review and refine the cost estimate with the goal of reaching consensus on a workable Project cost.

Task 5.7 – Pre-purchased Equipment and Materials

This DM will include recommendations for any pre-purchased equipment and materials recommended for advancing the Project schedule. The DM will identify vendor-imposed lead times for the recommended purchases and show Project Schedule impacts as well as critical purchase deadlines. The list of equipment and materials recommended for pre-purchase will be coordinated with the County to ensure that the equipment and materials meet County standards and any County preferences for type or manufacturer. Following County approval, Design-Builder will work with County to facilitate timely purchase of the recommended equipment and materials.

Task 5.8 – Preliminary MOPO Design Memorandum

As needed, preliminary MOPOs will be developed based on the schematic design information developed in Task 5. Meet with County staff prior to preparation of MOPO and discuss additional information required by PCRWD.

This DM will provide a summary of anticipated construction sequencing and tie-ins to maintain any existing operations while the new facilities are being constructed and started up. The required MOPOs will be

identified and documented for the purposes of updating as the design progresses. These recommendations will be coordinated with County staff.

Assumptions:

- This task includes attending one workshop with all appropriate County personnel.

Task 5.9 – 30% Workshop Meeting

This DM will provide a summary of the recommended construction packaging and scheduling to achieve the County's goals and regulatory requirements for the project. These recommendations for construction packaging, sequencing, and duration will be coordinated with the County. This task will include attending one workshop with County to coordinate these requirements and to develop recommendations and schedule milestones.

Assumptions:

- This task includes attending one 4-hour workshop with the County.

Task 5 – Deliverables

- 5.2.1. 30% Preliminary Design Plans for Selected Alignment **[Task 5.2]**
- 5.2.2. Preliminary Identification of Project disturbance area **[Task 5.2]**
- 5.3.1. Draft System Hydraulics Analysis Report **[Task 5.3]**
- 5.3.2. Draft Surge Analysis Report **[Task 5.3]**
- 5.4.1. 30% Structural Analysis **[Task 5.4]**
- 5.5.1. 30% Preliminary Design Report **[Task 5.5]**
- 5.6.1. 30% Preliminary Cost Estimate **[Task 5.6]**
- 5.8.1. Preliminary MOPO DM **[Task 5.8]**
- 5.9.1. 30% Review Comment responses and Workshop Minutes **[Task 5.9]**

PROJECT DELIVERY PHASE 2 – FINAL DESIGN SERVICES

Task 6 – Design Development (60%)

The purpose of this task is to utilize the decisions that were made in the 30% schematic design task to finalize design development and to achieve a true "design freeze" at the conclusion of this task. Structures, equipment and the site plan will be finalized during this task to allow for subsequent final detailing in the Construction Document Preparation phase. Specific activities and work products from this task are described in the following subtasks.

Task 6.1 – Civil Design

60% civil design efforts will include the following activities:

- Incorporate responses to comments from the 30% design workshop.
- Develop site layouts of improvements for the facility developed to a 60% level. This includes plan and profile drawings for the selected alignment.
- Finalize horizontal locations of major site elements.
- Pothole Data

- Preliminary wash crossing details
- Define demolition requirements and limits.
- Finalize jack and bore locations
- Define contractor staging, storage, access, parking, and off-site access corridors.
- Prepare 60% technical specifications.
- Final locations of easements (temporary and final)
- Develop intersection details
- Develop initial recommendations for anticipated surface restoration elements including impacts to existing roadways, pathways, trails, landscaping, irrigation, walls, drainage structures, utilities, etc.
- Finalize air release valve locations and layout details
- Review design development with Design-Builder quality control reviewer.
- One trip to the ADEQ Phoenix office to meet with ADEQ in person to discuss the project's permitting.

Task 6.2 – Hydraulics

The 60% alignment will be reviewed to finalize how the new force mains integrate with the existing Continental Ranch lift station pumps, which include pipes material, pressure rating, and inside diameter selections. A final system curve will be created for the selected pipe type. The system curves will be compared to the existing pump station curves to confirm that the selected pipe will allow for proper pump operation while also meeting capacity requirements developed within the preliminary analysis. Pipe pressure ratings will also be reviewed along the entire alignment to determine where pipe pressure ratings can be adjusted due to reduced system pressures.

A final surge analysis will also be completed for the finalized alignment and pipe selection. The analysis will determine if there is a need for a surge tanks for the alignment, or if alternative means (i.e. air release valves) can be used to manage system surges.

The final location and sizing of air release valves will be determined. A final product recommendation will be selected.

Task 6.3 – Structural Design

The structural engineer will perform a 60% level design for the pig retrieval vault, and, as needed, for the attaching the new dual force main pipes to the existing Cortaro Road Bridge across the Santa Cruz River. Tasks will include the following:

- Perform 60% level structural analysis, design, and detailing for the pig retrieval concrete vault, pipe penetrations, concrete lid, and appurtenances.
- As needed, Perform 60% level structural analysis, design, and detailing for the support framing and corresponding attachment/ support of the new force main pipes over the Santa Cruz River under the existing Cortaro Road bridge.
- Perform 60% level structural drafting services to develop structural drawings that shall include vault plans, vault sections, pipe support framing details, pipe support attachment details, and typical structural details. Specifications will be in the form of General Structural Notes (GSN s).

Task 6.4 – 60% Design Report

The DB team will update the 30% report to build it around the final 60% alignment, and incorporate the information collected throughout the 60% design. This will be considered as the 60% design report.

Task 6.5 – 60% Construction Cost Estimate

The DB team will develop a 60% cost estimate based around the 60% design plans. This task includes Design-Builder review of the cost estimate with the County. Construction cost estimating procedures are defined in Task 1.8.

In the event that the cost estimate exceeds the County budget, Design-Builder and County will meet as necessary to review and refine the cost estimate with the goal of reaching consensus on a workable Project cost.

Task 6.6 – Project Delivery/Construction Package Analysis

Design-Builder will conduct a Project delivery analysis, which will include consideration of the following:

- Finalize the list of any equipment to be pre-negotiated and/or County selected.
- Coordinate with vendors the equipment to be pre-procured and develop contract interface details.
- Receive County's review comments on 60% documents before development of 95% construction documents begins.
- Update and provide more detail on procurement and construction schedule and milestones. The results of this analysis will be discussed with the PCRWRD at the 60% Design Development Workshop.

Task 6.7 – Updated MOPO Design Memorandum

Update the MOPO DM, from Task 5, based on additional design information developed in Task 6. Meet with County staff prior to update of MOPO and discuss additional information available to update MOPO.

Task 6.8 – 60% Workshop Meeting

Design-Builder will assemble the work products from the tasks above and submit the 60% Design Development document to the County for review and comment. A workshop will be held with the County's personnel to review the 60% deliverable, to receive and discuss comments, and to reach closure on design issues. A 1-day workshop is included in this task to provide time to meet with all appropriate County staff. Following the workshop, meeting minutes and responses to comments will be prepared and submitted by Design-Builder. The responses to comments will be incorporated in the 95% Construction Documents.

Task 6 – Deliverables

- 6.1.1. 60% Design Plans **[Task 6.1]**
- 6.2.1. Final System Hydraulics Report **[Task 6.2]**
- 6.2.2. Final Surge Analysis Report **[Task 6.2]**
- 6.3.1. 60% Structural Drawings **[Task 6.3]**
- 6.4.1. 60% Design Report **[Task 6.4]**
- 6.5.1. 60% Construction Cost Estimate **[Task 6.5]**
- 6.6.1. Project Delivery/Construction Package Memoranda and Meeting Minutes **[Task 6.6]**
- 6.7.1. Updated MOPO DM **[Task 6.7]**
- 6.8.1. 60% Review Comment responses and Workshop Minutes **[Task 6.8]**

Task 7 – Construction Document Preparation (95%)

The purpose of this task is to develop the 95% construction drawings, specifications, and schedules for the Construction Phase. The construction documents will be finalized in Task 9, by incorporating the 95% review comments.

Assumption:

- It is anticipated that strategic phasing of construction will directly benefit the project delivery. It is assumed up to four geographic phases may be separately identified and/or independently advanced to 95% designs.

Task 7.1 – Civil Design

60% civil design efforts will include the following activities:

- Incorporate responses to comments from the 60% design workshop.
- Update drawings around the equipment that has been pre-purchased.
- Prepare 95% construction drawings.
- Prepare 95% technical specifications.
- 95% survey control sheets
- Finalize wash crossing details
- Finalize jack and bore details
- Finalize intersection crossing details
- Finalize surface restoration elements including impacts to existing roadways, pathways, trails, landscaping, irrigation, walls, drainage structures, utilities, etc.
- Finalize existing system connection details
- Create phased plans
- Complete final checking and coordination review by design leads.
- Provide independent review by the Design-Builder quality control review team.

Task 7.2 – Structural Design

The structural engineer will perform a 95% level design for the pig retrieval vault, and, as needed, for the attaching the new dual force main pipes to the existing Cortaro Road Bridge across the Santa Cruz River. Tasks will include the following:

- Incorporate responses to comments from the 60% design workshop.
- Perform 95% level structural analysis, design, and detailing for the pig retrieval concrete vault, pipe penetrations, concrete lid, and appurtenances.
- As needed, Perform 95% level structural analysis, design, and detailing for the support framing and corresponding attachment/ support of the new force main pipes over the Santa Cruz River under the existing Cortaro Road bridge.
- Perform 95% level structural drafting services to develop structural drawings that shall include vault plans, vault sections, pipe support framing details, pipe support attachment details, and typical structural details. Specifications will be in the form of General Structural Notes (GSNs).

Task 7.3 – 95% Design Report

The DB team will update the 60% report and incorporate the information collected throughout the 95% design. This will be considered as the 95% design report. At this stage, the report will be broken up to describe the different project phases based on project timing and constructability.

Task 7.4 – Provide 95% Construction Cost Estimate

The DB team will develop a 95% cost estimate based around the 95% design plans. This task includes Design-Builder review of the cost estimate with the County. Construction cost estimating procedures are defined in Task 1.8.

Task 7.5 – Updated MOPO Design Memorandum

Update the MOPO DM from Task 6.12 based on additional design information developed in Task 7. Meet with County staff prior to update of MOPO and discuss additional information available to update MOPO.

Task 7.6 – 95% Workshop Meeting

The Design-Builder will submit 95% Construction Documents to the County for review and comment. The County will prepare one set of collated and adjudicated review comments and provide to the Design-Builder prior to the 95% Review Workshop. The workshop will be held to discuss and resolve this final set of review comments. Following the workshop, meeting minutes and responses to comments will be submitted to the County to document decisions.

Task 7.7 – Construction Cost Estimate Reconciliation

In the event that the cost estimate exceeds the County budget, Design-Builder and County will meet as necessary to review and refine the cost estimate with the goal of reaching consensus on a workable Project cost.

Task 7 – Deliverables

- 7.1.1. 95% Design Plans (assuming up to four separate construction phases) **[Task 7.1]**
- 7.2.1. 95% Structural Drawings **[Task 7.2]**
- 7.3.1. 95% Design Report (assuming up to four separate construction phases) **[Task 7.3]**
- 7.4.1. 95% Construction Cost Estimate (assum. up to four separate constr. phases) **[Task 7.4]**
- 7.5.1. Updated MOPO DM **[Task 7.5]**
- 7.6.1. 95% Review Comment responses and Workshop Minutes **[Task 7.6]**
- 7.7.1. Construction Cost Estimate Reconciliation **[Task 7.7]**

Task 8 – Construction GMP

Design-Builder will prepare and, by the date specified in the Contract, deliver to County a proposed GMP for the construction phase of the Project. At a minimum, the following component will be included in the proposed GMP:

- A recital of the specific Construction Documents, including drawings, specifications, and all addenda thereto, used in preparation of the GMP proposal.
- The five (5) elements of the Guaranteed Maximum Price:

- a. Guaranteed Maximum Cost of the Work (hereinafter defined), detailed by each subcontract, trade, or bid division;
 - b. the Design-Builder's Contingency for the Work;
 - c. Guaranteed Maximum Design-Builder's Staffing Cost (hereinafter defined), detailed by expense category;
 - d. Guaranteed Maximum General Conditions Cost (includes bond & insurance costs) (hereinafter defined), detailed by expense category; and
 - e. Guaranteed Maximum for Design-Builder's Overhead and Profit.
- A draft schedule of values;
 - A description of all other inclusions to, or exclusions from, the GMP;
 - All assumptions and clarifications; and
 - The final construction Project Schedule.

Assumption:

- It is anticipated that strategic phasing of construction will directly benefit the project delivery. It is assumed up to four geographic phases may be separately identified and/or independently advanced to a GMP for construction.

Task 8 – Deliverables

8.0.1 GMPs for Material Procurement/Long-Lead Items (TBD)

8.0.2 GMPs for Construction (assuming up to four separate construction packages)

Task 9 – 100% Construction Document Completion

The purpose of this task is to reconcile final Construction Documents with potential revisions resulting from input received during GMP development and final permitting. The Design-Builder will perform the following subtasks as part of this task.

Task 9.1 – Civil Design

The Design-Builder will modify the Construction Documents to incorporate agreed upon 95% review comments (and/or GMP review comments) from the County, applicable regulatory agencies, and the Design-Builder's quality control review team. The final documents will then be submitted to the County for final back-check and approval. The final back checking will consist of verifying the 95%/GMP responses to comments were adequately incorporated.

The final Construction Document production is based on a maximum of 4 construction packages.

The final Construction Documents will include 24-inch x 36-inch mylars sealed and signed, and contract specifications.

Task 9.2 – Structural Design

Final structural engineering construction documents will be completed to incorporate agreed upon 95% review comments from the County, applicable regulatory agencies, and the Design-Builder's quality control review team. The final documents will then be submitted to the County for final back-check and approval. The final back checking will consist of verifying the 95% responses to comments were adequately incorporated. Final stamped structural calculations will be provided at this time.

Task 9.3 – Final Design Report

The final design report will include the final updates of the predesign report technical memoranda, documenting design criteria for the engineering disciplines. This report will be in compliance with ADEQ requirements. The Design-Builder will submit the Final Design Report to County for County submission to ADEQ.

Task 9.4 – Updated MOPO Design Memorandum

Update the MOPO DM based on additional design information developed in Task 7. Meet with County staff prior to update of MOPO and discuss additional information available to update MOPO.

Task 9.5 – ADEQ Permitting

The DB Team will, with county assistance, complete the ADEQ permitting documentation for the Notice of Intent to Discharge (NOI). It is assumed that up to four permits will be created (one for each phase). It is also assumed that this will include the creation of up to four A312G Justification letters.

Assumption:

- It is anticipated that strategic phasing of construction will directly benefit the project delivery. It is assumed up to four geographic phases may be separately identified and/or independently advanced to 100% designs.

Task 9 – Deliverables

- 9.1.1. Final Contract Documents (assuming up to four separate construction phases) **[Task 9.1]**
- 9.1.2. Final (100%) Construction Cost (Reconciliation of GMPs to final 100% plans) **[Task 9.1]**
- 9.2.1. Final Structural Calculations (incorporated into plans) **[Task 9.2]**
- 9.3.1. Final Design Report (up to four phases) **[Task 9.3]**
- 9.4.1. Final MOPO DM **[Task 9.4]**
- 9.5.1. ADEQ NOIs and A312Gs (up to four phases) **[Task 9.5]**

Task 10 – Trade Contractor Selection Bidding and Negotiation

Task 10.1 – Bid Packages

Design-Builder will prepare and assemble document packets for use in bidding the subcontracts. Such packaging of the Work will be broken down to maximize both competition and the involvement of small businesses.

Establishment of SBE Requirements/Procedures will occur during preliminary design services and finalized prior to the 30% design milestone.

Task 10.2 – Prequalification

The Design-Builder will develop subcontractor and supplier interest for each division of the Work. A design professional on the Project Team will attend all pre-bid meetings with potential subcontractors and be available to respond to questions regarding the Construction Documents.

Task 10.3 – Bidding

The Design-Builder will competitively bid each trade category or, if approved by County, negotiate for the performance of a particular trade category.

Task 10.4 – Budget Control

The Design-Builder will use its best efforts to obtain bids which are less than the final GMP estimates.

Task 10.5 – Bid Opening

The Design-Builder will conduct bid openings in the presence of the County's Representative. The Design-Builder will provide the County with a copy of its preliminary bid tabulation and a copy of all bids.

Task 10.6 – Bid Evaluation and Award

The Design-Builder will, for each subcontract, trade, or bid division:

- determine the final bid amounts, having reviewed and clarified the scope of Work in detail with the apparent low responsive bidders to determine that their bids are complete but do not include duplicate scope items;
- prepare and furnish to the County a final bid tabulation summary which includes by subcontract, trade, and/or bid division, the applicable final GMP estimate and the related final bid amount and the details of all scope clarifications for County's review and approval;
- if requested by County, provide a list of all potential Direct Purchase Materials (hereinafter defined);
- identify to the County in writing the subcontractors to which the Design-Builder recommends award of subcontracts; and
- award and enter into a subcontract between itself and each subcontractor which it has recommended in accordance with this Scope unless otherwise notified by the County.

Task 10.7 – County Approval Required to Proceed

No portion of the Work may be performed by the Design-Builder or its affiliates except with County's approval.

Task 10 – Deliverables

- 10.1.1 Establish SBE goals/requirements for specialty subcontractors **[Task 10.1]**
- 10.2.1 Specialty subcontractor prequalification **[Task 10.2]**
- 10.3.1 Specialty Subcontractor preliminary (30%) pricing/bidding **[Task 10.3]**
- 10.3.2 Specialty Subcontractor preliminary (60%) pricing/bidding **[Task 10.3]**
- 10.3.3 Specialty subcontractor selection **[Task 10.3]**
- 10.4.1 Specialty Contractor GMP Coordination **[Task 10.4]**

The Design-Builder's initial scope/fee are based on Tasks 1 – 10 above. Tasks 11 – 21 are provided as a general reference for Pima County's expectation during the Construction Phase. Specific details for Tasks 11-21 will be mutually agreed upon and confirmed with each GMP contract amendment, when specific construction details can be better defined.

PROJECT DELIVERY PHASE 3 - CONSTRUCTION

General Intent. Design-Builder will perform all Work and construction administration services necessary to construct the Project in accordance with the Contract for Design-Build Construction and to render the Project and all of its components operational and functionally and legally usable. This includes, but is not limited to, completion of the following tasks.

Task 11 - Design Professional's Role During and After Construction

Although the design and construction of the Project are being provided through a Design-Build delivery method, because no additional design professionals have been retained by County to provide oversight during construction and warranty phase services, the lead design professionals on the Design-Builder's Project Team will be responsible for providing the services described herein. Such services will be provided by the lead design professionals without regard to the conflict of interests associated with the Design-Build delivery method. These services include:

Task 11.1 - Construction Administration

The design professionals will carry out the Construction Administration services set forth herein.

Task 11.2 - Advice and Consultation

The design professionals will be a representative of, and will advise and consult with, the County during construction until final payment is made. The Design-Builder will have authority to act on behalf of the County only to the extent provided in the Contract.

Task 11.3 - Presence at Work Site

The design professionals on the Project Team will attend regularly scheduled construction meetings at the Site and will provide such representation as may be required to fulfill the intent and interpretation of the plans and specifications for the Project. In any event, the design professionals will visit the site as is reasonable and necessary to become familiar with the progress and quality of the Work completed and to determine if the Work is being performed in a manner indicating that the Work when completed will be in accordance with the Construction Documents. On the basis of on-site observations as an architect or as an engineer, the design professional will keep the County informed of the progress and quality of the Work and will guard the County against defects and deficiencies in the Work.

Task 11.4 - Certification of Pay Requests

Based on the design professionals' observations and evaluations of the Design-Builder's Applications for Payment, the design professional will review and certify the amounts due the Design-Builder in close coordination with the County Project Manager. The design professional's certification for payment will constitute a representation to the County, based on the design professional's observations at the Project site and on the data comprising the Design-Builder's Application for Payment, that the Work has progressed to the point indicated and that, to the best of the design professional's knowledge, information, and belief, the quality of the Work is in accordance with the Construction Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Construction Documents upon Substantial Completion, to results of subsequent tests and inspections, to minor deviations from the Construction Documents correctable prior to completion and to specific qualifications expressed by the design professional. The issuance of a Certificate for Payment will further constitute a representation that the Design-Builder is entitled to payment in the amount certified.

Task 11.5 - Duty to Inspect

The design professional will reject Work which does not conform to the Construction Documents. Whenever the design professional considers it necessary or advisable for implementation of the intent of the

Construction Documents, the design professional will have authority to require additional inspection or testing of the Work in accordance with the provisions of the Design-Build Contract for Construction, whether or not such Work is fabricated, installed, or completed.

Task 11.6 - Submittals

The design professional will review, approve, reject, or take other appropriate action on construction-related inquiries and submittals, such as shop drawings, product data, and samples in close coordination with the County Project Manager. The design professional will not approve any such submittals unless such submittals conform with: (i) the design concept; (ii) the Construction Documents; (iii) the County's total budgeted Construction Cost; (iv) the County's Design and Construction Standards; and (v) governing codes and authorities having jurisdiction. In the event the County's Design and Construction Standards exceed applicable legal requirements, those County standards will govern. The design professional's review will be completed so that all Work can be performed without delay and all products or materials may be ordered or fabricated with sufficient time to meet the Project Schedule.

Task 11.7 - Preparation of Change Orders

The design professional will prepare Change Orders, with supporting documentation and data, if the design professional determines the same is necessary for the County's approval and execution in accordance with the Design-Build Contract for Construction.

Task 11.8 - Interpretation

Interpretations and decisions of the design professionals will be consistent with the intent of, and reasonably inferable from, the Construction Documents and will be in writing or in the form of drawings.

Task 11.9 - Aesthetic Review

The design professionals' decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Construction Documents, and if concurred with by the County.

Task 11.10 - Substantial and Final Completion

The design professionals will, in conjunction with County personnel, conduct inspections to determine the dates of Substantial Completion and Final Completion, will receive and forward to the County for the County's review and records, written warranties, and related documents required by the Design-Build Contract for Construction and assembled by Design-Builder, and will issue a final Certificate for Payment upon compliance by the Design-Builder with the requirements of the Design-Build Contract for Construction. The design professionals will perform all services relating to Substantial Completion and Final Completion in accordance with County policies and procedures.

Task 11.11 - As-Built Drawings

The Design-Builder will prepare "As-Built" or record drawings at Project completion in accordance with the requirements set forth in the County Specifications. These drawings will include changes made to the Project by Change Orders, Addenda to the Construction Documents, Architect's Supplemental Information, field orders, field reports, Requests for Information, shop drawings, other directives and submittals, and information provided by the Design-Builder.

Task 11.12 - Warranty Support

The design professionals will respond to: County's requests to review design and construction issues during the construction warranty period; coordinate and participate in the end of the warranty period inspection in accordance with the County Specifications; and produce a summary report documenting deficiencies, problems, or other outstanding items.

Task 12 - Construction Supervision

Commencing with the award of the first subcontract and terminating on the date of Final Completion, the Design-Builder will provide the services described herein. The Design-Builder, in close coordination with County's Field Engineering representative will advise and consult with the County, and provide administration of the Construction Documents. The Design-Builder will supervise and direct the Work at the Site, in close coordination with County Field Engineering representatives. The Design-Builder will, at a minimum, staff the Project Site with personnel who will:

- supervise and coordinate the Design-Builder's personnel and act as its primary liaison with the County;
- coordinate trade contractors and suppliers, and supervise Site construction management services;
- be familiar with all trade divisions and trade contractors' scopes of Work, all applicable building codes and standards, and the Contract for Design-Build Construction;
- check, review, coordinate and distribute shop drawings and check and review materials delivered to the Site, regularly review the Work to determine its compliance with the Construction Documents and this Agreement, confer with the appropriate County consultant(s) as necessary to assure acceptable levels of quality;
- prepare and maintain Project records;
- schedule and conduct weekly progress meetings with subcontractors to review such matters as jobsite safety, job procedures, construction progress, schedule, shop drawing status and other information as necessary and provide notification of, and minutes from, such meetings to County;
- schedule and conduct weekly progress meetings with the County to review such matters as construction progress, schedule, shop drawing status, and other information as necessary; and
- make provision for Project security to protect the Project site and materials stored off-site against theft, vandalism, fire, and accidents as required by the General Terms and Conditions.

Task 13 - Reporting

The Design-Builder will provide a monthly report in searchable PDF format summarizing the progress of the Project to the County including information on the subcontractors' Work, percentage of completion of the Work, current estimating, subcontract buyouts, computerized updated monthly Critical Path Method scheduling and Project accounting reports, including projected time to completion and estimated cost to complete the Work, progress photographs, project directory, logs for Requests for Information, submittals and shop drawings, Change Orders, cost change proposals, field directives, safety meetings, deficiencies, weather conditions, and meeting minutes.

Task 14 - Miscellaneous Construction Phase Duties

Task 14.1 - GMP and Savings

During the Construction Phase, Design-Builder will complete the Construction Work in accordance with the Construction Documents and the Contract in return for payment by County of the Costs of Construction, provided that in no event will the aggregate payments by County to Design-Builder for Construction Work exceed the Guaranteed Maximum Price.

Task 14.2 - Services Provided

Design-Builder's Construction Phase services include, without limitation: team management and coordination, scheduling, cost control and change order management, submittal process management, subcontracting, field management, safety program, close-out process, and warranty period services. This will include providing through itself or its Subcontractors all necessary supervision, labor, inspection, testing, material, equipment, machinery, temporary utilities, and other temporary facilities to permit Design-Builder to complete all Construction Work in accordance with the Construction Documents and the Contract.

Task 14.3 - Performance of Work

Design-Builder will perform all construction activities efficiently and with the requisite expertise, skill, quality, and competence to satisfy the requirements of the Construction Documents and the Contract.

Task 14.4 - Reporting

Design-Builder will provide County, on a monthly basis, a written status report detailing the progress of the Construction Work during the Construction Phase, including whether the Work is proceeding according to the Project Schedule. Each monthly report during the Construction Phase will include: an updated Project Schedule; an updated Construction Work cash flow projection for the duration of the Project; copies of the Design-Builder's Superintendent's daily site reports made during the preceding month; identification of discrepancies, conflicts, or ambiguities existing in the Construction Documents that require resolution; identification of any health and safety issues that have arisen in connection with the Construction Work; and identification of other items that require resolution so as not to jeopardize Design-Builder's ability to complete the Construction Work for the GMP and within the Contract Time(s),

Task 14.5 - Schedule

During the Construction Phase, Design-Builder will maintain the Project Schedule and will promptly prepare a proposed updated Project Schedule and submit it to County for its review and approval whenever events occur or are likely to occur that require changes in the Project Schedule. The Project Schedule for the Construction Phase is the same and a continuation of the Project Schedule used for the Design Phases and will indicate the dates for the start and completion of the various stages of the Construction Work, including the dates when County information and approvals are required and all necessary shutdowns or suspensions of County or separate vendor activities on the Site (if any).

Task 14.6 - Work Management

The Design-Builder will provide leadership to Design-Builder's employees and Subcontractors during the Construction Phase for all matters relating to the Construction Work. The Design-Builder agrees to furnish efficient business administration and superintendence and to complete the Construction Work in an expeditious and economical manner.

Task 14.7 - Management Presence at Work Site/Approval of Replacement

Design-Builder's Representative and the Design-Builder Superintendent will be at the Site at all times when Construction Work is being performed and will have the necessary expertise and experience required to supervise the Construction Work. Design-Builder's Representative will communicate regularly with County and will be vested with the authority to act on behalf of Design-Builder. Design-Builder's Representative and Design-Builder's Superintendent may only be replaced with the mutual written agreement of County and Design-Builder. Notwithstanding the foregoing, the Design-Builder's Representative and Design-Builder's Superintendent will be replaced upon reasonable request of the County.

Task 14.8 - Subcontractor Coordination

Design-Builder is responsible for coordinating the activities of its own Subcontractors.

Task 14.9 - Work Site Cooperation

If County is performing other work with separate contractors under its control as part of the Project or as a separate project, Design-Builder agrees to cooperate and coordinate its Construction Work with the work of County's separate contractors so that the Project and any separate project(s) on which the separate contractors are working can be completed in an orderly and coordinated manner reasonably free of significant disruption to any party. In this regard:

Task 14.9.1 - County Use of Work Site

County reserves the right to award other contracts related to the Project, or to perform certain work. The County also reserves the right to award other contracts unrelated to the Project but involving work in the vicinity of the Project or to perform unrelated work itself. Such other work may or may not be known to the County or disclosed to the Design-Builder prior to the date of the Contract. The Design-Builder will afford the County and other contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work and will properly coordinate its Construction Work with theirs in such manner as County may direct. The Design-Builder will also permit reasonable access of other contractors to the Site and their work.

Task 14.9.2 - Right to Comment on County Work Site Activity

The County will timely provide the Design-Builder with a copy of all plans, specifications, schedules, and other data relating to other contracts or work. The Design-Builder will thoroughly examine these documents and will within three (3) days of completing such examination notify the County in writing of any conflicts with the Construction Work to be performed by the Design-Builder. In no event will such notice be given so late as to interfere with or delay Construction Work to be performed by the Design-Builder. Failure of Design-Builder to review, or provide written notice as provided above will constitute a waiver of any objections or claims Design-Builder may have as a result of the necessity to coordinate Design-Builder's Construction Work with other activities.

Task 14.9.3 - Waiver of Claim against County

Should Design-Builder sustain any property damage through any act or omission of any other contractor, Design-Builder will have no claim or cause of action against County for such damage and hereby waives any such claim. The Design-Builder does not waive any claim or cause of action against any other contractor or subcontractor to recover any and all damages sustained by reason of the acts or omissions of such other contractor. The phrase "acts or omissions" as used in this section will include, but not be limited to, any unreasonable delay by any such other contractors, whether due to negligence, gross negligence, inadvertence or any other cause.

Task 14.9.4 - Duty to Remedy/Indemnification

Should the Design-Builder cause damage to the work or property of any other contractor or of the County, the Design-Builder will upon receiving due notice promptly attempt to settle with such other contractor or the County by agreement, repair or otherwise to resolve the dispute. If such separate contractor sues or initiates a proceeding against the County on account of any damage caused by the Design-Builder, the County will notify the Design-Builder who will defend and indemnify County against such proceedings to the extent required by Article 8 of the Contract.

Task 14.10 - Work Site Appearance

Design-Builder will keep the Site free from debris, trash and construction wastes to permit Design-Builder to perform its Construction Work efficiently, safely, and so as not to interfere with the use of any adjacent land areas, and will maintain the reasonable appearance of the jobsite and all storage/staging areas. Upon Substantial Completion of the entire Construction Work or a portion of the Construction Work to be accepted separately by County, Design-Builder will remove all debris, materials, wastes, equipment, machinery and

tools from the Construction Work to permit County to occupy the entire Construction Work or portion of the Construction Work for the use for which it is intended.

Task 14.11 - Changes to Approved Work

Any changes affecting previously approved Construction Work will require prior written approval of County.

Task 15 - Control of Construction Work

Task 15.1 - Means and Methods

Design-Builder will at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction. Design-Builder will perform all construction activities efficiently and with the requisite expertise, skill, and competence to satisfy the requirements of the Contract and Construction Documents.

Task 15.2 - Supervision and Coordination of Work

The Design-Builder will supervise and direct the work of its employees and Subcontractors and coordinate the Construction Work with the activities and responsibilities of the County to complete the Construction Work in accordance with the Construction Documents and the Contract and within the Contract Time(s).

Task 15.3 - Lines of Authority

The Design-Builder will establish an on-site organization and lines of authority in order to carry out the overall plans for completion of the Construction Work.

Task 15.4 - Direct Supervision of Work

All elements of the Work will be under the direct supervision of a foreman or his designated representative on the Site who will have the authority to take actions required to properly carry out that particular element of the Work.

Task 15.5 - Superintendent

The Superintendent will represent the Design-Builder in its absence and all directions given to the Superintendent will be as binding as if given to the Design-Builder. Important directions will be confirmed by written request in each case. The Superintendent will give efficient supervision to the Work, using its best skill and attention. In the event of noncompliance with this Task, County may require the Design-Builder to stop or suspend the Work in whole or in part.

Task 15.6 - Measurements

Before ordering materials or doing work, the Design-Builder and each Subcontractor will verify measurements at the Site and will be responsible for the correctness of such measurements.

Task 15.7 - Field Measurements

Design-Builder will take field measurements and verify field conditions and will carefully compare such field measurements and conditions and other information known to the Design-Builder with the Construction Documents before commencing activities. Errors, inconsistencies, or omissions discovered will be reported to County at once.

Task 15.8 - Survey

Design-Builder will establish and maintain all building and construction grades, lines, levels, and bench marks, and will be responsible for accuracy and protection of same. This Work will be performed or supervised by a civil engineer or surveyor licensed in the State of Arizona.

Task 15.9 - Dust Control

Design-Builder will take whatever steps, procedures, or means necessary to prevent any dust nuisance due to construction operations. The dust control measures will be maintained at all times to the reasonable satisfaction of County and in accordance with the requirements of the Pima County Department of Environmental Quality.

Task 15.10 - Sanitary Provisions

Design-Builder will provide and maintain in a neat and sanitary condition such accommodations for the use of its employees as may be necessary to comply with the requirements and regulations of the State Department of Health or other authorities having jurisdiction.

Task 15.11 - On-Site Storage

Only materials and equipment which are to be used directly in the Work will be brought to and stored on the Site by the Design-Builder. Equipment no longer required for the Work will be removed from the Site within a reasonable time.

Task 15.12 - Responsibility for Materials and Equipment

Protection of construction materials and equipment stored at the Site from weather, theft, damage, and all other adversity is the responsibility of the Design-Builder. No part of damage or loss arising from Design-Builder's failure to provide such protection will be compensable from the Design-Builder's contingency.

Task 16 - Daily Log

Task 16.1 - Log Content

The Design-Builder will maintain a daily log of construction activities for each calendar day during the Construction Phase, using a form approved by Design-Builder and County. The Design-Builder will document all activities at the Site, including:

- Weather conditions showing the high and low temperatures during work hours, the amount of precipitation received on the Site, and any other weather conditions which adversely affect Construction Work at the Site;
- Soil conditions which adversely affect Construction Work at the Site;
- The hours of operation by Design-Builder and individual Subcontractor personnel;
- The number of Design-Builder and Subcontractor personnel present and working at the Site, by subcontract and trade, and updated schedule activity number;
- The equipment active or idle at the Site;
- A description of the Construction Work being performed at the Site by updated schedule activity number;
- Any delays, disruptions or unusual or special occurrences at the Site;
- Materials received at the Site; and
- A list of all visitors at the Site.

Task 16.2 - Copies to County

The Design-Builder will provide copies of the daily logs to County on a weekly basis. Providing copies of the daily log to County does not satisfy any requirement in the Design-Builder Contract for written notice to the County.

Task 17 - Supervision and Construction Procedures

Task 17.1 - Duty to Supervise and Direct

The Design-Builder will supervise and direct the Construction Work, using the Design-Builder's best skill and attention. The Design-Builder will be solely responsible for coordination and accomplishment of all portions of the Construction Work in accordance with the Construction Documents and the Contract.

Task 17.2 - Responsibility for Actions

The Design-Builder will be responsible to the County for the acts and omissions of all entities or persons employed by or operating under the direction of Design-Builder including, but not limited to, Subcontractors, material and equipment suppliers, vendors, and service providers.

Task 17.3 - Responsibility for Inspection Delays

Delays in or results from inspections, tests, or approvals required or performed by persons other than the Design-Builder will not relieve Design-Builder from its obligation to perform the Construction Work in accordance with the Construction Documents and the Contract. Nothing contained in this Task 17.3 precludes the Design-Builder from asserting any rights it may have under the Contract in the event County is responsible for unreasonable delays in the making of any inspections, tests, or approvals.

Task 17.4 - Superintendent Authority

The superintendent and representatives will represent the Design-Builder and all communications given to either representative will be binding on the Design-Builder. All oral communications will be confirmed in writing.

Task 17.5 - Skilled Employees

The Design-Builder will at all times enforce strict discipline and good order among its employees and its Subcontractors' employees and will not allow employment on the Construction Work of any unfit person or anyone not skilled in the task or trade assigned to him or her.

Task 17.6 - County Access to Work

The Design-Builder will at all times allow the County or any other representative designated by County access to the Construction Work to observe progress and inspect the quality of work and conformance to the Construction Documents and the Contract.

Task 17.7 - Uncovering Work

Any Construction Work required to be observed or inspected, as applicable, by the County prior to being covered, which is covered without prior observation or inspection, as applicable, or without prior consent of the County, must be uncovered and recovered by the Design-Builder, if requested by the County, at no cost to County, except where Design-Builder has complied with the notice requirement of Task 17.8 and County or any other representative designated by County fails to inspect the Construction Work to be covered up.

Task 17.8 - Inspection Notice to County

Design-Builder will notify the County in writing at least twenty-four (24) hours prior to the time at which the County must be present to perform an inspection or observation, as applicable. Failure to provide such notice will make the Design-Builder responsible for uncovering the affected Construction Work including any costs to provide reasonable and required access to the Construction Work.

Task 17.9 - County Authority to Keep Work Uncovered

Notwithstanding the foregoing, if after inspection by County, the quality of the Construction Work is in question or an error in measurement is suspected, County may require that Design-Builder leave the work uncovered pending final resolution of the discrepancy.

Task 18 - Construction Documents

Task 18.1 - Reporting of Errors

Design-Builder will study and compare the Construction Documents in advance of beginning each portion of the Construction Work and immediately report to the County any material error, inconsistency, conflict, ambiguity, or omission that is discovered.

Task 18.2 - Shop Drawings Required

The drawings included in the Construction Documents are intended to show general arrangements, design, and extent of Construction Work and are not intended to serve as shop drawings. When specified by County, Design-Builder will not perform any portion of the Construction Work without approved shop drawings, product data, or samples. Any Construction Work performed in violation of this requirement will be solely at the Design-Builder's risk regardless of County's knowledge of such Construction Work.

Task 18.3 - Interpretation of Construction Document Conflicts

In the event of any conflict or ambiguity, the Construction Documents will be interpreted as being complementary, requiring a complete Project or designated portion thereof to be accepted separately by the County. Any requirement occurring in any one of the Construction Documents is as binding as though occurring in all Construction Documents. Generally, the specifications address quality, types of materials and contractual conditions while the drawings show placement, sizes, and fabrication details of materials. In the event of any conflict in the Construction Documents, the order of precedence stated below will govern:

- Contract addenda (subsequent addenda will govern over prior addenda only to the extent modified).
- The Contract document.
- Design-Builder Special Conditions.
- Technical Specifications.
- Standard Specifications & Details for Public Improvement, 2015 Edition.
- General Conditions.
- Glossary of Terms.
- In case of conflict between drawings and specifications, the specifications will govern.

- Conflicts within the drawings:
 - 1) Schedules, when identified as such, will govern over all other portions of the drawings.
 - 2) Specific notes will govern over all other notes and all other portions of the drawings, except the schedules described in Item (c)(1) above.
 - 3) Larger scale drawings will govern over smaller scale drawings.
 - 4) Figured or numerical dimensions will govern over dimensions obtained by scaling.
- If provisions of codes, safety orders, Construction Documents, referenced manufacturer's specifications, or industry standards are in conflict, the more restrictive or higher quality will govern.
- In the event of any conflict or ambiguity, Design-Builder will request an interpretation by the Design-Builder before performing the Construction Work.

Task 18.4 - Implied Minor Details

If the Construction Documents are not complete as to any minor detail of a required construction system or with regard to the manner of combining or installing of parts, materials, or equipment, but there exists an accepted trade standard for good and skillful construction, such detail will be deemed to be an implied requirement of the Construction Documents in accordance with such standard. "Minor detail" will include the concept of substantially identical components, where the price of each such component is small even though the aggregate cost or importance is substantial and will also include a single component which is incidental, even though its cost or importance may be substantial. The quality and quantity of parts or material so supplied will conform to trade standards and be compatible with the type, composition, strength, size, and profile of the parts or materials otherwise set forth in the Construction Documents.

Task 19 - Submittals, Drawings, and Shop Drawings

Task 19.1 - Records Maintained at Work Site

The Design-Builder will maintain at the Site, for the use of County, one copy of all drawings, specifications, bulletins, addenda, Change Orders, field orders, approved shop drawings, approved submittals, supplementary instructions, requests for information, catalog data, manufacturers' operating and maintenance instructions, certificates, warranties, guarantees, and other Contract related documents and their modifications, if any, in good order and marked daily by the Design-Builder to record all approved changes made during construction. These will be turned over to the County by Design-Builder at Substantial Completion.

Task 19.2 - Submittals to County

The Design-Builder will submit to County, with such promptness as to cause no delay in the Construction Work or in the work of any other contractor, all submittals and shop drawings as required by the Construction Documents and the Contract or as necessary to illustrate details of the Construction Work.

Task 19.3 - Submittal Content Standards

Each submittal and shop drawing must be accompanied by a transmittal letter containing a list of the titles and numbers of the shop drawings. Each series will be numbered consecutively for ready reference and each submittal and shop drawing will be marked with the following information:

- Date of submission
- Name of Project
- Location of Project
- Branch of Construction Work (specification section)

- Project number
- Name of submitting Design-Builder
- Name of Subcontractors
- Revision number

Task 19.4 - Design-Builder Review of Subcontractor Submittals

All Subcontractor submittals and shop drawings will be reviewed by Design-Builder prior to being submitted to County and will bear a written statement by the Design-Builder that the submittals and shop drawings are consistent with the Construction Documents or, if not totally consistent, will bear a written statement indicating all deviations from the Construction Documents. By approving, verifying and submitting Shop Drawings, Product Data, Samples, and similar submittals, the Design-Builder represents that the Design-Builder has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Construction Documents. Any submittals or shop drawings submitted without the statement will be returned for resubmission; the submittals or shop drawings will be considered as not having been submitted, and any delay caused thereby will be the Design-Builder's sole responsibility. This review by Design-Builder of Subcontractor submittals and shop drawings will not be construed as Design-Builder approval of the design therein except that it will be a representation that the letter accompanying the submittal or shop drawings does indicate all deviations from the Construction Documents as required by Task 19.5,

Task 19.5 - Deviations from Contract Documents

Design-Builder will include with submittals and shop drawings, a written statement indicating all deviations from the Construction Documents and Contract. Failure to so notify County of such deviations may be grounds for subsequent rejection of the related Construction Work or materials. If, in the opinion of County, the deviations are not acceptable, the Design-Builder must furnish the item as specified or as indicated on the drawings included in the Construction Documents and in accordance with the Contract, Design-Builder will not be relieved of responsibility for deviations from requirements of the Contract Documents by County's approval of Shop Drawings, Product Data, Samples, or similar submittals unless Design-Builder has specifically informed County in writing of such deviation at the time of submittal and County has given written approval to the specific deviation. The Design-Builder will not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals by approval thereof.

Task 19.6 - Responsibility for Submittals

It is the Design-Builder's obligation and responsibility to check all of its submittals and shop drawings and to be fully responsible for them and for coordination with connecting Construction Work. Submittals and shop drawings will indicate in detail all parts of an item of Construction Work, including, without limitation, erection and setting instructions, and engagements with work of other trades or other separate contractors.

Task 19.7 - Design-Builder Representations Concerning Correctness of Submittals

By reviewing or submitting submittals and/or shop drawings, the Design-Builder represents that it has determined and verified availability, field measurements, field construction criteria, materials, catalog numbers, and similar data, or will do so, and that it has checked and coordinated each submittal and/or shop drawing with the requirements of the Construction Documents and Contract. If any specified material item or part is not available, the Design-Builder will so indicate to County.

Task 19.8 - County Review

The County will review and approve submittals and shop drawings and return them to Design-Builder within five (5) days of receipt unless otherwise previously agreed in writing. For scheduling purposes, Design-

Builder must assume a five (5) day review period for each submittal or set of shop drawings. For complex submittals, Design-Builder must assume two five (5) day review cycles. If review and approval are delayed beyond five (5) days, County will notify Design-Builder in writing stating the reason for the delay. Approval will not relieve the Design-Builder from responsibility for deviations from the Construction Documents or Contract, unless it has been called to County's attention, in writing, at the time of submission. Any modification will be approved only if it is in the interest of County to effect an improvement in the Construction Work and does not increase the GMP or Contract Time(s). Any such modification is subject to all other provisions of the Construction Documents and Contract and is without prejudice to any and all rights of County under any surety bond.

Task 19.9 - Response to County Rejection or Comments

If the County returns a submittal or shop drawing to Design-Builder with the notation "rejected", "revise and resubmit", or "approved as noted", Design-Builder, so as not to delay the Construction Work, will promptly submit a submittal or shop drawing conforming to the requirements of the Construction Documents and Contract and indicating in writing on the submittal or shop drawing and on the transmittal what portions of the resubmittal have been altered in order to meet with the approval of the County. Any other differences between the resubmittal and the prior submittal will be indicated on the shop drawing and on the resubmittal as a special note.

Task 19.10 - Untimely Submittal

No extension of time will be granted to Design-Builder because of its failure to submit submittals or shop drawings in ample time to allow for review, possible resubmittal, and approval. Construction Work will not commence until the Design-Builder has received written approval.

Task 19.11 - Transmittal of Approved Submittals to Subcontractors

The Design-Builder will furnish prints of its approved submittals and shop drawings to all Subcontractors whose work is in any way related to the Construction Work covered by the Submittal or shop drawings.

Task 20 - Product Samples, Tests, and Certificates

Task 20.1 - Requirement to Furnish Product Samples

Design-Builder will furnish product samples of all items requested or required by the specifications. Product samples will be properly identified and submitted with such promptness as to cause no delay in Construction Work or in the work of any other contractor and to allow time for consideration by County. Design-Builder will submit product samples to County for review and approval in accordance with Task 19, above, and this Task 20.

Task 20.2 - Submittal of Product Samples

Each product sample must be accompanied by a letter of transmittal containing the following information:

- Date of submission
- Name of Project
- Location of Project
- Branch of Construction Work (specification section number) Project number
- Name of submitting Design-Builder
- Name of Subcontractor

Task 20.3 - Certification of Compliance

Design-Builder will furnish to County a certificate stating that material or equipment submitted complies with the Construction Documents and the other Contract Documents. If a certificate originates with the manufacturer, the Design-Builder will endorse it and submit it to County together with a statement of compliance in its own name.

Task 20.4 - Duty to Perform

No tests, inspections, observations or approvals performed or given by County or others acting for County, or any agency of Federal, State, or local government, nor any acts or omissions by County in administering the Contract will relieve Design-Builder from its duty to perform the Construction Work in accordance with the Construction Documents, the Contract, and applicable law.

Task 20.5 - Destruction of Samples

Unless the County is requested at the time of submittal to return samples at Design-Builder's expense, rejected samples will be destroyed.

Task 20.6 - County Testing Not Acceptance

After delivery of materials, County may make such tests as it deems necessary, with samples required for such tests being furnished by and at the cost of Design-Builder. Any such test is for the benefit of County and will not relieve Design-Builder of the responsibility for providing quality control measures to assure that Construction Work strictly complies with the Construction Documents and the Contract. No test will be construed as implying acceptance of materials, work, workmanship, equipment, accessories, or any other item or thing. Any material not meeting the requirements of the specifications may be rejected by County and will be removed immediately and replaced in an acceptable manner.

Task 20.7 - Removal of Rejected Work

On the basis of the test results, materials, workmanship, equipment, or accessories may be rejected even though general approval has been given, if items have been incorporated into the Construction Work, County will each have the right to cause their removal and replacement by items meeting Construction Document requirements or to demand and secure appropriate reparation to County from the Design-Builder.

Task 20.8 - Cooperation with Testing Efforts

Design-Builder will cooperate with the selected testing laboratory and all others responsible for testing and inspecting the work and will provide them access to the Work at all times. The County and/or selected testing laboratory will make every effort as to not delay the work.

Task 20.8.1 - Compliance with Work Site Rules

Any person employed by any testing laboratory who, in the opinion of the Design-Builder, does not perform his work in a proper, skillful, and safe manner or is intemperate or disorderly will, at the written request of the Design-Builder, be removed from the Work by County or testing laboratory employing such person, and will not be employed again in any portion of Work without the written approval of the Design-Builder.

Task 20.8.2 - Testing Prior to Delivery

At the option of County, materials may be tested at the source of supply before delivery is started. County will make every effort necessary to not delay the work if materials are to be tested at the source of supply.

Task 20.9 - Trade Name Substitutions

Unless the Contract Documents indicate that no substitutions are permitted, Design-Builder may, subject to the following conditions, substitute or supply alternate items when equipment, materials, or patented processes are referenced in the Contract Documents by manufacturer, trade name, make, or catalog number:

- The substitution will be submitted to County in writing by Design-Builder.
- Design-Builder will certify that the substitution will perform the functions and achieve the results called for by the general design, be similar and of equal substance, and be suited to the same use as that specified.
- The submittal will state any required changes in the Construction Documents to adapt the design to the proposed substitution.
- The submittal will contain an itemized estimate of all costs and credits that will result directly and indirectly from the acceptance of such substitution, including cost of design, license fees, royalties, and testing. Also, the submittal will include any adjustment in the Contract Time created by the substitution.
- Design-Builder, if requested by the County, will submit Samples or any additional information that may be necessary to evaluate the acceptability of the substitution.

County will make the final decision and will notify Design-Builder in writing as to whether the substitution has been accepted or rejected. If County does not respond in a timely manner, Design-Builder will continue to perform the Work in accordance with the Contract and the substitution will be considered rejected.

Task 20.10 - Field Inspection

County may utilize field inspectors during construction to assist County in observing Design-Builder's performance. Such inspectors are solely for the purpose of assisting County and should not be confused with an inspector with a regulatory agency or with an inspector from an County-selected laboratory. In conjunction with these activities, the inspector may perform the following activities:

- Thorough onsite observation of the Work in progress and field checks of materials and equipment, the inspector will endeavor to provide protection against defects and deficiencies in the Work.
- The inspector will be authorized to inspect all Work and materials furnished. Such inspection may extend to all or part of the Work and to the preparation, fabrication, or manufacture of the materials to be used.
- The inspector will not be authorized to issue instructions contrary to the Construction Documents or to act as foremen for the Design-Builder.
- The inspector will have the authority to reject work or materials until any questions at issue can be decided by County.

The use of such services by County will not make County responsible for or give the County control over construction means, methods, techniques, sequence, or procedures, or for safety precautions or programs, or responsibility for the Design-Builder's failure to perform the work in accordance with Contract Documents.

County and its representatives will at all reasonable times have access to the work wherever it is in preparation or progress. Design-Builder will provide proper facilities for such access and for inspection.

During the course of construction, as identified in the scheduled, initial construction inspections, if work fails to comply with the Project plans and specifications, Design-Builder will be responsible for all additional engineering consultant costs associated with re-inspections, meetings and reports.

Task 21 Redline Drawings

Task 21.1 - Monthly Review

On a monthly basis, the Design-Builder will complete and turn over to County redlined drawings for review. The redlined drawings will clearly indicate all field changes that were made to adapt to field conditions, field changes resulting from Change Orders, and all buried and concealed installation of piping, conduit and utility services. All buried and concealed items will be accurately located on the redlined drawings as to depth and in relationship to not less than two permanent features such as manholes or corners. The redlined drawings will be clean and all changes, corrections, and dimensions will be given in a neat and legible manner in a contrasting color.

Task 21.2 - Changes Shown

Items required to be marked include but are not limited to:

- Dimensional changes to the drawings.
- Revisions to details shown on Drawings
- Depths of foundations or footings
- Locations and depths of underground utilities
- Revisions to routing of piping and conduits.
- Revisions to electrical circuitry.
- Actual equipment locations.
- Duct size and routing, if any.
- Locations of concealed internal utilities.
- Changes made by Change Order.
- Details not on original Contract Drawings.

Task 21.3 - Basis Documents

Design-Builder will completely and accurately mark Project Red Line Record Drawing prints of Construction Documents or Shop Drawings, whichever is most capable of indicating the actual physical condition. Where Shop Drawings are marked, they must display a cross-reference to their location in the Construction Documents.

Task 21.4 - Changes after Substantial Completion

Changes or corrections in the Construction Work made subsequent to Substantial Completion will be submitted to County as part of the red line record drawings.

End of Appendix "B" – Design-Builder General Scope of Work

APPENDIX "C"

TECHNICAL SPECIFICATIONS (6 pages)

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TS 2.0	SYSTEM DESCRIPTION AND COMPONENTS
TS 3.0	SYSTEM PERFORMANCE REQUIREMENTS
TS 4.0	CONSTRUCTION REQUIREMENTS
TS 5.0	REFERENCE STANDARDS
TS 6.0	EXCAVATION, FILLING, AND BACKFILLING
TS 7.0	LANDSCAPING
TS 8.0	SITE MANAGEMENT DURING CONSTRUCTION
TS 9.0	STRUCTURAL DESIGN
TS 10.0	CORROSION CONTROL

[Note to Proposers: The Technical Specifications include the Design and Construction Requirements and the Secondary Technical Criteria. The distinction between these two categories of Technical Specifications is in the Design-Builders ability to make changes. The Design and Construction Requirements may only be changed pursuant to a Change Order in accordance with the Contract. The Design-Builders has a greater degree of flexibility with respect to the Secondary Technical Criteria. Secondary Technical Criteria will be identified in the negotiation of the Contract based on the information in the Preliminary Technical Proposal. Proposers should consider all requirements set forth in this SFQ Technical Specifications to be Design and Construction Requirements.]

TS 1.0 – Project Overview

The mission of the County is to protect public health, safety, and environment by providing quality services, environmental stewardship, and renewable resources. This requires providing high quality wastewater services at a reasonable cost, while balancing social, economic, and environmental impacts of wastewater collection and treatment.

This document revises the approved charter signed 12/09/2013 by Assistant County Administrator Nanette Slusser. The original charter authorized a project to design and construct one additional force main parallel to the existing force main from the Pima County Regional Wastewater Reclamation Department (RWRD) Continental Ranch Regional Pump Station (CRRPS). During the alignment study on this CIP project, RWRD determined that the project should encompass two additional force mains instead of one to account for area population growth. One additional force main will serve as redundancy in case of a catastrophic force main failure, while the second additional force main will provide additional capacity for new development in the sewer basin.

Background:

RWRD owns and operates the CRRPS located at 10050 North Coachline Boulevard in Marana, Arizona. The CRRPS is located approximately one half mile east of Silverbell Road, halfway between Twin Peaks Road and Avra Valley Road.

The facility serves the area downstream of the Tres Rios Wastewater Reclamation Facility (WRF), that being roughly from Ina Road north along both sides of Silverbell Road to one-half mile south of Avra Valley Road west of Interstate 10 and the area west of Camino de Oeste and east of an extension of Blue Bonnet Road east of Interstate 10. The main population in the area is concentrated in the Continental Ranch area east of Silverbell Road with the major future expansion expected to be between Camino de Oeste and Interstate 10. This area expansion involves large parcels of State Land whose release for development is dependent upon the State Land Department.

The CRRPS delivers wastewater to the Tres Rios WRF by means of an 18-inch diameter High Density Polyethylene Pipe (HDPE) force main routed generally along the west bank of the Santa Cruz River to Cortaro Road, to Silverbell Road, to Ina Road and then along the south side of Ina Road to the Tres Rios WRF. The majority of the route, approximately 4 miles north of Cortaro Road, is in an utility easement along the riverside park, close to residential areas. The remaining pipeline, approximately 3 miles, is in the public rights-of-way of Cortaro Road, Silverbell Road and Ina Road ending at the WRF. During construction of the 18-inch force main at the crossing of the Santa Cruz River south of Ina Road, two 48-inch diameter sleeves were installed. The southern sleeve contains the 18-inch force main currently in use. The northern sleeve contains a 24-inch HDPE pipe for the future force main.

The 18-inch diameter force main installed in 1998 was designed to convey the following flows:

- Minimum = 500 gpm
- Average (ADWF) = 2,000 gpm
- Maximum (PWWF) = 4,000 gpm

At the time the force main was designed, space for an additional force main was allocated parallel to the 18inch force main. The force main was considered Phase 2 of the CRRPS development and would be constructed when flows approached the 4,000gpm.

Several CRRPS basin studies have been done over the years:

- Cella-Barr 198
- CDM 1994
- Stantec 2002
- Presidio 2008, updated 2012
- WestLand Resources, 2019

In March 2019 an alignment study was completed by WestLand Resources (Appendix A). The WestLand study analyzed three potential alignments. Each of the three alignments follow the same route for approximately 15,500 feet from the CRRPS and then diverge near Cortaro Farms Road. From Cortaro Farms Road to the Tres Rios WRF, Alignment A follows Silverbell Road, Alignment B crosses the Santa Cruz River and generally follows Business Park Drive, while Alignment C follows the Chuck Huckelberry Loop multi-use path along the west bank of the Santa Cruz River.

Need Statement:

The addition of two new force mains will add capacity, operational flexibility and redundancy to the pump station operations.

The existing 18-inch force main was designed to convey 4,000 gpm. Flow monitoring during wet weather events in the last few years have shown several instances where the flow has reached between 2,500 and 3,000 gpm (75% of design flow). One event spiked a flow greater than 3,250 gpm. In addition to this CIP project, RWRD is actively working to minimize Infiltration and Inflow (I&I) to the CRPPS, however the sewer basin for this pump station is large and I&I will always need to be a consideration in our expansion plans

This project is a Design-Build project to provide a fully functional force main wastewater conveyance system (SS). The Design-Builder (DB) is responsible for designing the Project; procuring all Project components except those specifically identified in the Agreement as being County-supplied; securing all necessary permits and permissions except those specifically identified in the Agreement as being County-supplied; and constructing the project.

The project is located in Pima County, Arizona. Pima County (County) has identified optional alignments (the project site) from the Continental Ranch Pump Station to the Ina Road Treatment Facility installation of the project. The project site, depicted and described in "**Attachment 2 - Site Location**," consists of private property, Town of Marana right of way, and Pima County right of way.

The County's objectives for delivery of the project are as follows:

- Quality: Provide SS that will be sustainable and will reliably convey the specified wastewater flows with a minimum of odor issues in accordance with the contractual standards set forth in these Technical Specifications.
- Cost: Minimize life-cycle cost.
- Schedule: Achieve the schedule completion date for construction of the project.
- Risk: Achieve an optimal balance of risk allocation between the County and the Design-Builder.
- Safety: Implement an effective safety program incorporating best industry practices.

TS 2.0 – System Description and Components

The SS will be a fully functioning wastewater collection system including pipes, manholes, and associated appurtenances. The SS will convey wastewater by a pumped force main while minimizing potential odor issues and operation and maintenance costs. The SS will be located in one of the 3 options to be determined in the March 2019 alignment study completed by Westland Resources (see "**Appendix A**"). Main components of the SS are described with more detail below.

TS 2.1 – Collection System

The wastewater collection system will be sized based on the flows specified in Appendix A and design progress meetings with County during Phase I of the project. Flow from the Continental Ranch Pump Station will flow completely by force main to the project termination at the Tres Rios WRF. Each of the three alignments follow the same route for approximately 15,500 feet from the CRRPS and then diverge near Cortaro Farms Road. From Cortaro Farms Road to the Tres Rios WRF, Alignment A follows Silverbell Road, Alignment B crosses the Santa Cruz River and generally follows Business Park Drive, while Alignment C follows the Chuck Huckelberry Loop multi-use path along the west bank of the Santa Cruz River.

TS 2.2 – Pump Station Demolition (Reserved)

TS 3.0 – System Performance Requirements

The SS will reliably convey wastewater from the Continental Ranch Pump Station to the Tres Rios WRF with a minimum of odors on a continuous, 24-hour, 365 day per year basis.

TS 4.0 – Construction Requirements

An Arizona licensed contractor will perform all the work necessary to provide a complete and operational SS. All work will be done only within locations approved by County and in compliance with all current local, state, and federal codes. All permits for construction will be the responsibility of the DB. All personnel will enter the project site through approved access points and must comply with all DB security and safety processes and procedures while on the project site.

The DB will review as-built plans and field verify the current County wastewater collection system layout to select the SS connection points most advantageous to the County. Design and construction activities will be scheduled in such a way as to allow for delivery by December 31, 2022.

TS 5.0 - Reference Standards

TS 5.1 - Design Documents

All wastewater conveyance facilities constructed in Arizona must comply with the applicable recommendations and requirements of Arizona Administrative Code. Wastewater conveyance facilities constructed for Pima County use must comply with the latest adopted version of the County *Public Sewer Formatting Standards, Engineering Design Standards, and Standard Specifications and Details for Construction*.

TS 5.2 - Codes and Standards

The list below provides project designers with guidance to applicable codes and standards. The DB will perform the Design-Build Work in accordance with the Contract Standards, which include, among other things, all applicable permits, ordinances, codes, standards, and regulations. The DB will use the latest requirements of the Governmental Body having jurisdiction if different from those indicated below. The lists of codes and standards provided in this Section are not intended to be all-inclusive. The DB will be responsible for identifying and complying with all codes and standards that are applicable to the performance of the Design-Build work in accordance with Applicable Law and Good Engineering and Construction Practice.

The Contract Standards applicable to the performance of all design and construction work for the Project including, but are not limited to, the following:

- Pima County Regional Wastewater Reclamation Department Public Sewer Formatting Standards
- Pima County Regional Wastewater Reclamation Department Engineering Design Standards
- Pima County Regional Wastewater Reclamation Department Standard Specifications and Details for Construction
- Pima Association of Governments Standard Specifications for Public Improvement, 2015
- Pima County Regional Flood Control District, Pima County Drainage Standards for Local Drainage and the Pima County Floodplain and Erosion Hazard Management Ordinance, as amended to date.
- ADEQ Best Management Practices
- Arizona Department of Transportation (ADOT) Standard Specifications (where applicable).
- American Association of State Highway and Transportation Officials (AASHTO), Policy on the Geometric Design of Highways and Streets.
- U.S. Department of Transportation Federal Highway Administration (FHWA), Manual on Uniform Traffic Control Devices [MUTCD 2009 MUTCD with Revisions 1 and 2, May 2012.
- Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities, 2006 revisions.
- 2015 International Building Code and Local Amendments
- 2015 International Energy Conservation Code and Local Amendments
- 2015 International Fire Code and Local Amendments

- 2017 National Electrical Code and local Amendments
- 2015 Uniform Plumbing Code and local Amendments
- 2015 International Mechanical Code and local Amendments
- American Institute of Steel Construction (AISC), Manual of Steel Construction, 14th Edition
- American Welding Society (AWS) Welding Code
- American Society for Testing and Materials (ASTM)

TS 6.0 - Excavation, Filling, and Backfilling

TS 6.1 - Responsibility for Fill

The DB will be responsible for furnishing all supervision, labor, tools, materials, and equipment; performing all operations in connection with excavation of materials regardless of the character of that material; obtaining fill and backfill material approved by a licensed professional engineer specializing in soil mechanics to achieve final grade lines; and all activities necessary for disposal of excess excavated material. All necessary arrangements for obtaining fill material and topsoil from off-site borrow areas will be the responsibility of the DB.

TS 6.2 - Professional Engineer

The DB will employ a professional engineer specializing in soil mechanics to provide recommendations for the work, including excavation, fill, backfilling, compaction, dewatering, subgrade preparation and stabilization, shoring, and drainage from protection of excavated areas.

TS 6.3 - Excavation

The DB will perform all necessary excavation for construction of the project. Excavations for footings will be made sufficiently wide for the installation of form work and to the depths required. The DB will prevent the foundation area from becoming destabilized due to the flow of water into the excavation or from cave-ins. Where soils are not suitable for sustaining design loads, the DB will take appropriate action in accordance with the requirements of appropriate established codes and good Engineering and Construction Practices.

TS 6.4 - Excess Fill

The DB will be responsible for all activities necessary to dispose of the excess material at an approved off-site location. It will be the DB's responsibility to obtain the disposal site for the disposal of excess material.

TS 7.0 - Landscaping

TS 7.1 - County Standard

Landscaping will be in compliance with the Pima County Landscape Design Manual or the appropriate jurisdiction of the work.

TS 7.2 - Appropriate Materials

Landscaping and irrigation will use environmentally appropriate materials that are tolerant of the climate of the Service Area and compliant with all applicable Contract Standards. The proper use of plant materials and other design elements must demonstrate environmental responsibility.

TS 7.3 - Design Considerations

All landscape will be designed to achieve minimum maintenance and maximum water conservation. During plant establishment period, landscape irrigation needs will be met with reclaimed water (if available), including maximum use of captured stormwater runoff.

TS 8.0 - Site Management During Construction

TS 8.1 – Fencing

The Design Builder will provide a temporary perimeter fence during construction to ensure the security of the Project Site and safeguard operations within the Construction Work Limits. The temporary fence shall be removed after construction is complete.

TS 8.2 - Erosion Control

Erosion control measures will be applied before and while construction activities are taking place. To reduce the amount of sediment being transported from the project sites, sediment fences will be installed at the toe of new slopes, around stockpiles, and downhill of disturbed areas. There will also be a gravel construction entrance at the limits of construction to help mitigate construction debris from being transported away from the project sites. Loss of material from erodible stockpiles and other disturbed areas will be mitigated. All erosion control measures will be shown and implemented in accordance with Pima County Department of Environmental Quality *Best Management Practices* and the Pima County Regional Flood Control District's *Hydrology Manual for Engineering Design and Flood Plain Management within Pima County, Arizona*, Pima County Drainage Standards for Local Drainage and the Pima County Floodplain and Erosion Hazard Management Ordinance.

TS 8.3 – Security

The DB is solely responsible for providing security within the project site.

TS 9.0 - Structural Design

TS 9.1 - Professional Engineer

All structural design work will be prepared under the direct supervision of a structural engineer licensed in the State of Arizona. The DB will design all structures for a service life of not less than 50 years, in accordance with the most current applicable codes and standards.

TS 10.0 - CORROSION CONTROL

TS 10.1 - Site Soil Corrosivity

The DB will evaluate corrosion potential of project site soils, based on its analysis of geotechnical information gathered by the DB.

Appropriate methods will be used to protect material from damage due to corrosive conditions.

End of Technical Specifications

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APPENDIX "D"

DESIGN-BUILDER SPECIAL CONDITIONS (18 pages)

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SC 1 – County Obligations

SC 1.1 - Project Information

Design-Builder acknowledges that County has provided Design-Builder with all necessary information regarding County's requirements for the Project as set forth in the Request.

SC 1.2 - County's Budget

County established an overall budget for the Project of \$27 million to \$33 million, including amounts allocated for design and construction, the County's other costs, and reasonable contingencies related to these costs as appropriate.

SC 1.3 - Time for Performance

County will review and approve or take other appropriate action on all design submittals of the Design-Builder within the timeframes set forth in the Scope of Work.

SC 1.4 - Purpose of County's Review

County's review, inspection, or approval of any Work, Design Documents, Applications for Payment, or other submittals will be solely for the purpose of determining whether the same are generally consistent with County's Request, the Contract, and with County standards, policies, and requirements. No review, inspection, or approval by County of such Work or documents will relieve Design-Builder of its responsibility for the performance of its obligations under the Contract for Design-Build Construction or the accuracy, adequacy, fitness, suitability, or coordination of its Design Services or the Work. Approval by any governmental or other regulatory agency or other governing body of any Work, Design Document, or the Construction Documents will not relieve Design-Builder of responsibility for the performance of its obligations under this Contract. Payment by County pursuant to the Contract for Design-Build Construction will not constitute a waiver of any of County's rights under the Contract for Design-Build Construction or at law, and Design-Builder expressly accepts the risk that defects in its performance, if any, may not be discovered until after payment, including final payment, is made by County. Notwithstanding the foregoing, prompt written notice will be given by the County to the Design-Builder if the County becomes aware of any fault or defect in the Project or non-conformance with the Contract for Design-Build Construction.

SC 1.5 - Status of County

The County will not have control or charge of construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, nor will the Design-Builder, for any of the foregoing purposes, be deemed the agent of the County.

SC 2 – Design Service Requirements and Standards

SC 2.1 - Quality of Design Services

Design-Builder will be responsible for the quality, completeness, accuracy, and coordination of Design and Construction Documents. Design-Builder will provide Design Services that meet all environmental and regulatory requirements. Design-Builder will provide for all testing and inspections required by sound architectural and engineering practices and by governmental authorities having jurisdiction over the Project.

SC 2.2 - Errors and Omissions

The Design-Builder will, at no additional cost to the County, immediately make additions, changes, and corrections to any documents prepared by Design-Builder necessitated by errors and omissions in the Design-Builder's performance of its services. In addition, Design-Builder will not be entitled to any compensation or adjustment in the Guaranteed Maximum Price ("GMP") for additional work required as a result thereof, provided, upon County's written approval, Design-Builder may use contingency funds to pay for Work not included in the Construction Documents which add value to the Project (but expressly excluding any demolition or other costs related to the substitution of such Work for previously installed Work and associated design fees). The foregoing will not relieve Design-Builder for liability to County for any damages, including costs incurred by County after termination in whole or in part of the Contract, resulting from any error or omissions by Design-Builder in the course of its duties under the Contract.

SC 2.3 - Notice of Non-Compliance with Law

If Design-Builder believes or is advised by another design professional retained to provide services on the Project that implementation of any instruction received from County would cause a violation of any applicable law, Design-Builder will promptly so notify County in writing.

SC 3 - Schedule and Coordination

SC 3.1 - Design-Builder Responsible

Design-Builder will schedule and coordinate the work of its own Subcontractors on the Project, including their use of the Site. Design-Builder will keep its Subcontractors informed of the Project Schedule to enable the Subcontractors to plan and perform the Construction Work properly. Design-Builder will cooperate and coordinate with other separate contractors performing work for County on the Project. However, Design-Builder's obligation of cooperation and coordination will not operate to make Design-Builder responsible for any aspect of work performed by any separate contractors except Design-Builder's own Subcontractors.

SC 3.2 - Schedule Requirements

The Project Schedule for performance of the Construction Work will be a CPM schedule with reasonable detail, including a time-scaled network and computer printout in accordance with the following requirements:

- no activity will be longer than twenty-one (21) calendar days in length without the approval of County except fabrication and delivery activities.
- each activity must be logically tied to another activity to show its interdependency with other activities.
- installation activities must be logically tied to submittal/approval, fabrication, and delivery.
- only a single critical path will be designated.

The Design-Builder will use scheduling software acceptable to County to develop the Project Schedule. The Project Schedule will be presented in graphical and/or tabular reports as agreed upon by the Project Team. If Project phasing, as described below, is required, the Project Schedule will indicate milestone dates for the phases, once determined.

The Project Schedule will provide one (1) week for County to review Design Submission Documents at each sub-phase of the Design Phases and provide adequate time for government agency reviews and all other necessary approvals and permits. The Project Schedule will indicate the dates for the start and completion of the various stages of the Project, including, among others, the dates when County information and approvals are required and all necessary shutdowns or suspensions of County or separate vendor activities on the Site (if any). Design-Builder will update and reissue the Project Schedule throughout the Design Phases and the Construction Phase, as necessary and appropriate to reflect adjustments in the schedule. Updates will be subject to approval by County.

The Project Schedule will be in Days (calendar days, unless otherwise directed by County) and will indicate task duration (earliest start/latest completion) for all activities. Float times for all activities will be shown. The CPM diagram will be presented in a time scaled graphical format for the Project as a whole.

The Project Schedule will indicate all relationships between activities.

The activities making up the Project Schedule will be of sufficient detail to assure that adequate planning has been done for proper execution of the Work so that it provides an appropriate basis for monitoring and evaluating progress of the Work.

The activities upon which the Project Schedule is based will coincide with the Schedule of Values.

The Project Schedule will show all submittals associated with each work activity and the review time for each submittal.

The Project Schedule will show milestones, including milestones for all Team members.

The Project Schedule will include anticipated rain delay during the performance of the construction contract. The duration will reflect the average climatic range and conditions prevailing in the locality of the site. Weather data, provided by the Design-Builder, will be based on information from the National Weather Services or other County-approved sources.

The Project Schedule will consider the Substantial Completion date requirements showing portions of the Project having priority.

Float time will be prescribed as follows: The total Float within the overall schedule is not for the exclusive use of either County or Design-Builder, but is jointly owned by both and is a resource available to, and shared by, both parties as needed to meet contract milestones and the Project completion date.

The Design-Builder will not sequester shared Float through such strategies as extending activity duration estimates to consume available Float, using preferential logic, or using extensive crew/resource sequencing, etc. Since Float time within the schedule is jointly owned, no time extensions will be granted, nor delay damages paid, until a delay occurs which extends the Work beyond the Substantial Completion date.

Throughout the Design Phases, Design-Builder will provide updates and/or revisions to the Project Schedule for use by the Project Team, whenever required, but no less often than monthly. The Design-Builder will add detail to the previous version of the Project Schedule to keep it current throughout the Design Phases, so that the Project Schedule is ready for implementation at the start of the Construction Phase. The update/revisions will include, but not be limited to:

- A narrative analyzing the progress achieved to-date vs. planned.
- Any concerns regarding delays or potential delays, and any recommendations regarding mitigating actions.
- Revisions in Drawings and Specifications.
- The results of any additional investigative reports of subsurface conditions, drawings of physical conditions of existing surface and subsurface facilities, and documents depicting underground utilities placement and physical condition, whether obtained by County or Design-Builder.
- Unresolved permitting issues, and significant issues, if any, pertaining to the acquisition of land and right of way.
- The fast-tracking of any of the construction, or other chosen construction delivery methods.
- The requisite number of separate bidding documents to be advertised.
- The status of the procurement of long-lead time equipment and materials.
- Funding issues (i.e., delays) identified by the County.

If phased construction is deemed appropriate and County approves, Design-Builder will review the design and make recommendations regarding the phased issuance of Construction Documents to facilitate phased construction of the Work, with the objective of shortening the Construction Time and/or reducing the Cost of the Work. The Design-Builder will take into consideration such factors as natural and practical lines of work severability, sequencing effectiveness, access and availability constraints, total time for completion, construction market conditions, labor and materials availability, effect on traffic or public access, and any other factors pertinent to saving time and cost. The Project Schedule will be adjusted to allow for phased construction or for portions of the Construction Work to be accepted separately by the County, if required by County.

SC 3.3 - Submittal Schedule

Design-Builder will prepare and keep current, for County's approval, a time schedule of submittals which is coordinated with Design-Builder's construction schedule and allows County the specified time to review submittals.

SC 3.4 - Monthly Schedule Revisions

Design-Builder's schedules will be revised monthly to reflect ACTUAL conditions in the field. A copy of the revised Project Schedule and narrative report including a description of current and anticipated problem areas, delaying factors and their anticipated impact, and corrective action taken or proposed to be taken will be submitted with each Application for Payment. Submission of an updated Project Schedule meeting these criteria will be a condition to the processing of any application for payment made by Design-Builder. County's review of the Project Schedule update will not be construed as relieving Design-Builder of its complete and exclusive control over the means, methods, sequences, and techniques of construction and payment by County will not be deemed a determination that the updated schedule is acceptable. The Design-Builder understands that the updated Project Schedule will be the basis for the analysis and granting of time extensions in accordance with SC 6.13.

SC 3.5 - Other Schedule Updates

In addition to the monthly update, the Design-Builder's schedules will also be revised at appropriate intervals as required by the conditions of the Construction Work or as directed by the County with a printed and electronic copy submitted to the County in a format acceptable to the County.

SC 3.6 - Adherence to Schedule

Design-Builder will perform the Construction Work within the identified times of the most recent schedule and consistent with the established Contract Time(s).

SC 3.7 - Ownership of Float

The parties agree that if Design-Builder submits an original or updated schedule which shows the Project and/or individual milestone(s) completing earlier than required by the Contract Documents (the then adjusted Contract Time(s)), the differences between the forecasted early completion and the required completion will be considered Project-owned float available for use by both the County and the Design-Builder.

SC 3.8 - Time Extensions

Since Float time within the schedule is jointly owned, no time extensions will be granted nor delay damages paid until a delay occurs which extends the Construction Work beyond the adjusted Contract Time(s).

SC 3.9 - Demonstration of Extension Need

No time extensions will be granted nor delay damages paid unless the delay is clearly demonstrated by the updated construction schedule current as of the month the change was issued or the delay occurred and which delay cannot be mitigated, offset, or eliminated through such actions as revising the intended sequence of Work or other reasonable means.

SC 4 – Design-Builder's Responsibility for Project Safety

SC 4.1 - Division of Safety Responsibility

As among Design-Builder and County, Design-Builder will have sole responsibility for safety at the Construction Work Site, except that County will have responsibility for the acts and omissions of its officers and employees.

SC 4.2 - Scope of Responsibility; Safety Manager

Design-Builder recognizes the importance of performing the Construction Work in a safe manner so as to prevent damage, injury, death or loss to (i) all individuals at or in the vicinity of the Construction Work, whether working or visiting the Project; (ii) any Construction Work, including, without limitation, materials and equipment incorporated or stored on or off Site; and (iii) all other or adjacent property, whether owned by County or other persons. As among Design-Builder and County, Design-Builder assumes sole responsibility for implementing and monitoring all safety

precautions and programs related to the performance of the Construction Work. Design-Builder will, prior to commencing construction, designate a safety manager with the necessary qualifications and experience to supervise the implementation and monitoring of all safety precautions and programs related to the Construction Work. The safety manager will make routine daily inspections of the Site and will hold at least weekly safety meetings with Design-Builder's personnel and its Subcontractors.

SC 4.3 - Legal Requirements

Design-Builder and its Subcontractors will comply with all Legal Requirements relating to safety, as well as any County specific safety requirements set forth in the Contract which do not violate any applicable Legal Requirements. Design-Builder will immediately report, in writing, to County and, if required by applicable Legal Requirements, all government or quasi-government authorities having jurisdiction over matters involving the Construction Work, any injury, death, loss, damage or accident occurring at the Site. Without limiting the foregoing, Design-Builder will, and will cause each Subcontractor to, comply with worker health and safety requirements in Environmental Law and OSHA. In addition, Design-Builder will take all reasonable necessary and appropriate steps to ensure the health and safety of persons occupying any part of the facility in which the Construction Work Site is located or in the vicinity of or passing by the Construction Work Site and will also take all reasonable necessary and appropriate steps to protect from damage or destruction the property of County and other persons in any part of the facility in which the Construction Work Site is located or in the vicinity of or passing by the Construction Work Site. Among other actions in this regard, Design-Builder will comply with the requirements of any applicable fire code.

SC 4.4 - Discontinuance of Work

If in the course of the Construction Work, any environmental, health, or safety concern exists or arises, whether relating to a Hazardous Substance, OSHA, or otherwise, then the Construction Work activities related to the concern must be discontinued until the concern is resolved. Prior to disturbing a suspected Hazardous Substance or otherwise interacting with a potential health or safety hazard, the County must be notified immediately of the concern. Construction Work will not resume until approval has been provided by County. Close coordination will be maintained between County and Design-Builder so the Project schedule is impacted the least amount possible.

SC 4.5 - Subcontractor Responsibility

Design-Builder's responsibility for safety under this SC 4 is not intended in any way to relieve Subcontractors from applicable obligations and responsibilities for complying with all Legal Requirements, including those related to health and safety matters, and taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, death, loss, damage or accident resulting from their performance of the Construction Work.

SC 4.6 - Applicability of Other Contract Requirements

The requirements in this SC 4 supplement and are in addition to the other requirements in the Contract Documents.

SC 4.7 - Pass-Through to Subcontractors

Design-Builder will provide the requirements and make the assignments of responsibilities for safety precautions and programs for the Construction Work, for temporary Project facilities, and for equipment, materials and services for common use of Subcontractors. Design-Builder will assure that this SC 4 and the applicable assignments are included in the contract between Design-Builder and each Subcontractor.

SC 4.8 - County-Designated Limited Work Areas

County may elect to designate to Design-Builder specific limitations to the area in which Design-Builder and its Subcontractors are to perform the Construction Work in order to prevent a Release of an existing Hazardous Substance on or in the vicinity of the construction site, provided that in such event County must make Design-Builder aware of the existence of the Hazardous Substance and must provide an area free from the Hazardous

Substance sufficient for Design-Builder and its Subcontractors to perform the Construction Work. Whenever County does this, Design-Builder and its Subcontractors will carry out their actions in performing the Construction Work within the specified limited area. In addition, in performing the Construction Work, Design-Builder and its Subcontractors will not, intentionally or accidentally, or otherwise, traverse, scrape, or otherwise disturb soils or constructed surfaces adjacent to or outside the designated Construction Work area unless Design-Builder has requested and obtained written approval from the County. Any question about the scope of the permitted Construction Work area must be resolved by the County.

SC 5 - Site Conditions

SC 5.1 - General

DB may only claim Uncontrollable Circumstances relief due to any surface or subsurface conditioned encountered in the performance of the Contract if the condition meets the definition of either Differing Site Conditions or Regulated Site Conditions.

SC 5.2 - Notification

Design-Builder will immediately, and before such conditions are disturbed, notify County in writing of Differing Site Conditions or Regulated Site Conditions encountered at the Site that could adversely affect the cost of the Construction Work or the timely performance thereof.

SC 5.3 - Investigation and Remedy

The County will within ten (10) days after receipt of notice from Design-Builder, or such other reasonable time as necessary, investigate the conditions reported by Design-Builder under SC 5.2. If the County finds that conditions are so materially different as to support an equitable adjustment in the GMP or the Contract Time(s), an equitable adjustment will be accomplished by written change order to the Contract Time(s) or the GMP. Adjustment of the GMP will be for the actual, demonstrated direct and indirect cost impact to address the unforeseen condition. Extensions of Contract Time(s) will be considered only when based upon submission of an updated CPM master schedule showing an actual unavoidable delay to the Project critical path resulting from the unforeseen condition. If the County determines that no Change Order will be issued, the Contract Time(s) will not be changed and there will be no change in the GMP. Regardless of the outcome, the Design-Builder will continue with the Construction Work.

SC 5.4 - Timeliness of Notice

No claim by the Design-Builder for an increase in the GMP or in the Contract Time(s) will be allowed without proper advance notice and an adequate opportunity for the County to investigate.

SC 6 - Payment of Design-Builder - Finance Controls - Open Book Costs and Audit

SC 6.1 - County Payments

The County will make payments as provided in the Contract for Design-Builder's performance of the Construction Work up to, but not exceeding, the Guaranteed Maximum Price, as such GMP may be modified as provided in the Contract.

SC 6.2 - Section Reserved

SC 6.3 - Financial Records

With respect to all Construction Work performed by the Design-Builder and its Subcontractors, Design-Builder and each Subcontractor will keep full and detailed accounts and exercise such controls as may be necessary for proper financial management, using generally accepted accounting principles and control systems approved by County. During the performance of the Construction Work and for five (5) years after Final Payment, the Design-Builder will

retain and will also require all Subcontractors to retain for review, audit, or both, by the County all correspondence; meeting minutes; memoranda; electronic media; books; accounts; reports; files; time cards; material invoices; payrolls; evidence of all communications (in native format); evidence of direct, and indirect costs; and all other matters relating to the Construction Work. Upon request by County, a legible copy or the original of any or all such records will be produced by the Design-Builder at any reasonable time during or after the Construction Work as the County may request. The Design-Builder will submit to the County upon request all payrolls, reports, estimates, records, and any other data concerning the Construction Work performed or to be performed or concerning materials supplied or to be supplied, as well as Subcontractor payment applications or invoices and such Subcontractor's progress payment checks. The requirements of this SC 6.3 will be included in all contracts between the Design-Builder and its Subcontractors. The County may exercise its rights under this SC 6.3 as often as reasonably necessary in the County's sole judgment to assure the County has a complete and accurate understanding of all Project costs.

SC 6.4 - Schedule of Values

The Schedule of Values will be used as a basis for payment as provided in SC 6.5 and SC 6.6. If there are any changes in the Guaranteed Maximum Price, the Schedule of Values will be adjusted accordingly. Design-Builder will provide written approval from its surety for the approved Schedule of Values to be used as a basis for monthly progress payments.

SC 6.5 - Applications for Payment

Design-Builder will deliver to County each month a certified application for payment in the format specified by County. Each application for payment: (i) will be for an amount based on the Schedule of Values and determined by the percentage of completion of the Construction Work; (ii) will show the percentage of completion of each category of the Construction Work; (iii) will be accompanied by an updated CPM schedule and a narrative report per SC 3; and will include the following, signed certification by Design-Builder:

The undersigned, as Design-Builder's duly authorized representative, certifies that to the best of the Design-Builder's knowledge, information, and belief, the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Design-Builder for Work for which previous Certificates for Payment were issued and payments received from the Design-Builder, and that current payment shown herein is now due.

In addition, with each application for payment, Design-Builder will submit such supporting documentation as is necessary or appropriate in the reasonable judgment of County to justify all amounts paid to Design-Builder under prior applications for payment. Payment will be made in accordance with A.R.S. § 34-609.

SC 6.6 - Amount of Progress Payments

The County will pay the amount in each Design-Builder request for payment to the extent approved for payment in the certificate for payment, less retainage as set forth in SC 6.7, provided that the cumulative payment amount before retainage (i) will not exceed the aggregate amount certified in all certificates for payment and, (ii) also will not exceed the percentage of completion of the Construction Work multiplied by the Guaranteed Maximum Price (excluding items of the Guaranteed Maximum Price not subject to retainage), all as set forth in the Schedule of Values. The Design-Builder Construction Phase will be paid in accordance with the percentage of completion of the Construction Work.

SC 6.7 - Retainage

SC 6.7.1 - Design Payments

With respect to the Design-Builder's Design Phase Fees, no retainage will be withheld.

SC 6.7.2 - Construction Payments

With respect to all payments for the Construction Work, ten percent (10%) retainage will be withheld until the Construction Work is fifty percent (50%) complete. At that point in time, the County will pay one-half (1/2) of the accumulated retainage to Design-Builder provided that County has determined that the Design-Builder is making satisfactory progress on the entire Construction Work and there is no specific cause or claim relating to the Construction Work requiring a greater amount to be withheld. After that point in time, County will retain five percent (5%) of each payment until Final Completion of the Project, or a designated portion thereof. However, if at any time, County determines that satisfactory progress is not being made, ten percent (10%) retention will be reinstated for all future progress payments under the Contract pursuant to County's determination. This is in addition to the County's right to withhold payment as defined under SC 6.10. County's decision concerning satisfactory progress and the existence of specific causes or claims requiring greater retention will be final. Retainage will be released upon Final Completion of a designated portion of the Construction Work that County has agreed to accept separately. Release of retainage upon Final Completion of the Project will be as required under A.R.S. § 34-609.

SC 6.8 - Payment for On-Site and Off-Site Materials

Payment will be made on account of materials and equipment delivered and suitably stored at the Site for subsequent incorporation in the Construction Work. Payment may similarly be made for materials and equipment suitably stored offsite, conditioned upon Design-Builder furnishing evidence to County that (a) title to the materials and equipment will pass to County upon payment therefor and there are no claims of third parties; (b) the materials and equipment are adequately insured for full replacement value plus delivery with the County named as an additional insured on the insurance policy; and (c) such other matters as the County may reasonably request in order to protect its interests.

SC 6.9 - Title to Construction Work

Design-Builder warrants that title to all Construction Work covered by an application for payment will pass to County no later than the time of payment. The Design-Builder further warrants that upon submittal of an application for payment, all Construction Work for which applications for payment have been previously issued and payments received from the County will be free and clear of liens, claims, security interests, or encumbrances in favor of Design-Builder, Subcontractors, or other persons or legal entities making a claim by reason of being a creditor of Design-Builder or any Subcontractor. Design-Builder will provide conditional waivers of lien through the date of the application for payment from each Subcontractor of any tier with each application for payment and when requested by County. Design-Builder will also provide with each application for payment unconditional waivers of lien through the date of the prior application for payment from each Subcontractor of any tier. As a condition precedent to Final Completion of the entire Construction Work or a portion of the Construction Work that County has agreed to accept separately, Design-Builder will provide unconditional waivers of lien from all Subcontractors.

SC 6.10 - Withholding Payment

The County may withhold payment from any application for payment to the extent necessary to protect County from loss because of:

- Unsatisfactory job progress as determined by the County.
- Disputed Construction Work or materials.
- Defective Construction Work not remedied.
- Claims or other encumbrances filed or reasonable evidence indicating probable filing of claims or other encumbrances by Subcontractors.
- Failure of the Design-Builder to make payment to any Subcontractors within seven (7) days after receipt of each progress payment.
- The Design-Builder's failure to perform any of its contractual obligations under the Contract Documents or any other agreement with the County.

- Deficiencies or claims asserted by County against Design-Builder arising from any other project.
- Damage to the County or a separate contractor caused by the fault or neglect of the Design-Builder or any of its Subcontractor to the extent not covered by insurance.
- Reasonable evidence that the entire Construction Work or portion of the Construction Work that the County has agreed to accept separately will not be Substantially Complete within the Contract Time(s) due to delay for which the Design-Builder is responsible, or that the unpaid balance of the Guaranteed Maximum Price will not be adequate to cover completion of the entire Construction Work and liquidated damages for any anticipated unexcused delay for which the Design-Builder is responsible.

If the above basis for withholding payment is remedied, payment will be made for amounts previously withheld. Prior to any withholding pursuant to this SC 6.10, the County will meet with Design-Builder to discuss potential withholding and attempt in good faith to resolve such issue without the need for withholding.

SC 6.11 - Substantial Completion

When Design-Builder believes the entire Construction Work or a portion thereof which County has agreed to accept separately is Substantially Complete, Design-Builder will notify County and submit to County a comprehensive list of items to be completed or corrected relating to the entire Construction Work or the portion thereof, as applicable. Within five (5) working days of receipt of Design-Builder's notice and list, County or its representatives and Design-Builder will jointly make an observation or inspection, as applicable, to determine whether Substantial Completion has occurred. If it is determined by County that the entire Construction Work or a portion thereof, as applicable, is Substantially Complete, County will issue the Punch List and the certificate of Substantial Completion stating the date of Substantial Completion which will be executed by County or its representatives and Design-Builder. The Design-Builder will proceed promptly to complete or correct Punch List items. Failure to include an item on the Punch List does not alter the responsibility of the Design-Builder to complete all Construction Work in accordance with the Construction Documents and the other Design-Builder Contract.

SC 6.12 - Final Completion and Final Payment

SC 6.12.1 - Work and Submittal Requirements

Completion of all outstanding Construction Work items noted in the Punch List and all other Design-Builder requirements is required for County to certify Final Completion of the entire Construction Work or a portion thereof that the County has agreed to accept separately. Requirements also include, but are not limited to: equipment operations training for County; satisfaction of the conditions precedent in SC 6.12.2; the Design-Builder being in compliance with the Construction Documents and the Contract as to all matters relating to the Construction Work; and submission to and approval by County of all drawings and all record and close out documents as specified in County's Project specifications, including but not limited to, all operating manuals, warranties, assignments of warranties from Design-Builder and its Subcontractors, and all other deliverables required by the Construction Documents and the Contract.

SC 6.12.2 - Documentation

Neither final payment nor any final release of retainage as to the entire Construction Work or as to a portion of the Construction Work that County has agreed to accept separately will become due until the Design-Builder submits to the County each of the following as to the entire Construction Work or the portion of the Construction Work that County has agreed to accept separately:

- An affidavit that payrolls, bills for materials and equipment, and other indebtedness Incurred in connection with the Construction Work or portion thereof, as applicable, for which County or the County's property might be responsible or encumbered (less amounts withheld by the County) have been paid or otherwise satisfied.

- A certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least thirty (30) Days' prior written notice has been given to the County.
- Consent of surety to the final payment and final release of retainage.
- If required by County, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract.
- Unconditional waivers of lien from all Subcontractors.
- Evidence that all third-party warranties and guarantees have been transferred to County.
- Approval by County of the redlined drawings submitted by Design-Builder.
- A written accounting, in a form agreed by Design-Builder and County, of the Actual Cost of the Construction Work for the entire Construction Work or portion thereof, as applicable, including all supporting documentation justifying Actual Costs of the Work paid or to be paid by County required to be delivered by Design-Builder to County under the Contract.

SC 6.12.3 - Amount of Final Payment

Final payment by County to Design-Builder will be based on the Actual Costs of Construction Work for the Project, which amount will equal the aggregate amount of actual costs for the Construction Work, provided that:

- the Actual Costs of the Construction Work for the Project to be paid by County to the Design-Builder will not exceed the Guaranteed Maximum Price for the Project set forth in the Contract Documents, as such GMP may be modified in accordance with the Contract.
- the Actual Costs of the Construction Work to be paid by County for Construction Work will not exceed the Open Book Cost, including Fee.

Final payment to Design-Builder will equal the difference between the Actual Cost of the Construction Work and the aggregate sum of the progress payments (including retainage) made to Design-Builder based on the Schedule of Values, adjusted as above and subject to the terms of SC 6.12.

SC 6.12.4 - Partial Payment In Event of Final Completion Delay

If, after Substantial Completion of the Construction Work, Final Completion thereof is materially delayed through no fault of the Design-Builder or by the issuance of additional Change Orders by County, the County may upon request of the Design-Builder, and without terminating the Contract, make payment of the balance due for that portion of the Construction Work fully and properly completed. If the remaining balance for Construction Work not fully and properly completed is less than the applicable retainage, and if bonds have been furnished, the written consent of Surety to payment of the balance for that portion of the Construction Work fully and properly completed will be submitted by Design-Builder to the County, and such payment will be made under the terms and conditions governing final payment, except that it will not constitute a waiver of claims by either the Design-Builder or the County.

SC 6.12.5 - Waiver of Claims

Except for claims previously made by Design-Builder to County in writing, acceptance of final payment by the Design-Builder will constitute a waiver of affirmative claims by Design-Builder. The making of the final payment by the County will constitute a waiver of claims by the County, except those arising from (a) liens, claims, security interests, and encumbrances arising out of the Construction Work after final payment; (b) latent defects arising after final payment; or (c) the terms of warranties, guarantees, or indemnifications set forth in or required by the Contract or other rights provided under Arizona law.

SC 6.12.6 Audit Scheduling

County and Design-Builder agree to cooperate fully in the establishment of a schedule for early audit of the actual costs of construction so as not to unduly delay final payment. Audits may be conducted annually, semi-annually, on individual phases, or on any other such basis as may be agreed by County and Design-Builder.

SC 6.13 - Time

SC 6.13.1 - Time is of the Essence

Design-Builder and County recognize that any time limits set forth in the Contract Documents, as amended, are of the essence of this Contract. Design-Builder agrees that it will timely commence performance of the Construction Work, achieve Substantial Completion and Final Completion of the entire Construction Work, and achieve any interim milestones for Substantial Completion and Final Completion as required by the Contract. In addition, if County has agreed to accept separately a portion of the Construction Work, Design-Builder agrees to achieve Substantial Completion and Final Completion of each portion by the dates agreed in writing by County and Design-Builder. Failure to achieve any date or time for achievement of Substantial Completion of the entire Construction Work or any portion of the Construction Work that the County has agreed to accept separately will result in the assessment of Liquidated Damages.

SC 6.13.2 - Delay Liquidated Damages

Subject to relief in accordance with the terms and conditions of the Contract in the event of Uncontrollable Circumstances, if Substantial Completion occurs subsequent to the scheduled Substantial Completion date, then, in addition to the amounts payable to County under the Contract, the DB will pay to the County delay liquidated damages in the amount of \$1,290.00 per day for each day that the Substantial Completion date falls after the scheduled Substantial Completion date until any termination of the Contract for an Event of Default.

SC 6.13.3 - Time Extensions

If Design-Builder is delayed in the performance of the Construction Work (based upon a critical path analysis of the current Project Schedule) due to non-concurrent acts, omissions, conditions, events, or circumstances beyond its reasonable control or prevention and due to no legal fault of its own or those for whom Design-Builder is responsible under the terms of the Contract, the time for Substantial Completion or Final Completion, as applicable, of the entire Construction Work or of any portion of the Construction Work the County has agreed to accept separately and, to the extent applicable, any interim milestones, will be extended by written Change Order for the amount of time such acts, omissions, conditions, events, or circumstances added to the time to complete the entire Construction Work, portion thereof or interim milestone, as applicable. By way of example only, such acts, omissions, conditions, events, and circumstances which would entitle Design-Builder to an extension of the Contract Time(s), include, but are not limited to: acts or omissions of County or anyone under County's control, including separate contractors; changes ordered in the Project by County through a written Change Order; unforeseeable Project Site conditions (to the extent provided in the Contract Documents); wars; floods; labor disputes; unusual delays in transportation; and unusually adverse weather conditions.

SC 6.13.4 - GMP Adjustment

Design-Builder will be entitled to an appropriate adjustment of its Guaranteed Maximum Price for extended construction general conditions resulting from non-concurrent delays due to acts, omissions, conditions, events, or circumstances beyond Design-Builder's reasonable control or prevention and due to no legal fault of its own or those for whom Design-Builder is responsible under the terms of the Contract.

SC 6.13.5 - Notice of Delay

Notice of any delay in the Construction Work will be made in writing by Design-Builder to the County as soon as possible, but in no event later than three (3) days after discovery of the event giving rise to the delay. Upon discovery

of the delay, Design-Builder will immediately begin to keep and maintain complete and specific records regarding the time and costs associated with the delay. The Design-Builder will provide additional details concerning the delay in writing to the County within fourteen (14) calendar days from the beginning of the delay. Failure to meet these time requirements will constitute a waiver of and absolutely bar any and all later claims. The detailed notice will indicate the cause of the delay, the anticipated length of the delay, the probable effect of such delay upon the progress and cost of the Construction Work, and potential mitigation plans. If the cause of the delay is continuing, the Design-Builder must give written notice every month at the same time it submits the updated progress narrative report to the County. Within a reasonable period of time, but in no event later than the end of the next month, the Design-Builder will submit further documentation concerning the delay and, if applicable, a formal written request covering an extension of the Contract Time(s) for such delay. The written request for time extension will state the cause of the delay, the number of days extension requested, and provide a fully documented analysis of the delay's impact on the Project Schedule, including any other data demonstrating a delay in the critical path of the entire Construction Work or the portion of the Construction Work the County has agreed to accept separately or individual milestone.

SC 6.14 - Changes to GMP and Time

SC 6.14.1 Change Order

Modifications to Contract may only be made by a written Contract amendment or Change Order executed by the Pima County Board of Supervisors or the Procurement Director, pursuant to the Pima County Procurement Code, and the Design-Builder.

- a. County may, at any time, make unilateral changes to the general Scope of Work, including the addition, deletion, or modification of Work. The Design-Builder will not proceed with any change involving an increase or decrease in cost or time without an approved Change Order executed by County and will proceed in accordance with the procedures set forth in this SC 6.14. The County's right to make changes will not invalidate the Design-Builder Contract or relieve the Design-Builder of any liability. Any requirement of notice to the Surety will be the responsibility of Design-Builder.
- b. "Change Order" means a written instrument issued after acceptance and incorporation into the Contract of Design-Builder's GMP, signed by County and Design-Builder, stating their agreement upon all of the following:
 - An addition, deletion, or modification to the work within the general scope of the work.
 - The amount of the adjustment, if any, to the GMP (including, without limitation, an Allowance within the GMP) incorporated into the Contract, as applicable.
 - The extent of the adjustment, if any, to the Contract Time(s) of performance set forth in the Contract.
- c. All such changes in the Work authorized by applicable Change Order will be performed under the applicable conditions of the Contract and the County and Design-Builder will negotiate in good faith and as expeditiously as possible on the appropriate adjustments, as applicable. No GMP adjustment on account of a Change Order will include the Design-Builder's or any Subcontractor's profit, fee, home office overhead, or a formula allocation of indirect costs unless otherwise specifically allowed hereunder, except as allowed in SC 6.14.4.

SC 6.14.2 - Contract Administration Waiver

SC 6.14.2.1 - Administrative Communications

The Parties recognize that a variety of contract administrative matters will routinely arise during the Term. These matters will by their nature involve requests, notices, questions, assertions, responses, objections, reports, claims, and other communications made personally, in meetings by phone, by mail and by electronic and computer communications. The purpose of this Condition is to set forth a process by which the resolution of the matters at issue in such communications, once resolution is reached, can be formally reflected in the common records of the parties so as to permit the orderly and effective administration of the Contract.

SC 6.14.2.2 - Contract Administration Memoranda

The principal formal tool for the administration of routine matters arising under the Contract between the Parties which do not require a Contract Amendment shall be a "Contract Administration Memorandum." A Contract Administration Memorandum shall be prepared, once all preliminary communications have been concluded, to evidence the resolution reached by the County and the Design-Builder as to matters of interpretation and application arising during the course of the performance of their obligations under the Contract. Such matters may include, for example: (1) issues as to the meaning, interpretation, application, or calculation to be made under any provision of the Contract Documents; (2) notices, waivers, releases, satisfactions, confirmations, further assurances, and approvals given under any provision of the Contract Documents; and (3) other similar contract administration matters.

SC 6.14.2.3 - Procedures

Either Party may request the execution of a Contract Administration Memorandum. When resolution of the matter is reached, a Contract Administration Memorandum shall be prepared by or at the direction of the County reflecting the resolution. The Contract Administration Memorandum shall be numbered, dated, signed by the Contract Representative of each Party, and, at the request of the County, co-signed by a Senior Supervisor for the Design-Builder. The County and the Design-Builder each shall maintain a parallel, identical file of all Contract Administration Memoranda, separate and distinct from all other documents relating to the administration and performance of this Contract.

SC 6.14.2.4 - Effect

The executed Contract Administration Memoranda shall serve to guide the ongoing interpretation and performance of the Contract. Any material change, alteration, revision, or modification of the Contract, however, shall be effectuated only through a formal Contract Amendment authorized, approved or ratified by resolution of the County Board of Supervisors (or, as authorized, the County's Procurement Director) and properly authorized by the Design-Builder.

SC 6.14.3 - Minor Changes in the Construction Work

County may direct minor changes in the Construction Work consistent with the intent of the Construction Documents providing such changes do not involve an adjustment in the Guaranteed Maximum Price or Contract Time(s) and do not materially affect the design, quality, or performance of the Project. The County will promptly inform Design-Builder, in writing, of any such changes, and verify that Design-Builder has recorded such changes on the as-built documents.

SC 6.14.4 - Price, Time, or Scope of Work Adjustment

SC 6.14.4.1

The cost or credit to the County in a Change Order resulting from a change in the Construction Work, the Construction Documents or the other Design-Builder Construction Contract Documents or resulting from the cost of items covered by an Allowance exceeding the amount of the Allowance will be determined in one or more of the following ways:

- By unit prices stated in the Contract Documents.
- By the Cost of Work, properly itemized and supported by sufficient, substantiating data to permit evaluation.
- Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to facilitate evaluation; provided, that such lump sum will not exceed that amount calculated under the Cost of Work method.

SC 6.14.1.2.

Any dispute regarding the pricing methodology or cost of a change will not relieve the Design-Builder from proceeding with the change as directed by the County. The cost or credit to the County will be determined by the County or its representatives on the basis of SC 6.14.4.1.

SC 6.14.1.3

An County-approved written Change Order executed by County and Design-Builder will be full and final settlement of all claims for direct, indirect, delay, disruption, inefficiency, and any other consequential costs related to items covered or affected, as well as time extensions. Any claimed cost, whether direct, indirect or consequential, and time extension not presented by Design-Builder for inclusion in the Change Order is irrevocably waived.

SC 6.14.1.4

If County and Design-Builder disagree upon whether Design-Builder is entitled to be paid for any services required by County, or in the event of any other disagreements over the scope of the Construction Work, the Construction Documents, or the other Contract Documents or proposed changes to the Construction Work, the Construction Documents or the other Construction Contract Documents or Contract Time(s), County and Design-Builder agree to try to resolve the disagreement consistent with this SC 6.14.

SC 6.15 - Emergencies

In any emergency affecting the safety of persons or property, Design-Builder will act, at its discretion, to prevent threatened damage, injury, or loss. Any change in the Guaranteed Maximum Price or Contract Time(s) or both on account of emergency work will be determined as provided in SC 6.14.

SC 7 – Warranty and Correction of Non-Conforming Work

SC 7.1 - Warranty

Design-Builder warrants to County that the construction, including all materials and equipment furnished as part of the construction, will be new unless otherwise specified in the Construction Documents or Contract, of good quality, in conformance with the Construction Documents and Contract, and free of defects in materials and workmanship. Design-Builder's warranty obligation excludes defects caused by abuse, alterations or unreasonable failure to maintain the construction by persons other than Design-Builder, Design-Builder's subcontractors, or others under Design-Builder's control. Nothing in this warranty will limit any manufacturer's warranty which provides County with greater warranty rights than set forth herein. Design-Builder will provide County with all manufacturer's warranties and operation and maintenance manuals upon Substantial Completion of the work. Design-Builder's warranty will be for a period of two (2) years and will commence for all portions of the Construction Work upon Substantial Completion of the entire Construction Work as determined by County under this Contract unless the Parties mutually agree otherwise in writing. All statutory or other warranties, express or implied, related to latent defects will remain in force and are not limited by this provision.

SC 7.2 - Correction of Defects and Nonconforming Work

SC 7.2.1 - Agreement to Correct

Design-Builder agrees to promptly correct any work that is found not to be in conformance with the Construction Documents, whether or not previously inspected or observed by County's Representative unless a specific written waiver of nonconformance has been provided to Design-Builder by County. This obligation will continue for the term of the warranty. Nothing in this SC 7.2.1 will waive any other rights that County has under Arizona law.

SC 7.2.2 - County Right to Correct

Upon receipt of written notice from County that the Construction Work is not in conformance with the Construction Documents, Design-Builder will, within seven (7) days (except in the case of a nonconformity that affects the safety or security of life or property or which involves an item of work on the critical path of the Project Schedule, in which case response will be immediate), commence correction of such nonconformity including, without limitation, correction, removal, or replacement of the nonconforming work and repair of any damage caused to any other part of the work attributable to the nonconforming work. If Design-Builder fails to commence correction within seven (7) days, County, in addition to any other remedies provided in the Contract, may provide notice to Design-Builder that County will commence correction with its own or other forces. In such event, Design-Builder will be responsible for all costs and expenses that County may incur in remedying the nonconformity, including, without limitation and at County's sole discretion, the cost of County's staff time and all other costs and fees incurred by County, which amount County may recover from Design-Builder by setoff or otherwise, as permitted under Arizona law. County will notify Design-Builder of its intent to make corrections at or before the commencement of corrective work.

SC 7.2.3 - County's Additional Rights Preserved

The warranty period applies only to Design-Builder's obligation to correct construction work or replace materials or equipment not in conformance with the Construction Documents and will not constitute a period of limitation with respect to any other rights or remedies County may have with respect to Design-Builder's other obligations under the Contract or Arizona law.

END OF APPENDIX "D" - DESIGN-BUILDER SPECIAL CONDITIONS

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