



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

Requested Board Meeting Date: 5/02/2017

or Procurement Director Award ☐

Contractor/Vendor Name (DBA): Kittelson & Associates, Inc. (Headquarters: Portland, OR)

Project Title/Description:

Engineering Design Services For Aerospace Parkway Widening (4AERO2)

Purpose:

Award: Contract No. CT-PW-17-337. This award of contract is recommended to the highest qualified consultant in the amount of \$764,235.00 for a contract term from May 2, 2017 to June 30, 2019 for engineering design services for the Aerospace Parkway Widening. Administering Department: Public Works.

Procurement Method:

Solicitation for Qualifications No. 247691 was conducted in accordance with A.R.S. § 34-603, Pima County Board of Supervisors Policy D 29.1, and an accelerated procurement process per County Administration including waiver of interviews. Four (4) responsive statements of qualifications were received and evaluated by a four (4) member committee using qualifications and experience based selection criteria. As a result of the scoring of the written statements of qualifications, the highest qualified consultant is recommended for award.

Attachments: Notice of Recommendation for Award and Contract.

Program Goals/Predicted Outcomes:

This contract is for the Consultant to provide engineering design services for the Aerospace Parkway Widening Project to four travel lanes, including reconstructing the Nogales Highway intersection to add capacity and improve operations and safety, and widen the existing UPRR crossing.

Public Benefit:

The construction of this expansion will provide the infrastructure needed for both the commercial and industrial growth being promoted in the area of the Aerospace corridor, including known increased traffic needs at Raytheon and Vector Space. The result of this development will be to support growth in the local economy which will benefit the entire region.

Metrics Available to Measure Performance:

The performance will be measured using the consultant evaluation process as outlined in BOS Policy D29.1(E)(II).

Retroactive:

No.

Procure Dept 04/18/17 PM09:35

To: POB- 4.18.17 (1)
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Original Information

Document Type: CT Department Code: PW Contract Number (i.e., 15-123): 17-337
Effective Date: 05/02/17 Termination Date: 06/30/19 Prior Contract Number (Synergen/CMS): _____
☒ Expense Amount: \$ 764,235.00 ☐ Revenue Amount: \$ _____
Funding Source(s): HURF 12.6%

Cost to Pima County General Fund: _____

Contract is fully or partially funded with Federal Funds? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards
Were insurance or indemnity clauses modified? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards
Vendor is using a Social Security Number? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards

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

Amendment Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____
Amendment No.: _____ AMS Version No.: _____
Effective Date: _____ New Termination Date: _____
☐ Expense ☐ Revenue ☐ Increase ☐ Decrease Amount This Amendment: \$ _____
Funding Source(s): _____

Cost to Pima County General Fund: _____

Contact: Matt Sage, Commodity/Contracts Officer Matt Sage 4-13-17
Department: Procurement May 9-17 4/13/17 Telephone: 520-724-8586
Department Director Signature/Date: [Signature] 4/13/17
Deputy County Administrator Signature/Date: [Signature] 4/17/17
County Administrator Signature/Date: [Signature] 4/17/17
(Required for Board Agenda/Addendum Items)



NOTICE TO RESPONDENTS

Date of Issue: April 12, 2017

The Pima County Procurement Department hereby issues formal notice to respondents to Solicitation #247691 for Design Engineering Services – Aerospace Parkway Widening Project and the following respondent will be recommended for award as indicated below. The award action is scheduled to be performed by the Board of Supervisors on or after May 2, 2017.

Award is recommended to the Most Qualified Respondent:

Kittelson & Associates, Inc.

Other Responding Firms (Alphabetical Order):

Kimley-Horn and Associates, Inc.

Parsons Brinckerhoff, Inc.

Stantec Consulting Services, Inc.

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

Issued by: /s/ Matt Sage

Telephone Number: (520) 724-8586

This notice is in compliance with Pima County Procurement Code §11.20.010(C).

Copy to: Pima County SBE via e-mail at SBE@pima.gov

A handwritten mark or signature in the bottom right corner of the page, possibly initials or a stylized signature.

PIMA COUNTY PUBLIC WORKS ADMINISTRATION	
PROJECT:	Engineering Design Services For Aerospace Parkway Widening (4AERO2)
CONSULTANT:	Kittelson & Associates, Inc. 2 East Congress Street, Suite 705 Tucson, Arizona 85701
AMOUNT:	\$764,235.00
FUNDING:	HURF 12.6%
<div style="border: 2px solid red; padding: 5px; text-align: center;"> CONTRACT NO. CT. PW-17-337 AMENDMENT NO. _____ <small>This number must appear on all invoices, correspondence and documents pertaining to this contract.</small> </div>	
(Stamp Here)	

CONSULTANT SERVICES CONTRACT

This Contract is entered into between Pima County, a body politic and corporate of the State of Arizona, hereafter called COUNTY, and Kittelson & Associates, Inc., hereinafter called CONSULTANT, and collectively referred to as the Parties.

WITNESSETH

WHEREAS, COUNTY requires the services of a CONSULTANT registered in the State of Arizona and qualified to provide Engineering Services for the Aerospace Parkway Widening project; and

WHEREAS, CONSULTANT is willing, qualified, and properly registered within the State of Arizona to provide such services; and

WHEREAS, based on CONSULTANT's representations in response to Pima County Solicitation No. 247691, CONSULTANT was determined to be the most qualified for this Project; and

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

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

ARTICLE 1 – TERM AND EXTENSION/RENEWAL/CHANGES

This Contract, as approved by the Board of Supervisors, commences on May 2, 2017 and terminates on June 30, 2019, unless sooner terminated or further extended pursuant to the provisions of this Contract.

COUNTY has the option to extend the Contract termination date for purposes of project completion. Any modification or extension of the Contract termination date must be by formal written amendment executed by the Parties.

ARTICLE 2 – SCOPE OF SERVICES

CONSULTANT agrees to provide Engineering Services for the COUNTY as described in **APPENDIX 'A' – SCOPE OF SERVICES** (4 pages) and **APPENDIX 'C' – GENERAL CONDITIONS** (44 pages), attachments to this Contract, and to complete such services within the term and value of this Contract as it may be modified in accordance with **Article 5**.

Amendments and changes to the Scope must be approved by the Board of Supervisors or the Procurement Director, as required by the Pima County Procurement Code, before the work under the amendment commences.

ARTICLE 3 - DEFINITIONS

Other Direct Costs. Other Direct Costs are those costs that can be specifically identified within this Contract, are required for performance of the Contract, and are actually incurred. This includes Subcontract or Subconsultant costs; reproduction, copy and printing costs; courier services; and similar costs specifically necessary for this Contract and approved by COUNTY.

AS

Cost Plus Fixed Fee. The modified Cost Plus Fixed Fee (CPFF) is a compensation method that provides compensation to the Consultant for actual costs of Direct Labor, Indirect, and Other Direct Costs incurred up to a "not-to-exceed" amount, plus a fixed Fee amount for the successful performance of the work. The Fee amount may initially be determined as a percentage of the estimated not-to-exceed costs. Once negotiated, the Fee amount becomes fixed and does not vary with actual costs. The Fee may only be in accordance with **Article 5**.

Critical Path Method. The Critical Path Method (CPM) is a way of depicting the sequence of activities in a project, including interdependencies, and containing all activities needed for successful completion of the Work. Delay in the completion of activities on the critical path will extend the completion date.

Direct Labor Costs. Direct Labor Costs are the total number of allowable hours worked on the Project by each individual multiplied by the Labor Rate, identified in **APPENDIX 'B' – COMPENSATION SCHEDULE**.

Fee. Fee is the amount, independent of actual costs, that the CONSULTANT is allowed for assuming risk and to stimulate efficient contract performance. Fee includes compensation to CONSULTANT for both profit and unallowable costs. Efficient cost control will allow CONSULTANT to earn a higher profit margin without adjustment of the fee amount. Conversely, inefficient cost control will result in a lower profit margin.

Float. Float is the number of days by which an activity not on the critical path in a CPM network may be delayed before it extends the completion date.

Labor Rates. Labor rates are the actual cost of salary paid to employees of CONSULTANT and identified in **APPENDIX 'B' – COMPENSATION SCHEDULE**.

Not to Exceed Cost. The Not to Exceed Cost for a task is the sum of the agreed Direct Labor costs, indirect costs, and other reimbursable costs of the task defined in the original Project Baseline. Actual Direct Labor costs may be invoiced based on hours worked, per discipline, per task, or a percent complete by task for the period. CONSULTANT assumes all risk for providing the requested task/deliverables at or below the original estimated cost, unless an equitable adjustment to the scope and/or fee are made by amendment to the Contract. Any costs incurred by CONSULTANT beyond the not-to-exceed amount identified which are not attributable to any change in the project baseline are unallowable. Unallowable costs are compensated through the CONSULTANT's fixed Fee.

Indirect Costs. Indirect costs are at the overhead rate identified in **APPENDIX 'B' – COMPENSATION SCHEDULE**.

Project Baseline. The agreed Contract scope of services, total Not-to-Exceed Cost plus Fixed-Fee (CPFF), the allocation thereof among Contract tasks, and the accompanying schedule and expectations/assumptions upon which the scope of services and schedule are based, collectively constitute the Project Baseline.

ARTICLE 4 – COMPENSATION AND PAYMENT

In consideration of the services specified in this Contract, COUNTY agrees to pay CONSULTANT on a modified Not-to-Exceed Cost plus Fixed Fee (CPFF) basis, not to exceed the total amount of this Contract. Cost is comprised of CONSULTANT's Direct Labor Costs, Indirect Costs and Other Direct Costs. CONSULTANT's fee will remain fixed and may be adjusted only as provided in **Article 5** and **Article 6**.

CONSULTANT's total CPFF will be allocated among the major tasks contemplated by this Contract in such manner that each major deliverable will have associated with it a not-to-exceed cost, plus a fixed fee amount, incorporated herein as **APPENDIX 'B' – COMPENSATION SCHEDULE** (48 pages). CONSULTANT may invoice monthly for the actual costs incurred plus a pro-rata portion of one-half (1/2) of the fee amount for each task. CONSULTANT will calculate actual costs based on actual hours spent, to which the agreed overhead rate may be applied, plus Other Direct Costs. Actual Costs may then be represented as percentage of the "not to exceed" cost amount associated with that task on the CONSULTANT's invoice for billing purposes. Calculations and supporting data will be made available to COUNTY at any time, upon request. The cumulative payment for the actual costs of any task may not be more than the "not to exceed" cost amount associated with that task. Upon completion of a task, (including acceptance by COUNTY of all associated deliverables), COUNTY will pay the balance of the fee allocated to that task to CONSULTANT.

Hourly rates and all other rates included under this Contract will remain fixed throughout the term of the Contract. COUNTY may consider adjustments to rates in connection with any extensions of the Contract term.

The total of all payments to CONSULTANT for services provided under this Contract will not exceed Seven Hundred Sixty-Four Thousand Two Hundred Thirty-Five Dollars and Zero Cents (\$764,235.00).

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

For the period of record retention required under **Article 25**, COUNTY reserves the right to question any payment made under this Article and to require reimbursement therefor by setoff or otherwise for payments determined to be improper or contrary to the Contract or law.

CONSULTANT will not perform work in excess of the Contract Amount without prior authorization by an amendment executed by COUNTY. Work performed in excess of the Contract Amount without prior authorization by amendment is at CONSULTANT'S own risk. Additional Services identified in APPENDIX 'B' – COMPENSATION SCHEDULE, are services within the scope of this Contract but not included within the Tasks identified as of the effective date of this Contract. If ordered, CONSULTANT will invoice additional Services at the rates incorporated into this Contract as in APPENDIX 'B-COMPENSATION SCHEDULE'. COUNTY may add additional services throughout the term of the Contract by providing notice in writing to CONSULTANT. Hourly billable rates shown in APPENDIX 'B' – COMPENSATION SCHEDULE will only be adjusted by written amendment to the Contract. The Parties may add additional required professional classifications or disciplines to APPENDIX 'A' - SCOPE OF SERVICES by written amendment at any time.

COUNTY has ten (10) calendar days from the date of invoice to notify CONSULTANT of any invoicing discrepancies. COUNTY and CONSULTANT will meet to resolve any discrepancies before the invoice is approved or rejected for payment. Subconsultant charges must be supported by appropriate documentation upon request by COUNTY.

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

ARTICLE 5 – PROJECT BASELINE AND ADJUSTMENTS

- A. COUNTY and CONSULTANT have agreed upon the Project scope and the total Cost Plus Fixed Fee, and will prepare a CPM-based schedule for the performance of the work. The schedule is based on assumptions and expectations agreed upon by the Parties. Schedule estimates for the timeframes associated with outside party activities, i.e. design and other reviews, and/or permits or other clearances do not represent commitments made by either outside agencies or the permit-granting entities of County. This Project Baseline represents a firm commitment by the Parties to complete the work within the schedule and total cost identified in the Baseline, subject to schedule variations by outside Parties and other factors beyond the control of the Parties.
- B. Although the Baseline reflects the best estimates and expectations of the Parties at the time of agreement, there is an element of uncertainty associated with the design process that makes the actual schedule and effort required to complete the work difficult or impossible to establish in advance. Unusual citizen input, litigation, regulatory changes, significant delays by utilities or others, unforeseen decisions or commitments by policy makers, or other unanticipated events or factors beyond the control of the Parties that differ materially from the expectations of the Parties may delay or disrupt the schedule and/or require a change in the level of resources or effort. The Project Baseline may be adjusted as follows:
 - 1. A delay in the work attributable to a failure by COUNTY to adhere to its estimates with respect to schedule is an excusable delay for which an adjustment may be made to the schedule. In any such case affecting a task on the critical path, the schedule of the affected task or activity may be extended one (1) day for each day of COUNTY-caused delay; provided, however, that if the COUNTY-caused delay overlaps a period of delay attributable to any other cause, the extension for COUNTY-caused delay is limited to the number of non-overlapped days of COUNTY-caused delay.

2. There is no adjustment for any delay in the work attributable to a failure by CONSULTANT to adhere to its commitments with respect to schedule. In the event of a significant delay attributable to a failure by CONSULTANT to adhere to its schedule expectations, CONSULTANT will provide a recovery plan to COUNTY within five (5) days of COUNTY's request. For the purposes of this paragraph, a delay arising from or attributable to a necessity for CONSULTANT to make more than two (2) submissions of plans or documents for approval is a failure by CONSULTANT to adhere to its schedule commitments. CONSULTANT's work associated with additional reviews are non-compensable.
 3. A delay in the work attributable to any other cause that differs materially from the expectations of the Parties regarding that cause is an excusable delay for which the Parties will negotiate an appropriate schedule adjustment. If the period of delay attributable to any cause under this paragraph overlaps a period of delay attributable to any other cause, the adjustment under this paragraph will be made first and the delay attributed to such other cause will be limited to that occurring outside of the overlap.
 4. If any of the causes of delay in Paragraphs 1 or 3 above affects a task or activity on the critical path, then the schedule adjustment may include adjustment to the completion date. If the cause does not affect a task or activity on the critical path, then the adjustment will be made from Float and the completion date will not change.
 5. If any of the causes of delay in Paragraphs 1 or 3 above results in material provable additional costs to the affected task or tasks as a result of disruption of the schedule, then the Parties will negotiate an equitable adjustment to the cost for the affected task or tasks, but not to the fee.
 6. The Parties will negotiate an equitable adjustment of cost and fee for any task or tasks for which there is any significant change in the level of effort arising from additional or changed work requested or directed in writing by COUNTY that materially deviates from or adds to the baseline expectations or assumptions of the Parties with respect to the work.
 7. If any action, comment, cause, decision, or other event attributable to any third party results in a change in requirements that differs materially from expectations, then the Parties will negotiate in good faith an equitable adjustment in the cost and fee for the affected task or tasks.
- C. CONSULTANT agrees to complete the work by the completion date in the schedule, as it may be adjusted under the preceding provisions of this Article. Costs incurred by CONSULTANT to complete the work after the completion date in the schedule are not reimbursable under this Contract.

ARTICLE 6 – REALLOCATION OF FUNDS

Given the magnitude and complexity of the scope required by this Contract, the Parties understand that the actual cost to perform specific tasks may vary from the estimates reflected in APPENDIX 'A' - SCOPE OF SERVICES and APPENDIX 'B' – COMPENSATION SCHEDULE.

If the actual cost to complete a task is less than the estimated amount for that task, the cost savings realized accrues to COUNTY. With the agreement of the Parties, COUNTY may reallocate the cost savings to other tasks in APPENDIX 'A' - SCOPE OF SERVICES and APPENDIX 'B' – COMPENSATION SCHEDULE as follows:

- A. Reallocation between subtasks in APPENDIX 'A' - SCOPE OF SERVICES under any one of the major task categories in APPENDIX 'B' – COMPENSATION SCHEDULE may be made between the COUNTY's department representative and the CONSULTANT's project manager by written agreement.
- B. County's Procurement Director may make a reallocation among the major tasks in APPENDIX 'B' – COMPENSATION SCHEDULE by a Contract amendment, provided that the transfer does not increase the total amount of the Contract.
- C. The Board of Supervisors may make any reallocation or adjustment in APPENDIX 'A' - SCOPE OF SERVICES or APPENDIX 'B' – COMPENSATION SCHEDULE that increases the total Contract amount through a Contract Amendment.

Costs and Fee may not be reallocated from any task on which work has not progressed significantly and which does not include actual or demonstrable savings or reductions in required effort such that the task may be completed for less than the balance of the task remaining after the transfer.

ARTICLE 7 – INSURANCE

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

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

7.1 Minimum Scope and Limits of Insurance:

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

- 7.1.1 Commercial General Liability (CGL) – Occurrence Form with limits of \$1,000,000 Each Occurrence and \$2,000,000 General Aggregate. Policy will include bodily injury, property damage, and broad form contractual liability coverage.
- 7.1.2 Business Automobile Liability – Bodily Injury and Property Damage for any owned, hired, and/or non-owned automobiles used in the performance of this Contract with a Combined Single Limit (CSL) of \$1,000,000.
- 7.1.3 Workers' Compensation and Employers' Liability - Statutory requirements and benefits. Coverage is compulsory for employers of one or more employees. Employer's Liability - \$500,000.
Note: The Workers' Compensation requirement will not apply to a CONSULTANT that is exempt under A.R.S. § 23-901, and when such CONSULTANT executes the appropriate COUNTY Sole Proprietor or Independent CONSULTANT waiver form.
- 7.1.4 Professional Liability (Errors and Omissions) Insurance – This insurance is required when soliciting work from licensed professionals. The policy limits will be not less than \$2,000,000 Each Claim and \$2,000,000 Annual Aggregate. The policy will cover professional misconduct or negligent acts for those positions defined in the Scope of Work of this Contract.
In the event that the Professional Liability insurance required by this Contract is written on a claims-made basis, CONSULTANT warrants that any retroactive date under the policy will precede the effective date of this Contract and, either continuous coverage will be maintained, or an extended discovery period will be exercised, for a period of two (2) years beginning at the time work under this Contract is completed.

7.2 Additional Insurance Requirements:

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

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

7.3 Notice of Cancellation:

For each insurance policy required by the insurance provisions of this Contract, the CONSULTANT must provide to COUNTY, within two (2) business days of receipt, a notice if a policy is suspended, voided, or cancelled for any reason. Such notice will be mailed, emailed, hand-delivered or sent by facsimile transmission to Pima County Procurement, 130 West Congress Street, 3rd Floor, Tucson, Arizona 85701-1317 or via fax to (520) 724-4434.

7.4 Verification of Coverage:

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

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

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

7.5 Approval and Modifications:

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

ARTICLE 8 – INDEMNIFICATION

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

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

Upon request, CONSULTANT may fully indemnify and hold harmless any private property owner granting a right of entry to CONSULTANT for the purpose of completing the project. The obligations under this Article do not extend to the negligence of COUNTY, its agents, employees or indemnitee.

ARTICLE 9 – COMPLIANCE WITH LAWS

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

ARTICLE 10 – STATUS OF CONSULTANT

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

ARTICLE 11 – CONSULTANT'S PERFORMANCE

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

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

ARTICLE 12 – NON-WAIVER

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

ARTICLE 13 – SUBCONSULTANT

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

ARTICLE 14 – NON-ASSIGNMENT

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

ARTICLE 15 – NON-DISCRIMINATION

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

ARTICLE 16 – AMERICANS WITH DISABILITIES ACT

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

ARTICLE 17 – CANCELLATION FOR CONFLICT OF INTEREST

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

"The state, its political subdivisions or any department of either may, within three years after its execution, cancel any contract, without penalty or further obligation, made by the state, its political subdivisions, or any of the

departments or agencies of either if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the state, its political subdivisions or any of the departments or agencies of either is, at any time, while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or a consultant to any other party to the contract with respect to the subject matter of the contract."

ARTICLE 18 – TERMINATION OF CONTRACT FOR DEFAULT

- A. Upon a failure by CONSULTANT to cure a default under this Contract within ten (10) days of receipt of notice from COUNTY of the default, COUNTY may, in its sole discretion, terminate this Contract for default by written notice to CONSULTANT. In this event, COUNTY may take over the work and complete it by Contract or otherwise. In such event, CONSULTANT will be liable for any damage to the COUNTY resulting from CONSULTANT's default, including any increased costs incurred by COUNTY in completing the work.
- B. The occurrence of any of the following, without limitation to the named events, constitutes an event of default:
1. Abandonment of or failure by CONSULTANT to observe, perform or comply with any material term, covenant, agreement or condition of this Contract, or to prosecute the work or any separable part thereof with the diligence that will insure completion within the time specified in this Contract, including any extension, or a failure to complete the work (or the separable part of the work) within the specified time;
 2. Persistent or repeated refusal or failure to supply adequate staff, resources or direction to perform the work on schedule or at an acceptable level of quality;
 3. Refusal or failure to remedy defective or deficient work within a reasonable time;
 4. Loss of professional registration or business or other required license or authority, or any curtailment or cessation for any reason of business or business operations that would substantially impair or preclude CONSULTANT's performance of this Contract;
 5. Disregard of laws, ordinances, or the instructions of COUNTY or its representatives, or any otherwise substantial violation of any provision of the Contract;
 6. Performance of work hereunder by personnel that are not qualified or permitted under state law or local law to perform such services;
 7. Commission of any act of fraud, misrepresentation, willful misconduct, or intentional breach of any provision of this Contract; or
 8. If a voluntary or involuntary action for bankruptcy is commenced with respect to CONSULTANT, or CONSULTANT becomes insolvent, makes a general assignment for the benefit of creditors, or has a receiver or liquidator appointed in respect of its assets.
- C. In the event of a termination for default:
1. All finished and unfinished drawings, specifications, documents, data, studies, surveys, drawings, photographs, reports and other information in whatever form, including electronic, acquired or prepared by CONSULTANT for this project become COUNTY's property and will be delivered to COUNTY not later than five (5) business days after the effective date of the termination;
 2. COUNTY may withhold payments to CONSULTANT arising under this or any other Contract for the purpose of set-off until such time as the exact amount of damage due COUNTY from CONSULTANT is determined; and
 3. Subject to the immediately preceding subparagraph 2., COUNTY's liability to CONSULTANT will not exceed the Contract value of work satisfactorily performed prior to the date of termination for which COUNTY has not previously made payment.
- D. COUNTY will not terminate the Contract for default or charge CONSULTANT with damages under this Article, if—

1. Excepting item 8. in paragraph B above, the event of default or delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of CONSULTANT. Examples of such causes include—
 - (i) Acts of God or of the public enemy,
 - (ii) Acts of the COUNTY in either its sovereign or contractual capacity,
 - (iii) Acts of another Contractor in the performance of a contract with the COUNTY,
 - (iv) Fires,
 - (v) Floods,
 - (vi) Epidemics
 - (vii) Quarantine restrictions,
 - (viii) Strikes,
 - (ix) Freight embargoes,
 - (x) Unusually severe weather, or
 - (xi) Delays of subcontractors at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both CONSULTANT and the subcontractor(s); and
 2. CONSULTANT, within seven (7) days from the beginning of any event of default or delay (unless extended by COUNTY), notifies COUNTY in writing of the cause(s) therefor. In this circumstance, COUNTY will ascertain the facts and the extent of the resulting delay. If, in the reasonable judgment of COUNTY, the findings warrant such action, COUNTY may extend the time for completing the work.
- E. For the purposes of paragraph A above, "receipt of notice" includes receipt by hand by CONSULTANT's project manager, by facsimile transmission with notice of receipt, or under the Notices clause of this Contract.
- F. If, after termination of the Contract for default, COUNTY determines that the CONSULTANT was not in default, or that the delay was excusable, the rights and obligations of the Parties will be the same as if COUNTY had terminated the Contract for convenience.
- G. The rights and remedies of COUNTY in this Article are cumulative and in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE 19 – TERMINATION FOR CONVENIENCE OF COUNTY

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

ARTICLE 20 – NON-APPROPRIATION OF FUNDS

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

ARTICLE 21 – NOTICES

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

COUNTY:

Nancy Cole
Public Works Administration
201 North Stone, 2nd Floor
Tucson, Arizona 85701
Tel: (520) 724-6312

CONSULTANT:

Jim Schoen, Project Manager
Kittelson & Associates, Inc.
2 East Congress
Tucson, Arizona 85701
Tel: (520) 544-9616

ARTICLE 22 – OTHER DOCUMENTS

The Parties in entering into this Contract have relied upon information provided in Solicitation for Qualifications No. 247691, and on representations and information in the CONSULTANT'S response to said SFQ. These documents are hereby incorporated into and made a part of this Contract as if set forth in full herein, to the extent not inconsistent with the provisions of this Contract. CONSULTANT will perform services in accordance with the terms of the Contract and at a level of care consistent with prevailing industry standards. In the event any provision of this Contract is inconsistent with those of any other document, the Contract provisions will prevail.

ARTICLE 23 – REMEDIES

Either party may pursue any remedies provided by law for the breach of this Contract, provided, however, that the procedures in **Article 27** are first exhausted. No right or remedy is intended to be exclusive of any other right or remedy and each is cumulative and in addition to any other right or remedy existing at law or at equity or by virtue of this Contract.

ARTICLE 24 – SEVERABILITY

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

ARTICLE 25 – BOOKS AND RECORDS

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

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

ARTICLE 26 – DELAYS

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

ARTICLE 27 – DISPUTES

In the event of a dispute between the Parties regarding any part of this Contract or the Parties' obligations or performance hereunder, either Party may request a special meeting between their respective representatives to resolve the dispute. If the dispute remains unresolved, then either Party may request escalation of the issue to a meeting between the Director of the Pima County Department administering this Contract and CONSULTANT'S counterpart official, such meeting to be held within one (1) week of the request, unless otherwise agreed. If the dispute is still not resolved after that meeting, then either Party may pursue such remedy or remedies as may be available to them under the laws of the State of Arizona.

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

ARTICLE 28 – OWNERSHIP OF DOCUMENTS

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

ARTICLE 29 – PUBLIC INFORMATION

Pursuant to A.R.S. § 39-121 et seq., and A.R.S. §§ 34-603(H), 604(H), in the case of construction or Architectural and Engineering services procured under A.R.S. Title 34, Chapter 6, all information submitted by CONSULTANT

in any way related to this Contract, including, but not limited to, pricing, product specifications, work plans, and any supporting data becomes public information and upon request, is subject to release and/or review by the general public including competitors.

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

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

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

ARTICLE 30 – LEGAL ARIZONA WORKERS ACT COMPLIANCE

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

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

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

CONSULTANT will advise each sub-consultant of COUNTY'S rights, and the sub-consultant's obligations, under this Article by including a provision in each subcontract substantially in the following form:

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

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

ARTICLE 31- ISRAEL BOYCOTT CERTIFICATION

Contractor hereby certifies that it is not currently engaged in, and will not for the duration of this Contract engage in, a boycott of Israel as defined by A.R.S. § 35-393.01 effective August 6, 2016. Violation of this certification by Contractor may result in action by the County up to and including termination of this Contract.

ARTICLE 32 - ENTIRE AGREEMENT

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

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

PIMA COUNTY:

Chair, Board of Supervisors

Date

CONSULTANT:

Signature

Name and Title (Please Print)

Date

ATTEST:

Clerk of the Board

APPROVED AS TO FORM:

Deputy County Attorney

ANDREW FLAGG

Name (Please Print)

Date

APPENDIX “A” – SCOPE OF SERVICES (4 PAGES)

ENGINEERING DESIGN SERVICES FOR THE AEROSPACE PARKWAY WIDENING PROJECT

PROJECT DESCRIPTION/SCOPE:

Project Description: The Aerospace Parkway Widening project is to install a four-lane desert parkway expansion along the existing 2 lane parkway from the Nogales Highway intersection to 3800 LF east of Raytheon Parkway, approximately 1.5 miles long, including a widening of the existing UPRR crossing near Nogales Highway and improvements to the Nogales / Aerospace intersection as needed. An engineering professional team (CONSULTANT) will complete this work alongside a construction manager at risk (CMAR) contractor. The CONSULTANT shall provide engineering services on Phase 2, the Aerospace Parkway widening and Aerospace/Old Nogales intersection improvements. The initial phase of work (Phase 1), to extend Raytheon Way further south for access as well as the intersection of Raytheon at Aerospace will be designed separately, by AECOM Services, Inc. (AECOM) via a separate procurement process. Phase 1 will be constructed by the CMAR, and will require coordination, especially at the intersection, between both engineering teams.

The scope of work for this design anticipates the potential of two GMP packages, which will be considered GMP#2 and GMP#3 for the overall CMAR contract. GMP#2 shall include the widening from two lanes to four lanes from the transition of the existing Hughes Access Road to the Aerospace Parkway to just east of World View Enterprises. GMP#3 shall include the work necessary for the addition of the two eastbound lanes from Nogales Highway to the transition at the existing Hughes Access Road. This assumed approach is based on accommodations for coordination with UPRR.

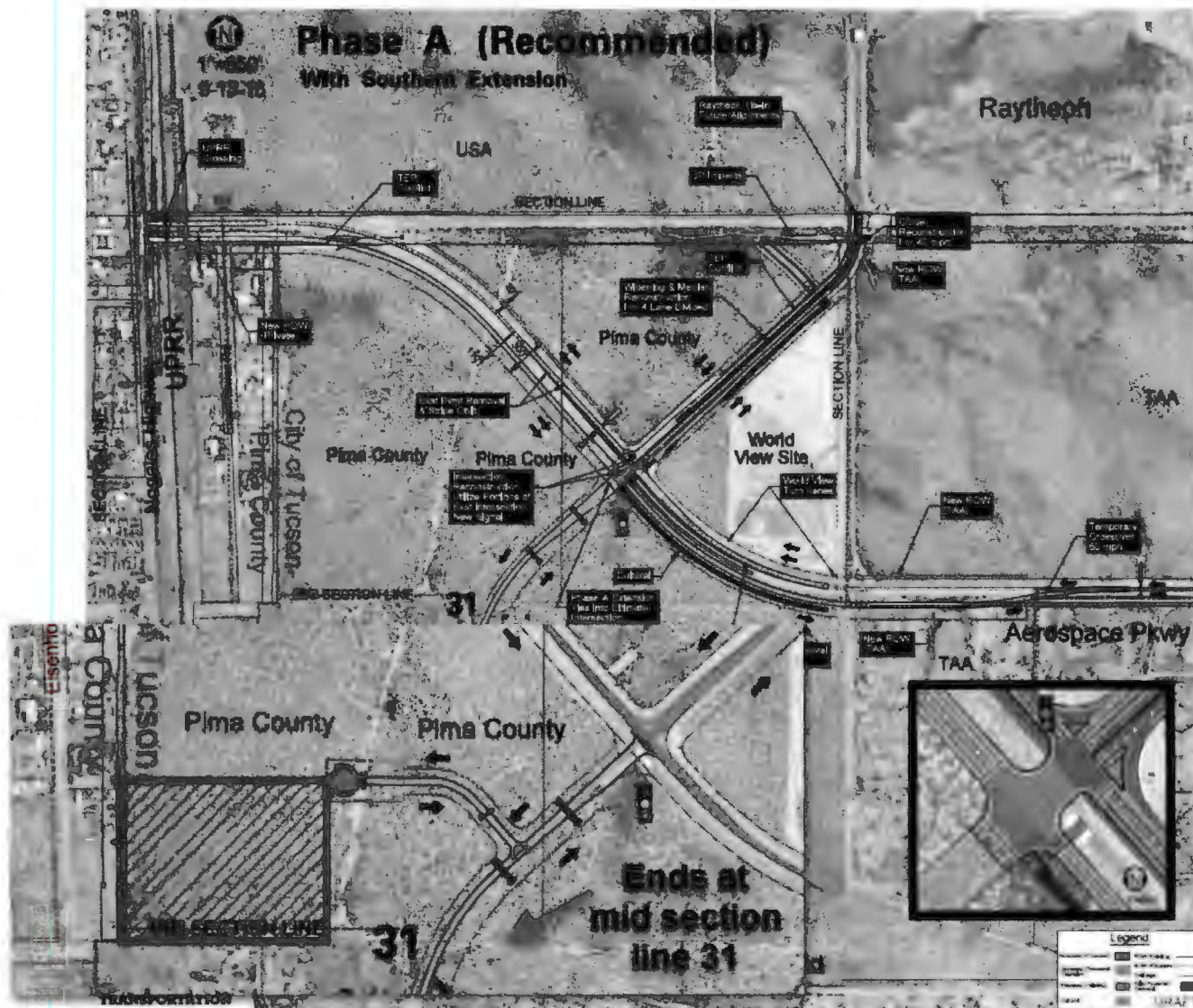
A typical desert parkway configuration with a 300-foot right of way width shall be utilized, except at the east end transition, the railroad crossing and the Nogales Highway Intersection. The transition of the new four-lane parkway into the existing two-lane roadway to the east of World View Enterprises shall occur within the existing right of way. The GMP#3 design shall also include any necessary improvements to the intersection of Hughes Access Road and Nogales Highway to facilitate the proposed traffic volumes while minimizing the impacts to UPRR, drainage and the need for additional right of way acquisition to the greatest extent possible.

This work is highly critical to upcoming development initiatives at Pima County. The construction of this expansion project will provide the infrastructure needed for both the commercial and industrial growth being promoted in the area. In order to meet these needs, the project schedule proposed is an expedited process. Below is a breakdown of the two areas of work (including potentially multiple GMP's).

GMP#2 and #3 - Aerospace Parkway Widening and Nogales Highway Intersection Improvements: This work will install an additional two lanes to the existing cross-section. The road will be expanded to the south with a “desert median” divider, except at the west end approaching the railroad and Nogales Highway intersection where it will be designed as a single UPRR crossing with traffic in both directions. This phase will also be expedited through use of the CMAR process. This approach reduces the risk associated with the unknown timelines of the railroad approval/construction activities. Projected completion for GMP#2 and #3 is May 2019.

Aerospace Widening (GMP#2) & Nogales Highway Intersection (GMP#3)	Start date	End Date
Expedited Procurement of Engineer & CMAR, no interviews (4 mo)	1/05/17	5/08/17
Engineering Drawings, prepared for CMAR process (12 mo)	5/09/17	5/11/18
CMAR Pre-construction services	5/09/17	2/12/18
UPRR Agreement negation (starts at 60% design completion) (7 mo)	10/10/17	5/11/18
ACC Approval (5 mo)	5/14/18	10/12/18
UPRR Construction (large window is shown for UPRR scheduling purpose)	10/15/18	5/16/19
GMP#2 & 3 negotiation and BOS award (3 mo)	2/13/18	5/15/18
Construction by CMAR of both GMP's (12 mo)	5/16/18	5/20/19

Project Location: Aerospace Parkway from Old Nogales intersection to the vicinity of the World View Site.
Phase 1/ GMP#1 – Southern extension of Raytheon Parkway and the intersection of Raytheon & Aerospace.
Phase 2/GMP#2 & #3 – Widening of Aerospace Parkway to 4 lanes & Intersection of Old Nogales & Aerospace



The project will have many concurrent activities. AECOM will be proceeding with design of the Phase 1 activities relating to Raytheon Parkway. The GMP#2 and #3 work will have a second engineer consultant procured concurrently with the CMAR, and the CMAR will provide pre-construction phase services throughout the timeline provided above. Potentially, two GMPs are expected in Phase 2 as listed above, however this may be changed or adjusted by the team during the design process to best construct the project as needed.

This project will be delivered as a partnership between the Project Management Office (PMO) and the Department of Transportation (DOT) within Pima County. Project Management responsibility will be via the PMO (including scope, schedule and budget management); however, DOT will provide the design oversight.

The County shall provide:

- Public outreach support in terms of duplication, distribution, newspaper advertisements, website hosting and mailing costs/coordination. The County shall work with the Consultant to notify and inform stakeholders as necessary.
- The Cultural Resources office shall provide a clearance letter for the project area based on the work previously completed for the existing sections of the Aerospace corridor.
- Traffic counts from Raytheon for the proposed intersection improvements as well as traffic counts and accident information for the corridor (completed as part of the original Aerospace corridor work and as part of Phase 1).
- Title reports/research will be coordinated by the County, along with any R/W acquisitions.

The County will designate a Project Manager to represent Owner on this Project, as noted above, and will be responsible to oversee and advise on overall contractual performance and compensation and will be responsible for the day-to-day activities and communications between the County and the Project Team. The Consultant shall likewise specify a Project Manager that shall act as the Consultant's representative and be a member of the Project Team throughout the duration of the contract.

Owner's Project Manager will provide information and documentation, when available, as requested by the Consultant during and relating to its performance of this Contract. The Consultant shall assume the responsibility of determining (field verifying, if necessary) the validity of such data provided.

Efforts to minimize disruptions to the operation of the existing facilities shall be identified and implemented at all times during construction of the Project.

CONSULTANT METHODOLOGY

The Owner will contract for the Consultant services in phases. The Owner anticipates two phases with agreements and fee negotiations for each.

Design services shall include the following:

- Development of project design schedule
- Participation in meetings including kickoff, partnering, monthly, stakeholder, over-the-shoulder or other as scheduled by the PM or as requested by other partners in this project
- Detailed Cost Estimating/Modeling
- Development of PS&E documents
- Phasing and Construction Schedule plan to minimize cost, time and impact
- Subcontractor qualification and selection including conformance to SBE goal requirements
- Assistance with the permitting process: Federal/State/Local Coordination
- Assistance with coordination with UPRR, as needed
- Utility Locating Services and coordination for relocations, as needed
- Others as may be identified

Deliverables:

- Design schedule and monthly updates
- Identification of Utility Conflicts
- Meeting agenda and minutes
- Design Summary Report
- Drainage Report
- Geotechnical Report
- Pavement Design (if necessary due to changes in conditions from original Aerospace corridor study)
- Traffic Report (if necessary to include any changes in condition from original Aerospace corridor study)
- NPPP in conformance with County Ordinance
- SWPPP plans
- 30% and 60% Design Plan submission

- 30% and 60% Cost Estimate
- Special Provisions

The services required by this Solicitation for Qualifications (SFQ) shall be performed under the full authority and responsible charge of a principal of the firm who holds a current Arizona Certificate of Registration issued by the Arizona Board of Technical Registration for the practice of Engineering in the State of Arizona.

End of Appendix 'A' – Scope of Services

APPENDIX “B” – COMPENSATION SCHEDULE (48 PAGES)

1. COST PLUS FIXED FEE SCHEDULE OF PAYMENTS

(Detailed by Major Milestone, Not to Exceed Cost by Task (Direct Labor, Indirect, and Other Direct Costs), and Fixed Fee)

2. COMPENSATION DETAILS

A. Cost Allocation and Ceilings

The compensation schedule will contain the negotiated cost allocations for each individual task. The compensation schedule will be used to monitor cost expenditures and sets the fixed price that can be charged for work pursuant to the specified task.

B. Cost Adjustments

If, for valid reason(s), CONSULTANT notifies the Project Manager that the requisite work cannot be performed within the task's compensation allocation, and the Project Manager (PM) concurs, COUNTY will consider modifying cost allocations. The total compensation may be increased only by formal amendment to this agreement.

C. Progress Payments

It is anticipated certain elements of the Project may take longer than one (1) month to complete. These elements may be at considerable cost to CONSULTANT prior to their full completion and acceptance by COUNTY. In such cases, at the sole discretion of COUNTY, COUNTY may authorize interim progress payments to CONSULTANT. The invoice from CONSULTANT will be proportionate to the actual percentage of work completed through the period covered by the invoice, as accepted by the PM.

D. The Fixed Fee for each assignment will be negotiated on a case-by-case basis. The fee will be a percent of the consultant or co-consultants level of effort cost estimate agreed to by the County excluding sub-consultants and other direct cost estimates. The fee will be fixed for the scope of work detailed in the contract. The fixed fee percentage will be based upon historical departmental percentages for similar assignments, published industry guidelines and magnitude and duration of the assignment. Fixed Fee for engineering sub-consultants will generally follow the same guidelines established for the prime consultants but can also be negotiated on a case-by-case basis as appropriate.

E. Cost Items

1. Hourly Billing

a. Hourly Billing Rates

- Actual Payroll Rates within published industry standards
- Actual payroll rates for each person anticipated to be performing services on the assignment will be provided in advance of execution of the contract. Said listing will be updated on an annual basis during the term of the contract
- Hourly fee schedules for various position titles are not allowed

b. Annual Salaried Professionals

- Annual Salary individuals working a normal forty (40) hour week will be divided by two thousand eighty (2,080) hours to arrive at hourly billing rates
- Annual Salary individuals working a normal thirty-seven and one-half (37.5) hour week will be divided by one thousand nine hundred fifty (1,950) to arrive at hourly billing rates

c. Allowable Annual Increases

- Reasonable annual salary increases within published industry standards will be allowed and approved in advance
- Unusually high proposed increases and increases above published industry standards will be agreed to on a case by case basis.

- d. Sub consultants
Specific billing arrangements will be negotiated with specialty sub-consultants such as the following:
 - Attorneys
 - Financial Advisors
 - Surveyors
 - Subsurface Consultants
 - Specialty Consultants
 - e. Vacation/Holidays
 - Included in firm's audited multiplier
 - f. Sick Time
 - Included in firm's audited multiplier
 - g. Billing for non-productive idle time
 - No billing for vehicle driving time (commuting time)
 - Allow billing during air travel to Pima County for actual time worked on Pima County projects
 - Short-term assignments are negotiable
2. Multipliers
- a. Only audited multipliers following Generally Accepted Accounting Principles (GAAP) or Federal Single Audit principles are allowed
 - b. Corporate, Regional or Local Audited Multipliers of firms will be negotiated for each contract
 - c. Job Site multipliers will be negotiated in the event the County provides office space or job site trailers for the consultant
 - d. County will consider annual audited multipliers or fixed multipliers for the contract period
3. Travel Time
- a. Air Travel
 - Allow only for time spent on aircraft working on Pima County projects
 - b. Land Travel
 - Not allowed from Phoenix Metro Area to Pima County (both ways)
 - Not allowed to and from airports
 - c. Local Travel between meetings and job sites
 - Allowed
4. Expenses
- a. Mileage (Between Phoenix Metro Area and Pima County)
 - Approve at the established County mileage rate
 - Included in firm's audited multiplier or as other direct cost
 - Mileage for commuting not allowed
 - b. Mileage – local
 - Approve at the established County mileage rate only allowable for projects outside a radius of 50 miles from 130 W. Congress, Tucson, AZ 85701.
 - Included in firm's audited multiplier or as other direct cost
 - Mileage for commuting to and from work place not allowed
 - c. Car Rental/Lease/Corporate Vehicles
 - Included in firm's audited multiplier or as other direct cost

- d. Hotel/Meals
 - Allow only for infrequent call-in of an out of state consultant for a limited period of time
 - Establish daily limits in accordance with Federal Guidelines and negotiable for unusual circumstances
 - Allowed charges to be identified as other direct costs
 - e. IT/ Phone/Internal Delivery Charges/Normal Postage/ Miscellaneous/Other Administrative Charges
 - Include in firm's audited multiplier
 - f. Relocation, second domicile or subsistence expenses
 - Negotiable on a case by case basis
 - g. Reproduction Costs
 - Bill as other direct costs if not in audited multiplier
 - h. All other direct costs will be detailed in the contract billing
5. Unallowable Costs
- a. Bonus
 - Not allowed as a direct charge or in the multiplier
 - b. Entertainment Costs
 - c. Marketing Costs
 - Only as allowed in audited multipliers
 - d. Non-identifiable Costs
 - e. Donations
 - Only as allowed in audited multipliers
 - f. Mark-up on sub-consultants
 - g. Travel time from Phoenix Metro Area to Pima County (both ways)
 - h. Air travel for commuting purposes

F. Invoicing

CONSULTANT will submit invoices monthly, at the Monthly Progress Meeting, to the Project Manager, with appropriate supporting data and documentation and in a format as prescribed by the Project Manager. (Acceptance of the invoice at this meeting is not mandatory. The Project Manager may delay approval for up to five (5) work days to review the Progress Report and invoice.). The invoice will tabulate the costs associated with each individual task. All Task (deliverables) and Subcontracted Service costs will be appropriately documented. The Project Manager will review and check the invoice to determine if it is complete and acceptable. If the Project Manager determines the invoice to be complete and acceptable, the Project Manager will approve the invoice and forward it for processing the payment.

Design Engineering Services – Aerospace Parkway Widening

Scope of Work – Kittelson & Associates

Project Description

This project will widen the existing 2-lane Aerospace Parkway to a 4-lane divided and uncurbed roadway from and including Nogales Hwy to approximately one-half mile east of the Raytheon Blvd intersection. The improvements will include reconstructing the Nogales Hwy intersection to add capacity and improve operations and safety, and widen the existing UPRR crossing. The planning and design effort included in this scope of work will cover improvements to the Nogales Hwy intersection and Aerospace Parkway, with the exception of the Raytheon Blvd intersection, which is being designed as part of a separate project. The planning and design tasks, defined in this scope of work, will be conducted in coordination with a CMAR and the Raytheon Blvd intersection design team. It is expected that two GMP packages will be prepared for the project.

General Project Assumptions

1. Roadway design criteria shall conform to the Pima County Roadway Design Manual.
2. Design plans will be developed using AutoCAD V17, following Pima County CAD standards and in accordance with Pima County design practices and PAG Standard Drawings and Specifications. Roadway design models will be developed using Civil3D V17 roadway design software.
3. Survey files will be submitted in AutoCAD V17.
4. Landscape improvements along Aerospace Parkway are limited to the Raytheon Blvd intersection. Landscape and irrigation design for this intersection are included in this scope of work and fee proposal. Refer to the attached cost proposal from Wheat Design Group.
5. The project budget is itemized to aid in defining and tracking the level of effort required for each work task. It is assumed that budget may be transferred between tasks, as approved by the Pima County Project Manager. Additional services beyond the labor and expenses included in the contracted budget are considered extra, and will require additional budget to complete.

Task 1 Project Management

- 1.1 Progress Meetings (10) – Prep, attendance, meeting minutes
- 1.2 Comment Resolution Meetings (4) – Prep, attendance, documentation (meeting minutes and comment responses)
- 1.3 Schedule & Administration – Monthly schedule updates and project administration. Administration tasks to include monthly invoices, maintain correspondence and project files, and weekly work progress monitoring and planning.
- 1.4 Quality Control Plan – prepare a project specific quality control plan and provide quality control verification for all submittals.
- 1.5 CMAR Coordination – Bi-weekly meetings are anticipated over the 12 month project duration.

Task 2. Concept Phase (30%)

- 2.1 Kickoff and Partnering Workshop – Prepare and participate in a half-day workshop with Pima County staff, CMAR, AECOM team, and other stakeholders. The workshop is intended to finalize the

scope of the project, establish the available construction budget, project milestones, communication, decision and escalation ladders, and identify likely GMP's.

2.2 Data Collection - Gather existing information and reports, including technical documents (drainage, traffic, environmental, and geotech) prepared for the Hughes Access Road realignment, traffic analysis prepared for the Raytheon on-site improvements, traffic projections prepared by Pima County for the surrounding area, and roadway and utility as-built plans. Conduct a field review of existing roadway and drainage features and conditions.

2.3 Survey and Mapping - Survey will be conducted by Darling Geomatics. Refer to their attached scope of work.

The survey tasks will include:

1. Establish horizontal/vertical control and existing right-of-way. All existing monumentation required to establish horizontal and vertical control will be located. Benchmarks will be set per City of Tucson requirements.
2. Design survey to be completed using a combination of laser scanning technology and field survey (Option 2 in Darling's Proposal) utilizing Arizona state plane coordinate system. Design survey will include:
 - Perform 3D Laser Scanning of the Aerospace Blvd/ Nogales Hwy intersection limits including approximately 1600 feet east of Nogales Hwy on Aerospace Parkway, and at the exiting drainage culvert located west of Raytheon Blvd.
 - Perform field survey to on Aerospace Parkway, collecting 300 ft cross sections (ROW to ROW) at 50 ft intervals and existing visible utility features.
 - The Aerospace Parkway/Raytheon Blvd intersection is not included in the survey.
 - Post process the survey and scanning data to produce a 2D Orthographic images showing a plan view of the entire scan in a digital drawing, registered scan data point files, full 3D model of objects greater than 3 inches in diameter in a format suitable for design software, survey control points shown on map and a coordinate list in CSV or ASCII file format, a topographic map at ½ foot contour interval.
3. Prepare Right-of-Way survey. Identify existing monumentation and property corners. Existing right-of-way alignment will be defined with all changes in the right-of-way limits using records (Records of Surveys and Assessor's Maps) and found monumentation. Prepare draft right-of-way plans/record of survey per Pima County requirements. All found survey monuments with descriptions, recorded and measured dimensions and bearings; Pima County Tax Assessors data (owners name, tax id. no., and address), section and quarter section corners and lines, and right-of-way and property lines shall be shown.

Deliverables:

- Draft RW Plans /Record of Survey; one hardcopy and pdf.
- 3D surface model of the scanned area
- Topographic map at ½ foot contour intervals.

2.4 Traffic Analysis – Kittelson will perform a traffic engineering evaluation of existing and future (2040) traffic demand to determine necessary multi-modal capacity, operations, and safety improvements at the Nogales Hwy/Aerospace Parkway intersection and improvements at the existing

UPRR crossing, as well as develop the traffic volumes and EASLs for the design of the pavement section/treatment on Nogales Hwy.

Existing traffic volume data will be collected, including intersection turning movement counts (AM/PM peak periods), and 24-hr volumes on Nogales Hwy. Future traffic projections will be generated based on existing volumes, traffic projections generated by the current PAG 2045 travel demand model, and traffic volumes estimates for expected development of the Raytheon plant and properties served by Aerospace Parkway. Interim and ultimate design years will be evaluated.

Kittelson will coordinate with Pima County Traffic Engineering and the AECOM team in this analysis, as well as the analysis and recommended improvements at the Raytheon Blvd/Aerospace Parkway intersection. It is anticipated that the AECOM team will develop interim and ultimate (2040) traffic projections for Aerospace Parkway and Raytheon Blvd. Kittelson will review improvement alternatives proposed at the Raytheon Blvd intersection and provide feedback to the AECOM team.

Deliverables:

- Initial and Final Traffic Engineering Memorandum, one hardcopy and pdf.

2.5 Drainage Analysis – Drainage analysis will be conducted by CMG Drainage. Refer to their attached scope of work. Based on the roadway alignment and cross sections proposed by Kittelson, the following drainage analysis will be conducted:

- Conveyance of the outfall from the 36" pipe located 1000' east of Nogales Hwy under the new lanes to a new retention basin located south of the roadway. Full re-analysis of this existing culvert will not be conducted. The retention will be sized for runoff from the roadway corridor only.
- Hydraulic analysis of extending the existing 4-24" pipe culvert located west of Raytheon Blvd with a modified drop-inlet design. Full re-analysis of this existing culvert will not be conducted.
- Hydraulic analysis of extending the existing pipe culvert located east of Raytheon Blvd will be conducted by AECOM. It is not anticipated that additional analysis of the rip-rap channel connected to this culvert and paralleling Aerospace Pkwy will be required. Rather it is assumed that this channel will be reconstructed to the same existing dimensions to accommodate the roadway widening.
- Drainage analysis of the Nogales Hwy intersection for existing and improved conditions. The analysis will identify necessary drainage improvements at this intersection, however will not address the existing box culvert crossing Nogales Hwy just south of the intersection.

Deliverables:

- Initial and Final Drainage Memorandum, one hardcopy and pdf.

2.6 Geotechnical Analysis – A geotechnical analysis will be conducted by Ninyo & Moore to determine soil conditions for the roadway widening and develop an appropriate pavement design for the Nogales Hwy intersection. Refer to their attached scope of work. It is anticipated that the pavement section used for the existing Aerospace Parkway lanes (6" AC on 10" AB) will be used for the widening. The geotechnical analysis will be conducted according to Section 3.12 of the Pima County Design Manual. The analysis will include:

- Six (6) pavement borings - two at the Nogales Hwy intersection, three along the proposed alignment of the new Aerospace Pkwy lanes, and one within the JUT where Aerospace Pkwy crosses.
- Evaluation of the soils along the new pavement alignment to confirm consistency with those in the existing pavement. No new pavement design for Aerospace Parkway is anticipated.
- Evaluation and recommended treatment of soils or modification of existing pavement section at the JUT crossings.
- Recommended pavement design/treatment for the Nogales Hwy intersection.

Deliverables:

- Initial and Final Geotechnical Memorandum, one hardcopy and pdf

2.7 Existing Conditions Model – An existing conditions 3-D model will be developed in AutoCAD Civil 3D from the design and right-of-way survey data and information obtained from roadway and utility as built plans. Model development will include a quality control review.

2.8 Concept Design – A 30% design, including typical sections, alignment, profile, intersection lane configuration and striping will be prepared. The design will incorporate the Aerospace Pkwy/Raytheon Blvd geometry and lane configuration prepared by the AECOM team. A roll plot and exhibits will be prepared for review with Pima County staff, the CMAR, and other project stakeholders. A resolution meeting will be held to address comments on the concept design. It is understood that landscape and irrigation design will not be included with the Aerospace Pkwy widening.

2.9 Concept Phase Cost Estimate – Kittelson will prepare a concept level cost model, including earthwork calculations.

Deliverables:

- Design Summary Report, draft and final, one hard copy and pdf
- Roll plot and exhibits
- Comment resolution summary
- Concept cost model

2.10 Design Summary Report– Kittelson will document the results of the concept phase in a brief design summary report. The report will summarize the results and recommendations of the various technical and environmental analyses, alternatives considered, and the concept design decisions. The report will include exhibits of key design features, rather than concept level plans. Draft and final documents will be prepared.

Deliverables:

- Draft and final design concept summary , one hard copy and pdf

2.11 CMAR Coordination – Kittelson will coordinate with the CMAR and other stakeholders to review and finalize the concept design and coordinate cost items.

Task 3. Preliminary Design (60%)

3.1 Preliminary Design Model – the preliminary design model will reflect the approved concept design, tie-ins at to the Raytheon Blvd intersection, side street designs, drainage modifications and new

facilities, improvements at the Nogales Hwy intersection, and modifications to utilities (JUT, water, sewer) along Aerospace Pkwy, . CMAR value engineering suggestions will also be incorporated into the design, as approved by Pima County.

3.2 Preliminary Plans – design plans will be produced from the design model and e distributed for review. The design submittal will include one (1) 11"x17" plan set and a pdf. The pdf will be created in Bluebeam to allow for electronic commenting. Plan content will include:

- Cover
- General construction notes
- Typical sections/pavement sections
- Survey control
- Geometry
- Roadway plan and profile
- Side street plan and profile
- Roadside plans
- Staking plans
- Culvert plan and profile
- Drainage retention plan
- Pavement marking plans
- Signing plans and summary
- Traffic signal plan
- Erosion control plans
- Sewer modifications
- Water modifications
- JUT modifications
- Cross sections
- Right-of-way plans

3.3 Preliminary Cost Estimate – the cost estimate model will be refined based on the preliminary design and feedback from the CMAR.

Deliverables:

- Preliminary design model in Civil 3D
- Preliminary plans, one hardcopy and pdf.
- Comment resolution summary
- Preliminary cost model

3.4 CMAR Coordination will include review of the preliminary design, evaluation of value engineering suggestions, rectify differences between the Kittelson/CMAR cost estimates, and review of GMP1.

3.5 QA/QC Review – A QC review of the 60% design and cost estimate will be conducted according to the project QC plan.

Task 4. Final Design

4.1 Final Design Model - the revised design model will reflect the 60% comment resolution, CMAR constructability and value engineering suggestions, as approved by Pima County, utility modifications, and necessary details.

4.2 Initial Construction Plans (GMP2/GMP3) - Design plans will be prepared and distributed for review. It is anticipated that the plans will include separate GMP2 and GMP3 packages. Plan sheets added to those provided at 60% will include summary tables, drainage, erosion control, and other necessary details, sign formats, and traffic signal equipment and conductor schedules.

4.3 Initial Specifications (GMP2/GMP3) – Special provisions will be prepared for GMP2 and GMP3.

4.4 Detailed Cost Estimate (GMP2/GMP3) – the cost estimate model will be refined based on the preliminary design comments and feedback from the CMAR. GMP2 and GMP3 quantity and cost estimates will be prepared.

Deliverables:

- Revised design model in Civil 3D
- Revised plans - one hardcopy and pdf.
- Preliminary special provisions - one hardcopy and pdf
- Comment resolution summary
- Revised cost model

4.5 CMAR Coordination will include review of the final design model and plans, review of preliminary special provisions, rectify differences in the Kittelson/CMAR cost estimates and coordinate GMP2 and GMP

4.6 QA/QC Review - A QC review of the 90% design, specifications, and cost estimate will be conducted according to the project QC plan.

Task 5. Construction Documents

5.1 Final Design Model – the final design model will reflect the 90% comment resolution, CMAR constructability and value engineering suggestions, as approved by Pima County, and approved utility modifications.

5.2 Final Plans – (GMP2/GMP3) – Final sealed construction plans will be prepared for each GMP. The project SWPPP binder will be prepared.

5.3 Final Specifications – (GMP2/GMP3) – Final sealed special provisions will be prepared for each GMP

5.4 Final Cost Estimate – (GMP2/GMP3) – Final cost estimates will be prepared.

Deliverables:

- Final design model in Civil 3D
- Final plans - one hardcopy and pdf.
- Final special provisions - one hardcopy and pdf
- Comment resolution summary
- Final cost estimate
- Project SWPPP binder, draft and final versions, 2 hardcopies and pdf

5.6 CMAR Coordination – Three meetings are anticipated to review the final design and plans sets, rectify differences in the Kittelson/CMAR cost estimates and coordinate GMP2 and GMP

5.7 QA/QC Review - A QC review of the final construction documents will be conducted according to the project QC plan.

Task 6. Environmental Clearance

6.1 Environmental Analysis- All environmental assessments and documentation required will be conducted by Pima County, including biological evaluation, Section 404 permitting, hazardous materials survey, and cultural resources investigation. A native plant inventory of the areas not previously covered will be conducted by the Wheat Design Group. Two (2) meetings with Pima County Environmental staff are anticipated.

Task 7. RW Clearance

7.1 Right of Way Plans – Darling Geomatics will prepare right-of-way plans for the project per the Pima County Roadway Design Manual requirements. Draft and final sealed right-of-way plans will be prepared. Darling will also monument the proposed right-of-way.

7.2 Legal Descriptions -- Darling will prepare legal descriptions, with a parcel sketch, required for right-of-way acquisition. Six (6) legal descriptions are assumed – 1 for ROW, 2 for drainage easements, 3 TCEs are estimated.

Kittelson will review the right-of-way plans and legals, and incorporate the right-of-way plans into the project plan set.

Deliverables:

- Final right-of-way plans.
- Draft and final legal descriptions.

Task 8. Utility Coordination

8.1 Utility Coordination – Coordination with utilities will include:

- Participation by utilities in the kickoff workshop.
- Kittelson will gather utility as-built information and mapping and incorporate the information into the roadway design model.
- Kittelson will work with the Pima County Utility Coordinator to schedule initial meetings with individual utilities to determine design responsibilities, necessary agreements, and develop an initial schedule and milestones.
- It is anticipated that Kittelson will design modifications required to mitigate impacts to the PCRWRD sewer line, Tucson Water facilities, communications and power conduits within the JUT, and relocations/reconstruction of pull boxes, communication vaults, and manholes. It is assumed that designs required for the relocation of communications cables and underground power conductors will be the responsibility of the affected utilities.
- Design submittals will be distributed to each utility for review.
- It is anticipated that three(3) coordination meetings with each utility will be required through the design process.
- It is assumed that potholing needed to verify utility locations at potential conflicts will be conducted by the CMAR

Deliverables:

- Plan submittals distributed to utilities through the Pima County Utility Coordinator
- Design models will be available to utilities (e.g. SW Gas, TEP) for use in their relocation designs.
- Utility meeting minutes
- Utility coordination log

Task 9. UPRR Coordination

Kittelson will lead the UPRR coordination with support from CTC to obtain the necessary agreements with UPRR for widening the existing at-grade crossing.

9.1 Meetings with UPRR – Meetings with the UPRR Arizona Office of Industry and Public Relations will include an initial coordination meeting to define the project and agreement requirements and in conjunction with the preparation and execution of the Pima County/UPRR project agreement. Kittelson will monitor the status of the UPRR agreement and approval process monthly.

9.2 Preliminary Engineering Agreement – Kittelson/CTC will prepare and secure the preliminary engineering agreement (PEA) with the UPRR. This will include, a field review with UPRR, preparation of the concept design for the crossing improvements and pre-emption, and preparation and submittal of the PEA package. Kittelson/CTC will coordinate and respond to all UPRR questions and requests to secure PEA approval. The PEA application fee is included in our budget.

9.3 Pima County/UPRR Project Agreement – Kittelson/CTC will prepare and secure the required project agreement. Additional fees required by UPRR for agreement processing and the design and construction of the at-grade crossing improvements by the UPRR will be identified and included in the project cost. It is anticipated that the CMAR will be responsible for securing all necessary permits to construct roadway improvements within UPRR right-of-way and coordinating their work with the UPRR contractor.

Deliverables:

- Preliminary engineering agreement submittal and approval.
- Pima Count/UPRR project agreement approval.

Task 10. Public Involvement

10.1 Property Owner Meetings – No public meetings are anticipated for the project. Kittelson will prepare for and attend four (4) meetings with property owners during project development. It is anticipated that Pima County will schedule all property owner meetings and will be the primary contact with the public.

Deliverables:

- Meeting materials and summaries.

Task 11. Additional Design Services – The Kittelson Team will conduct additional design services as requested by Pima County. These may include preparing field review and sketch plans for repaving/regrading of Eisenhower Road, additional landscape/irrigation design, and value engineering of drainage or pavement design alternatives proposed by the CMAR.

Task 12. Construction Engineering Services – The Kittelson Team will provide requested construction engineering services on a time and materials basis. These services will include typical post design activities (responding to questions or providing clarification for the CMAR, reviewing submittals and, shop drawings, and developing as-built drawings) as well as construction engineering/administration support desired by Pima County. Construction engineering/administration support tasks will be conducted by Horrocks Engineering. A separate scope of work and fee estimate will be prepared by Horrocks for these services at the time of construction. Horrocks Engineering scope and fee estimate will be approved by Pima County prior to commencement. If mutually agreed to add scope and/or fee, an Amendment to the Contract prior to the start of Construction activities will be required.

Fee Estimate Summary
Aerospace Parkway Widening
Kittelson & Associates, Inc.

	Kittelson			Total
	Labor	Fee	Directs	
Task 1. Project Management	\$ 55,146	\$ 5,515	\$ -	\$ 60,660
Task 2. Concept Phase (30%)	\$ 120,198	\$ 12,020	\$ 3,160	\$ 135,378
Task 3. Preliminary Design (60%)	\$ 134,468	\$ 13,447	\$ 260	\$ 148,175
Task 4. Final Design	\$ 102,918	\$ 10,292	\$ 260	\$ 113,470
Task 5. Construction Documents	\$ 41,481	\$ 4,148	\$ 260	\$ 45,890
Task 6. Environmental Clearance	\$ 3,269	\$ 327	\$ -	\$ 3,596
Task 7. RW Clearance	\$ 4,067	\$ 407	\$ -	\$ 4,473
Task 8. Utility Coordination	\$ 21,691	\$ 2,169	\$ 600	\$ 24,461
Task 9. UPRR Coordination	\$ 12,011	\$ 1,201	\$ 759	\$ 13,971
Task 10. Public Involvement	\$ 4,953	\$ 495	\$ -	\$ 5,448
Task 11. Additional Design Services	\$ 19,318	\$ 1,932	\$ -	\$ 21,249
Task 12. Construction Services	\$ 38,347	\$ 3,835	\$ -	\$ 42,181
Kittelson SubTotal	\$ 557,867	\$ 55,787	\$ 5,299	\$ 618,953
Subconsultant Fees				
CMG; Drainage Analysis/Report	\$ 24,032	\$ 2,403	\$ 1,225	\$ 27,660
WDG; NPPP, Erosion Control	\$ 22,892	\$ 2,289	\$ 26	\$ 25,207
Darling; Survey, ROW Drawings, Legal Descriptions	\$ 45,405	\$ 4,540	\$ -	\$ 49,945
Ninyo & Moore; Geotechnical Investigation/Memo	\$ 12,682	\$ 1,268	\$ 4,810	\$ 18,760
CTC; UPRR Coordination	\$ 20,192	\$ 2,019	\$ 1,499	\$ 23,710
Subconsultant SubTotal				\$ 145,282
Design Fee Total				\$ 764,235

Kittelson Associates

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4/11/2017

Preliminary Hours and Fee Estimate
Aerospace Parkway
Kittelson & Associates

Project Summary	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/D esigner	Senior Technician	Technician	Clerical/ Admin	Hours	Labor +OH Cost	Fee (10%)	Direct Costs
	\$/4.34	\$54.19	\$42.89	\$36.36	\$25.35	\$36.14	\$24.39	\$21.68		KAI	KAI	KAI
Task 1. Project Management	108	120	68	0	0	0	0	26	322	\$55,146	\$5,515	\$ -
Task 2. Concept Phase (30%)	88	180	182	171	167	20	151	16	975	\$120,198	\$12,020	\$ 3,160
Task 3. Preliminary Design (60%)	40	122	257	222	216	130	210	2	1199	\$134,468	\$13,447	\$ 260
Task 4. Final Design	38	113	196	132	141	44	259	2	925	\$102,918	\$10,292	\$ 260
Task 5. Construction Documents	14	51	92	24	60	14	118	2	375	\$41,481	\$4,148	\$ 260
Task 6. Environmental Clearance	10	6	0	0	0	0	0	0	16	\$3,269	\$327	\$ -
Task 7. RW Clearance	4	14	4	0	0	0	4	0	26	\$4,067	\$407	\$ -
Task 8. Utility Coordination	40	40	30	0	0	0	20	8	138	\$21,691	\$2,169	\$ 600
Task 9. UPRR Coordination	44	4	0	0	10	0	8	0	66	\$12,011	\$1,201	\$ 759
Task 10. Public Involvement	12	10	0	0	0	0	4	4	30	\$4,953	\$495	\$ -
Task 11. Additional Design Services	14	40	44	20	0	0	20	0	138	\$19,318	\$1,932	\$ -
Task 12. Construction Services	22	78	76	40	0	0	80	0	296	\$38,347	\$3,835	\$ -
PROJECT TOTAL	434	778	949	609	594	208	874	60	4506	\$ 557,867	\$ 55,787	\$ 5,299

Kittelson Associates, Inc.

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4/11/2017

Hours and Fee Estimate Detail
Aerospace Parkway Widening
Kittelson & Associates

	Project Mgr: Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor OH Cost
	\$74.34	\$54.79	\$42.89	\$36.36	\$25.35	\$36.14	\$24.39	\$21.68		KAI
Task 1. Project Management										
1.1 Progress Meetings (10)	30	20						8	58	\$ 10,671
1.2 Comment Resolution Meetings (4)	12	16	8					4	40	\$ 6,704
1.3 Schedule & Administration	24	12						8	44	\$ 7,974
1.4 Quality Control Plan	6	8						6	20	\$ 3,093
1.5 CMAR Coordination (24)	36	64	60						160	\$ 26,702
Total	108	120	68	0	0	0	0	26	322	\$ 55,146

	Project Mgr: Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor OH Cost
										KAI
Task 2. Concept Phase (30%)										
2.1 Kickoff and Partnering Workshop	12	12	8				4	4	40	\$ 6,334
2.2 Data Collection	4	8	12	8					32	\$ 4,700
2.3 Survey and Mapping	2	8	10				4		24	\$ 3,396
2.4 Traffic Analysis	16	60	10	36	40		8	4	174	\$ 22,904
2.5 Drainage Analysis	8	8	8						24	\$ 4,197
2.6 Geotechnical Analysis	6	8	4						18	\$ 3,220
2.7 Existing Conditions Model	6	16	30	40	40	10	80		222	\$ 22,539
2.8 Concept Design	16	30	60	45	45	10	45		251	\$ 29,407
2.9 Concept Phase Cost Estimate	8	10	16	12	12				58	\$ 7,836
2.10 Design Summary Report	10	20	24	30	30		10	8	132	\$ 15,667
Total	88	180	182	171	167	20	151	16	975	\$ 120,198

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4/11/2017

Hours and Fee Estimate Detail
Aerospace Parkway Widening
Kittelson & Associates

	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor - OH Cost
	\$74.34	\$54.79	\$42.89	\$36.36	\$25.35	\$36.14	\$24.39	\$21.68		KAI
Task 3. Preliminary Design (60%)										KAI
3.1 Preliminary Design Model	5	29	181	165	162	39	147	0	728	\$ 75,710
3.2 Preliminary Plans	19	69	60	41	54	91	63	0	397	\$ 47,122
3.3 Preliminary Cost Estimate	8	12	16	16					52	\$ 7,686
3.5 QA/QC Review	8	12						2	22	\$ 3,951
Total	40	122	257	222	216	130	210	2	1199	\$ 134,468
Model and Plans Breakout - 60% Design										
Cover Sheet			1				2		3	\$ 280
General Notes			2						2	\$ 262
Typical Sections		4	20		20		20		64	\$ 6,318
Horizontal Control		2	20	10	10		20		82	\$ 6,320
Rightway Plans	2	8	40	50	40	2	10		182	\$ 18,855
Side Street Plans	2	2	20	30	25	2	30		111	\$ 11,115
Driveway Plans		2	6	10	5	2	10		35	\$ 3,579
Cross Drainage Plans	2	8	40		60	2	40		152	\$ 14,857
Storm Drain Channel Plans	2	2	40		40	2	40		126	\$ 12,308
Landscape SWPPP		2	6						8	\$ 1,119
Pavement Marking/Signing	2	20	2	24	16	20			84	\$ 10,159
Traffic Signals	8	16	8	12		40			84	\$ 11,273
Roadway Lighting									2	\$ -
H.T. Trench Adjustments	2	16	10	24		24			76	\$ 9,741
Tucson Water Relocation (Aerospace)	2	8	10	30		20			70	\$ 8,629
Sewer Modifications (Aerospace)	2	8	8	16		16			60	\$ 6,374
Cross Section Sheets			8				8		16	\$ 1,641
Subtotal for Model and Plans	24	98	241	206	216	130	210	0	1125	\$ 122,832
Plans Hours Only	19	69	60	41	54	91	63	0	397	

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Hours and Fee Estimate Detail
Aerospace Parkway Widening
Kittelson & Associates

	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor - OH Cost
	\$74.34	\$54.79	\$42.89	\$36.36	\$25.35	\$36.14	\$24.39	\$21.68		KAI
	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor - OH Cost
Task 4. Final Design										KAI
4.1 Final Design Model	4	16	66	48	56	4	100	0	294	\$ 29,745
4.2 Initial Construction Plans - GMP2/GMP3	16	47	98	72	85	40	151	0	509	\$ 54,195
4.3 Initial Specifications - GMP2/GMP3	8	24	16						48	\$ 7,916
4.4 Detailed Cost Estimate- GMP2/GMP3	4	16	16	12			8		56	\$ 7,599
4.6 QA/QC Review	6	10						2	18	\$ 3,163
Total	39	113	196	132	141	44	259	2	925	\$ 102,918
Model and Plans Breakout - 90% Design										
Cover Sheet			1				1		2	\$ 205
General Notes			2				2		4	\$ 410
Typical Sections			4		8		8		20	\$ 1,737
Horizontal Control		4	4				10		15	\$ 1,431
Curb and Median Geometry		2	10	15	15		25		67	\$ 6,325
Civil and Drainage Details	1	10	30	30	30		45		146	\$ 14,815
Roadway Plans	2	4	20	20	20		40		166	\$ 10,477
Side Street Plans	1	2	10	25			15		53	\$ 5,257
Driveway Plans		2	8		15		10		35	\$ 3,284
Cross Drainage Plans	1	4	20		25		25		75	\$ 7,304
Storm Drain/Channel Plans	1	2	15		8		24		50	\$ 4,927
Landscape			8						8	\$ 1,046
Pavement Marking/Signage	2	12	6		20	20			60	\$ 6,991
Traffic Signals	8	8	2			24			42	\$ 6,057
Roadway Lighting									0	\$ -
Cross Section Sheets			8				8		16	\$ 1,641
U/T Trench Adjustments		8	8	12			12		40	\$ 4,606
Tucson Water Relocation (Aerospace)	2	4	4	10			10		36	\$ 3,944
Sewer Modifications (Aerospace)	2	4	4	8			10		28	\$ 3,276
Subtotal for Model and Plans	20	63	164	120	141	44	251	0	883	\$ 84,240
Plans Hours Only	16	47	98	72	85	40	151	0	509	

Kittelson Associates, Inc.

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4/11/2017

Hours and Fee Estimate Detail
Aerospace Parkway Widening
Kittelson & Associates

Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor - OH Cost
\$74.34	\$54.79	\$42.89	\$36.36	\$25.35	\$36.14	\$24.39	\$21.68		KAI

	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor - OH Cost
Task 5. Construction Documents										KAI
5.1 Final Design Model	1	2	7	2	6	1	12	0	31	\$ 3,165
5.2 Final Plans - GMP2/GMP3	3	23	67	22	54	13	106	0	288	\$ 29,219
5.3 Final Specifications - GMP2/GMP3	2	10	8						20	\$ 3,171
5.4 Final Cost Estimate - GMP2/GMP3	4	8	10						22	\$ 3,551
5.7 QA/QC Review	4	8						2	14	\$ 2,376
Total	14	51	92	24	60	14	118	2	375	\$ 41,481
Model and Plans Breakout - 100% Design										
Cover Sheet			1				1		2	\$ 205
General Notes			1				1		2	\$ 205
Summary Tables			4		4		10		18	\$ 1,576
Typical Sections			1		1		1		6	\$ 506
Horizontal Control			1		1		4		6	\$ 506
Curb and Median Geometry		1	4		6		12		23	\$ 2,047
Civil and Drainage Details		1	16	8	10		20		64	\$ 6,373
Roadway Plans	1	2	8		8		10		35	\$ 3,416
Side Street Plans		1	2	4	4		4		15	\$ 1,479
Driveway Plans							1		1	\$ 298
Cross Drainage Plans		2	12		12		8		34	\$ 3,427
Storm Drain Channel Plans		1	4		4		12		21	\$ 1,892
Landscape			4						4	\$ 523
Pavement Marking/Signing	1	2	2		1	6			15	\$ 1,703
Traffic Signals	2	2	2			8			14	\$ 1,931
Roadway Lighting									0	\$ -
J/T Trench Adjustments		4	4	4			6		18	\$ 2,081
Fucson Water Relocation (Aerospace)		4	4	4			8		20	\$ 2,230

Kittelson Associates, Inc.

H:\profile\20894 - Aerospace Parkway Phase II\admin\Contract\Cost Proposal\20894 Aerospace Fee Estimate v4.0.xls

4/11/2017

Hours and Fee Estimate Detail
Aerospace Parkway Widening
Kittelson & Associates

	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor -OH Cost
	\$74.34	\$54.79	\$42.89	\$36.36	\$25.33	\$36.14	\$24.39	\$21.68		KAI
Sewer Modifications (Aerospace)		2	2	4			6		14	\$ 1,486
Cross Section Sheets			2				2		4	\$ 410
Subtotal for Model and Plans	4	25	74	24	60	14	118	0	319	\$ 32,384
Plans Hours Only	3	23	67	22	54	13	106	0	288	

	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor -OH Cost
Task 6. Environmental Clearance										KAI
6.1 Environmental Analysis	8	4							12	\$ 2,482
6.2 Environmental Clearance Memo	2	2							4	\$ 788
Total	10	6	0	0	0	0	0	0	16	\$ 3,269

	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor -OH Cost
Task 7. RW Clearance										KAI
7.1 Right of Way Plans	2	8	4						14	\$ 2,313
7.2 Legal Descriptions	2	6					4		12	\$ 1,753
Total	4	14	4		0		4	0	26	\$ 4,067

Kittelson Associates, Inc.

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4/11/2017

Hours and Fee Estimate Detail
Aerospace Parkway Widening
Kittelson & Associates

	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor - OH Cost
	\$74.34	\$54.79	\$42.89	\$36.36	\$25.35	\$36.14	\$24.39	\$21.68		KAI
	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor - OH Cost
Task 8. Utility Coordination										KAI
8.1 Utility Coordination	40	40	30				20	8	138	\$ 21,691
Task 7 - Total	40	40	30	0	0	0	20	8	138	\$ 21,691
	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor - OH Cost
Task 9. UPRR Coordination										KAI
9.1 Meetings with UPRR (Phoenix)(2)	16								16	\$ 3,627
9.2 Preliminary Engineering Agreement	20	4			10		8		42	\$ 6,570
9.3 Pima County UPRR Project Agreement	8								8	\$ 1,814
Total	44	4	0	0	10	0	8	0	66	\$ 12,011
	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor - OH Cost
Task 10. Public Involvement										KAI
10.1 Property Owner Meetings (4)	12	10					4	4	30	\$ 1,953
Total	12	10	0	0	0	0	4	4	30	\$ 4,953

Kittelson Associates, Inc.

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4/11/2017

Hours and Fee Estimate Detail
Aerospace Parkway Widening
Kittelson & Associates

	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor + OH Cost
	\$74.34	\$54.79	\$42.89	\$36.36	\$25.33	\$36.14	\$24.39	\$21.68		KAI
	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor + OH Cost
Task 11. Additional Design Services										KAI
11.1 Eisenhower Rd Repaving/Regrading	4	12	16				20		52	\$ 6,492
11.2 Evaluate Value Engineering Proposals	8	20	20	20					68	\$ 9,989
11.3 Additional Landscape Design	2	8	8						18	\$ 2,836
Total	14	40	44	20	0	0	20	0	138	\$ 19,318
	Project Mgr/ Principal	Associate Engineer	Senior Engineer	Engineer	Analyst/ Designer	Senior Technician	Technician	Clerical/ Admin	Hours	Labor + OH Cost
Task 12. Construction Services										KAI
12.1 CMAR Coordination/Construction Meetings	8	24	24						56	\$ 8,963
12.2 Submittal Reviews	2	16	20						38	\$ 5,743
12.3 As-Builts	2	8	8				20		38	\$ 4,324
12.4 Construction Management Support	10	30	24	40			60		164	\$ 19,317
Total	22	78	76	40	0	0	80	0	296	\$ 38,347

Kittelson Associates, Inc.

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4/11/2017

Direct Cost Estimate
Aerospace Parkway Widening
Kittelson & Associates

Item	Unit	Cost	Task									
			1	2	3	4	5	6	7	8	9	10
Traffic Counts												
2-day, 24-hr vehicle classification	\$	350.00		1	\$ 350							
AM/PM Peak Period Turning Movement Counts	\$	350.00		1	\$ 350							
Reproduction												
Color Roll Plots	\$	90.00		2	\$ 180	2	\$ 180	2	\$ 180			
11 x 17 Plan Sets (250 sheets each)	\$	40.00		2	\$ 80	2	\$ 80	2	\$ 80	15	\$ 600	
Traffic Report	\$	100.00		2	\$ 200							
Design Summary Report	\$	100.00		2	\$ 200							
Mileage												
Tucson to Phoenix (240 mi. roundtrip)	\$	0.54									480	\$ 259
Miscellaneous												
UPRR Preliminary Engineering Application Fee	\$	500.00									1	\$ 500
Percolation Test for Retention Basin	\$	1,800.00		1	\$ 1,800							
Total Direct Costs					\$ 3,160	\$ 260	\$ 260	\$ 260		\$ 600	\$ 759	

Rate Information Table

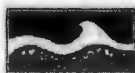
Firm Name: Kittelson & Associates, Inc.

Contract Description: Aerospace Parkway Widening

Overhead %: 204.96%

Profit %: 10.00%

Labor Classification	Average Direct Labor Hourly Rate	Overhead (204.96%* Labor)	Profit (10%* L+OH)	Billing Rate
Principal	\$74.34	\$152.36	\$22.67	\$249.36
Associate Engineer	\$54.79	\$112.29	\$16.71	\$183.78
Senior Engineer	\$42.89	\$87.91	\$13.08	\$143.89
Engineer/Engineering Associate	\$36.36	\$74.53	\$11.09	\$121.99
Analyst/Designer	\$25.35	\$51.96	\$7.73	\$85.05
Senior Technician	\$36.14	\$74.08	\$11.02	\$121.24
Technician/Drafter	\$24.39	\$49.99	\$7.44	\$81.82
Administrative	\$21.68	\$44.44	\$6.61	\$72.73



CMG DRAINAGE ENGINEERING, INC.

3555 N. MOUNTAIN AVE. • P.O. BOX 64880 (MAIL) • TUCSON, AZ 85728 • PHONE: (520) 882-4244 • FAX: (520) 888-1421

April 4, 2017

Jason Simmers, PE
Kittleson & Associates, Inc.
2 East Congress Street, Suite 705
Tucson, Arizona 85701

**RE: Engineering Services: Aerospace Parkway Widening Project --
Drainage Engineering Proposal
Pima County Solicitation Number 247691**

Dear Jason:

CMG Drainage Engineering appreciates the opportunity to submit this Aerospace Parkway Widening Project drainage engineering proposal. Our proposed scope of work and fee estimate are shown below.

PROJECT OVERVIEW

The overall project consists of widening approximately 1.15 miles of Aerospace Parkway from two lanes to four lanes of traffic from the intersection of Nogales Highway and extending to a location 1800 feet east of the intersection of Raytheon Parkway. Additionally, there is 0.42 miles of lane improvements on Nogales Highway included as part of this project. CMG Drainage Engineering, Inc. (SUBCONSULTANT) will be responsible for drainage engineering services as described herein.

The scope of work for this effort includes CMG Drainage Engineering, Inc. (CMG) providing Drainage Engineering Design support services per the Project Management Office's Construction Manager at Risk (CMAR) Process.

The 2013 Pima County Roadway Design Manual (RDM), and relevant updates, shall be used to provide roadway and drainage design criteria. Drainage report submittals will not follow the RDM, but will be aligned with the stages identified in the Kittleson Technical Delivery Plan. A Draft Drainage Report will coincide with the Concept Stage; a Final Drainage Report will coincide with the Schematic Design Stage and a Drainage Report Addendum will align with the Final Design Stage. An optional task to address value engineering is provided in the event of CMAR originated value changes.

WORK TASKS

TASK 1.0 PROJECT ADMINISTRATION

Assumptions:

- 1. Attendance by SUBCONSULTANT at meetings will be limited to the Task Leader.*
- 2. SUBCONSULTANT's hours for performing quality control shall be billed toward the specific tasks.*
- 3. SUBCONSULTANT will provide task schedule durations as requested and will update as necessary but will not prepare detailed Gant charts for drainage tasks.*

Task 1.1 Project Management. The anticipated management activities are as follows:

- a. Management of Task Schedules
- b. Coordination with Client and Team
- c. Invoicing and Progress Reports
- d. Internal management of Staff working on the project

Task 1.2 Meetings This task involves attendance at weekly and discipline specific work sessions. The anticipated design team meetings and activities are as follows:

- a. Attend Kickoff Meeting in person
- b. Attend weekly meeting by phone (8 total).
- c. Attend two (2) Drainage Design Working Sessions.
- d. Attend one (1) comment resolution meeting

TASK 2.0 DRAINAGE REPORT

Assumptions:

1. *The SUBCONSULTANT will follow RDM drainage criteria but has proposed a different submittal format that will be accepted by the Client.*
2. *Prior approved drainage documentation for this alignment will be acceptable for reference.*

Task 2.1 Review Existing Drainage Reports. The SUBCONSULTANT will review the following:

- Hydrology Memo for Aerospace Parkway by HDR;
- Drainage Report for Raytheon Parkway by HDR;

Task 2.2 Drainage Report. The SUCONSULTANT will prepare a report in the phases described below. The work includes preparing and processing the three (3) submittals described below:

2.2.1 Concept Stage - Draft Drainage Report. The SUCONSULTANT will prepare a draft drainage report to confirm design discharges and preliminary hydraulics for the preferred concept.

2.2.2 Preliminary Stage – Final Drainage Report. The SUCONSULTANT will append the Draft Drainage Report and prepare the Final Drainage Report including final hydraulics for the schematic design concept.

2.2.3 Final Design Stage – Drainage Report Addendum. The SUCONSULTANT will document revisions to the design that impact drainage within the Final Design Stage that were not accounted for in Preliminary Stage. This submittal will be a memo with associated revisions.



Deliverables:

- Draft Drainage Report
- Comment Response Letter
- Final Drainage Report
- Drainage Report Addendum

TASK 3.0 ADDITIONAL SERVICES

Assumptions:

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

Task 3.1 Value Engineering – Drainage Structures The CONSULTANT may be called upon to provide revised analysis to address value engineering ideas submitted by the CMAR. Any re-analysis originating from a CMAR request will be addressed under this task.

General Assumptions:

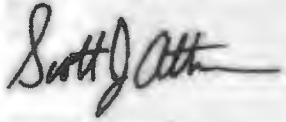
1. *The level of effort for each phase and work task is limited to the amount of labor and expenses identified in a Project Budget spreadsheet (Fee Calculation). Costs are itemized to aid in project tracking purposes only. The budget may be transferred between tasks, provided the total contracted amount is not exceeded. Additional services beyond these limits will be considered Extra Work.*
2. *The PROJECT duration is anticipated to be 37 weeks for the Conceptual Design, Schematic Design and Final Design Services.*
3. *The analyses, design, plans, specifications, and estimate performed or prepared as part of the PROJECT will be in English units. Metric units will not be used on this PROJECT.*
4. *Unless specified within individual tasks, an electronic copy will be submitted to the Client.*
5. *Hydrology values from the HDR memo for the existing Aerospace Parkway will be used as a baseline for existing conditions without any verification.*



Engineering Services: Aerospace Parkway Widening Project
March 27, 2017
Page 4 of 4

Thank you for the opportunity to submit this proposal. Please contact me if you have questions or need additional information.

Sincerely,
CMG Drainage Engineering, Inc.

A handwritten signature in black ink, appearing to read "Scott J. Altherr", is written over a light gray rectangular background.

Scott J Altherr, P.E., CFM
Principal

Attachment: Fee Estimate Table; Rate Schedule



FEE ESTIMATE SUMMARY

DATE: 4/04/2017

PROJECT: Engineering Services: Aerospace Parkway Widening Project

PREPARED BY: Scott Altherr, CMG SOLICITATION NUMBER: 247691

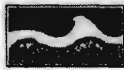
EFFECTIVE DATE: _____ PRIME CONTRACTOR: Kittleson & Associates, Inc.

CONTRACT TIME: _____ CONTRACT TYPE: _____

Item No.	Firm	Discipline	A Direct Labor Rate	B Overhead	C Profit	D Billing Rate
				127.0%	10.0%	
1	CMG Drainage Engineering, Inc.	Project Principal	\$ 56.05	\$ 71.18	\$ 12.72	\$ 140
2	CMG Drainage Engineering, Inc.	Project Manager	\$ 50.06	\$ 63.58	\$ 11.36	\$ 125
3	CMG Drainage Engineering, Inc.	Sr Proj Eng / Hydrologist	\$ 45.89	\$ 58.28	\$ 10.42	\$ 115
4	CMG Drainage Engineering, Inc.	Proj Eng / Hydrologist	\$ 38.05	\$ 48.32	\$ 8.64	\$ 95
5	CMG Drainage Engineering, Inc.	Designer	\$ 31.23	\$ 39.66	\$ 7.09	\$ 78
6	CMG Drainage Engineering, Inc.	CADD Technician	\$ 27.23	\$ 34.59	\$ 6.18	\$ 68
7	CMG Drainage Engineering, Inc.	Clerical / Admin	\$ 20.02	\$ 25.43	\$ 4.54	\$ 50
8				\$ -	\$ -	\$ -
9				\$ -	\$ -	\$ -
10				\$ -	\$ -	\$ -

Formulas

- (A) Direct Labor Rate
 (B) Overhead @ 127% x (A)
 (C) Profit @ 10% x (A + B)
 (D) Billing Rate (A + B + C)



CMG DRAINAGE ENGINEERING, INC.

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

FEE ESTIMATE

Project Name: Engineering Services: Aerospace Parkway Widening Project

Date: April 8, 2017

I. LABOR

Sub-Task 1: Project Management

Personnel	Rate*	Hours	Fee
Project Principal	\$ 140.00	2	\$ 280.00
Project Manager	\$ 125.00	37	\$ 4,625.00
Sr Project Engineer	\$ 115.00	2	\$ 230.00
Project Engineer	\$ 95.00	0	\$ -
Designer	\$ 78.00	0	\$ -
CADD Tech	\$ 68.00	0	\$ -
Clerical / Administration	\$ 50.00	0	\$ -
Sub-Total			\$ 5,135.00

Sub-Task 2: Design

Personnel	Rate*	Hours	Fee
Project Principal	\$ 140.00	0	\$ -
Project Manager	\$ 125.00	16	\$ 2,000.00
Sr Project Engineer	\$ 115.00	4	\$ 460.00
Project Engineer	\$ 95.00	0	\$ -
Designer	\$ 78.00	0	\$ -
CADD Tech	\$ 68.00	0	\$ -
Clerical / Administration	\$ 50.00	0	\$ -
Sub-Total			\$ 2,460.00

Sub-Task 3: Final Design Review

Personnel	Rate*	Hours	Fee
Project Principal	\$ 140.00	0	\$ -
Project Manager	\$ 125.00	2	\$ 250.00
Sr Project Engineer	\$ 115.00	10	\$ 1,150.00
Project Engineer	\$ 95.00	0	\$ -
Designer	\$ 78.00	0	\$ -
CADD Tech	\$ 68.00	0	\$ -
Clerical / Administration	\$ 50.00	0	\$ -
Sub-Total			\$ 1,400.00

Sub-Task 4: Drainage Report

Sub-Task 2.2.1: Draft Drainage Report

Personnel	Rate*	Hours	Fee
Project Principal	\$ 140.00	2	\$ 280.00
Project Manager	\$ 125.00	10	\$ 1,250.00
Sr Project Engineer	\$ 115.00	24	\$ 2,760.00
Project Engineer	\$ 95.00	0	\$ -
Designer	\$ 78.00	32	\$ 2,496.00
CADD Tech	\$ 68.00	8	\$ 544.00
Clerical / Administration	\$ 50.00	0	\$ -
Sub-Total			\$ 7,330.00

Personnel	Rate*	Hours	Fee
Project Principal	\$ 140.00	2	\$ 280.00
Project Manager	\$ 125.00	12	\$ 1,500.00
Sr Project Engineer	\$ 115.00	20	\$ 2,300.00
Project Engineer	\$ 95.00	0	\$ -
Designer	\$ 78.00	24	\$ 1,872.00
CADD Tech	\$ 68.00	8	\$ 544.00
Clerical / Administration	\$ 50.00	0	\$ -
Sub-Total			\$ 6,496.00

Personnel	Rate*	Hours	Fee
Project Principal	\$ 140.00	0	\$ -
Project Manager	\$ 125.00	8	\$ 1,000.00
Sr Project Engineer	\$ 115.00	18	\$ 2,070.00
Project Engineer	\$ 95.00	0	\$ -
Designer	\$ 78.00	0	\$ -
CADD Tech	\$ 68.00	8	\$ 544.00
Clerical / Administration	\$ 50.00	0	\$ -
Sub-Total			\$ 3,614.00

TOTAL LABOR \$ **26,435.00**

* Includes overhead at (127)% of labor and profit at (10)% of labor and overhead.

II. ESTIMATE OF DIRECT EXPENSES

Drainage Report Reproduction (8 copies)	\$ 900.00
General large format scanning & plotting	\$ 125.00
General in-house photocopying	\$ 200.00
TOTAL DIRECT EXPENSES	\$ 1,225.00

TOTAL NOT-TO-EXCEED BASE PROJECT COST \$ **27,660.00**

WHEAT DESIGN GROUP

LANDSCAPE ARCHITECTS

April 6, 2017

Jim Schoen
Kittelson & Associates, Inc.
2 East Congress Street, Suite 705
Tucson, Arizona 85701

Re: Aerospace Parkway Widening Project – Scope of Work

Dear Jim,

We are pleased to submit this Scope and Fee proposal for providing landscape architectural services for the Aerospace Parkway Widening Project. We have based this scope and fee on the emails and exhibits your team has provided. Basic services will include submittal of Landscape, Irrigation, and Erosion Control Plans and Details; cacti inventory and transplanting details, Specifications and Cost Estimate. Please refer to the attached Workhour Estimates for a detailed breakdown of services offered.

ASSUMPTIONS

1. Landscape architectural services are provided for 12-months.
2. WDG Scope of Work includes production of a SWPPP binder using Pima County's current template.
3. WDG Scope of Work does not include public participation, including no exhibits for public meetings.
4. This project will not follow the Pima County ESR Guidelines. Only cacti will be inventoried including Pima Pineapple Cacti, saguaros and barrels.
5. Landscape and irrigation will only be for the Aerospace/Raytheon intersection (approx. 500' east and west of the intersection). Erosion Control design will be for the entire project.
6. Pima Association of Governments Standard Specifications and Details (2015) will be used.
7. Any soil testing (Percolation and/or Horticultural Analysis) will be performed by others.
8. Kittelson will provide base files in AutoCAD format.
9. Landscape Architect's hours for performing quality control shall be billed toward the specific tasks.
10. The technical review, checking procedures, and monitoring process shall follow WDG's QA/QC plan.
11. All submittals will be in pdf format, including no mylars for 100% submittal.

INTERNAL PROJECT MANAGEMENT

This task includes administering and recording project documents, invoices, and managing project files.

MEETINGS AND COMMUNICATION

This task includes preparing for and attending the meetings listed below:

- Attend (1) Kick-off and Partnering Workshop
- Attend (1) Design Working Session
- Attend (1) Comment Resolution Meeting
- Participate in Weekly Status/Coordination Call-in Meetings (as needed)

STAGE 1 – CONCEPT PHASE

This task includes development of the Landscape Concept as well as a Concept Stage Cost Estimate. Irrigation and erosion control BMP's will be researched. This task also includes the cacti inventory (Pima Pineapple cacti, saguaros and barrels).

Deliverables:

1. WDG design base files to Kittelson
2. Landscape Concept memorandum

500 N TUCSON BLVD, SUITE 150 | TUCSON, ARIZONA 85715 | T: 520 884 7911 | WWW.WHEATDESIGNGROUP.COM

WHEAT DESIGN GROUP

LANDSCAPE ARCHITECTS

3. *Concept Stage Cost Estimate*
4. *Native Plant memorandum to Pima County*

STAGE 2 – PRELIMINARY DESIGN (SDs)

This task includes preliminary landscape, irrigation and erosion control layout, as well as a Preliminary Cost Estimate.

Deliverables:

1. *WDG design base files to Kittelson*
2. *Preliminary Cost Estimate*

STAGE 3 – FINAL DESIGN (DDs)

This task includes Initial Landscape, Irrigation and Erosion Control Plans & Details, Cacti Transplanting Details, Initial Cost Estimate, and Initial Specifications.

Deliverables:

1. *Initial Landscape, Irrigation and Erosion Control Plans and Details*
2. *Cacti Transplanting Details*
3. *Initial Cost Estimate*
4. *Initial Specifications (identification of what specs are necessary)*

STAGE 4 – CONSTRUCTION DOCUMENTS (CDs)

This task includes final CD's (Plans, Specifications, and Cost Estimate) as well as sealed plans and specifications for each GMP submittal. This task also includes potential post design services during construction: Assisting in the preparation of addendums, addressing questions on the construction documents, and/or product submittals.

Deliverables:

1. *Final CD's: Plans, Specifications and Cost Estimate (pdf submittal to Kittelson)*
2. *Sealed Plans and Specifications for each GMP submittal*
3. *SWPPP binder*

Professional Fees:

The work will be based on the hourly rates provided and based on the hours and tasks listed in the attached Workhour Estimate worksheet. This is a modified Cost plus fixed fee contract. Work beyond this scope will be considered additional services and will not proceed without approval from the Client. Billings for services will be submitted at the end of each month.

Direct Expenses:

Direct expenses include reproduction of SWPPP binder (2 copies).

We very much look forward to working with you on this project.

Sincerely,



Laura Mielcarek, Principal
Wheat Design Group, Inc.

Wheat Design Group DERIVATION OF COST PROPOSAL SUMMARY

PROJECT: **Aerospace Parkway Widening Project**
 TRACS No.:
 DBE: Yes #1025
 PREPARED BY: Laura Mielcarek, Principal
 CONTRACT TIME: 12 months

DATE: 04/05/17
 CONTRACT NO.:
 CONSULTANT: Wheat Design Group, Inc.

DIRECT LABOR COST

TASK DESCRIPTION	CLASSIFICATION	No. HOURS	HOURLY RATE	TOTAL COST
		Hours	Rates	Cost
Landscape Architectural	Principal	19	\$48.00	\$912.00
Services	Project Manager	78	\$36.00	\$2,808.00
	A/E	74	\$31.20	\$2,308.80
	Designer	71	\$27.00	\$1,917.00
(A) Direct Labor		242	Hrs.	<u>\$7,946</u>

NEGOTIATED OVERHEAD

(B) OH Rate x (A) 186.10% x \$7,945.80 = \$14,848

PROFIT

(C) % Profit Rate x (A + B) 10.0% x \$22,891.85 = \$2,289

OTHER DIRECT EXPENSES

(D) Other Direct Expenses
 REPRODUCTIONS (2 copies of SWPPP binder) = \$26

(E) OUTSIDE SERVICES & SUBCONSULTANT COSTS = \$0

ESTIMATED FEES

(F) TOTAL CONSULTANT FEE = \$25,207



April 4, 2017

Jason A Simmers P.E.
Associate Engineer
Kittelson & Associates, Inc.
Transportation Engineering / Planning
2 East Congress Street, Suite 705
Tucson, Arizona 85701
520.544.4067
520.382.4707 (direct)
520.250.7337 (cell)

Subject: Proposed Scope of Work and Cost Estimate
Survey and 3D Laser Scanning
South Nogales Highway, Eisenhower Rd, Aerospace Parkway
Tucson, Arizona

Dear Mr. Simmers,

Pursuant to your request, Darling Geomatics (Darling) is pleased to submit this proposal to perform surveying and 3D scanning services for the above referenced project. The following was prepared after our review of information we received from you via email on March 26, 2017 and includes our proposed scope of services, estimated fee, project assumptions, and anticipated schedule.

Scope of Work

i. Project Limits

1. ROW to include but not limited to 1000' north and 1500' south of South Nogales Highway from the intersection of Aerospace Parkway (formally known as Hughes Access Rd), 1000' of Aerospace Parkway, 200' south along Eisenhower Road and 5280' of Aerospace including the intersections.
2. Side streets – 250' north and south of ROW
3. Driveways 50' north and south of ROW
4. Drainage crossings – 50' up/dn stream

ii. Control: Establish horizontal/vertical control and existing right-of-way.

1. All existing monumentation required to establish horizontal and vertical control will be located. Benchmarks will be set per COT requirements. We expect an adjusted closure of 1:40,000 feet, or better, horizontally and vertically for this project.

- iii. Design Survey - to be completed using laser scanning technology utilizing Arizona state plane coordinate system. The following scope and deliverables will be provided.
 1. Research of City/County Records.
 2. Perform 3D Laser Scanning of the above mentioned limits
 3. Post process the survey and scanning data to produce:
 - a. 2D Orthographic images showing a plan view of the entire scan in a digital drawing.
 - b. Registered scan data point files.
 - c. Full 3D model of objects greater than 3 inches in diameter in a format suitable for design software.
 - d. Survey control points shown on map and a coordinate list in CSV or ASCII file format.
 - e. Topographic map at 1/4 foot contour interval.
 - f. Report document on the accuracy of the survey, inconsistencies, and any other pertinent information about the project.
 4. DELIVERABLES
 - a. Aerial view. (Plan view of project from point cloud data suitable as background for exhibits, but not a survey controlled orthographic photo).
 - b. 3D solid model importable into design software.
 - c. Registered point cloud of the area.
 - d. Topographic map at 1/4 foot contour intervals.
 - e. CAD line work files of the area.
 - f. Record of survey
- iv. Right-of-Way Survey: A right-of-way survey will be completed. A field search of existing monumentation along and property corners will be conducted. The existing right-of-way alignment will be defined with all changes in the right-of-way limits (alleys, side streets, private property boundaries, railroad ROW, etc.) by using records (Subdivision Maps, Records of Surveys and Assessor's Maps) and found monumentation. A Record of Survey of the existing right-of-way will be prepared. A set of 1"=40' scale plan sheets throughout the project shall reflect the resolution of the existing right-of-way and parcel boundaries along this right-of-way. All found survey monuments with descriptions, recorded and measured dimensions and bearings; Pima County Tax Assessors data (owners name, tax id. no., and address), section and quarter section corners and lines, and right-of-way and property lines shall be shown.
- v. Legal Descriptions and Drawings - 6 legal descriptions as follows: 1 ROW, 2 easements and 3 TCE's

EXCLUSIONS

- Survey locations of blue stake and manhole invert elevations are not a part of this proposal.
- True color texturing of the point cloud is not part of this proposal. Point clouds will be colored based on laser return intensity values.



ADDED VALUE

This proposal includes the additional, Darling-exclusive Deliverables:

<ul style="list-style-type: none">Proprietary Five-point Quality Control System: during survey and/or scanning, target acquisition, registration, and modeling	INCLUDED
<ul style="list-style-type: none">Data Accuracy Warranty: all data will be accurate at time of Darling's performed scan. In the unlikely event that a critical inaccuracy of data (at the time of scan) occurs, Darling will conduct re-work at no charge	INCLUDED
<ul style="list-style-type: none">Price Guarantee: change orders only issued if client makes a change or previously unknown factors result in additional work outside of those items clearly defined in the above work scope	INCLUDED
<ul style="list-style-type: none">Lifetime Data Archive: for client's use when data mining is desired	INCLUDED
<ul style="list-style-type: none">Bronze Customer Care Program: limited phone and email support for 3 years; Level 3 Support response time (a Darling Technical Specialist will respond to requests within 72 hours of receiving client's phone request at 520-298-2725 or email to support@darlingdtd.com) – NOTE: requests outside of the original Scope will be subject to an additional charge	INCLUDED
<ul style="list-style-type: none">TruView Free Bubble Viewer measuring and markup software download assistance and initial user training provided by Darling.	INCLUDED

For comparison purposes the following two options are included:

OPTION 1 FULL PROJECT SCANNING PLUS PROVIDING ROW AND UTILITY SURVEY

1. Perform 3D Laser Scanning on the full project limits
2. Establish control survey and perform ROW survey.
3. Provide legal descriptions, monumentation of ROWs and ROW maps

OPTION 2 PARTIAL PROJECT SCANNING SCAN PLUS ROW AND UTILITY SURVEY

1. Perform 3D Laser Scanning of Partial Project Area defined as Aerospace Parkway/Old Nogales Hwy intersection including north/south limits on Old Nogales Hwy ROW, 1600 feet east on Aerospace Parkway and at the culver crossing Aerospace Parkway approximately 300 feet west of Raytheon Blvd.
2. Establish control survey and perform ROW survey. Tie in culture including Man Holes, Water Valves, Telephone, Cable, Power and Light Poles.
3. Perform typical cross sections from ROW to ROW at 50 foot intervals

FEE ESTIMATE

Darling will perform the scope of work above for a cost plus fixed fee: (See Attachments)

This proposal, its terms, fees and conditions are effective for sixty (60) days from the date of this proposal. Fees are based on the scope of services presented above and our understanding of the project.

Any work not defined in the Scope of Work as written prior to its start or the additional field work can be



completed upon request, if it is agreed that a Darling Change Order Form will be signed by the Client's representative on site the day that the additional field survey services are provided. Additional work may include office support and supervision. Any additional services not included in the aforementioned Scope will be charged on a time and materials basis in accordance with our current Schedule of Fees.

ASSUMPTIONS

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

- Darling is not required to carry any permits from the City of Tucson to perform surveying within the project limits.

SCHEDULE

We typically can mobilize resources within ten (10) business days or less after receiving signed proposal and written Notice to Proceed or Purchase Order.

Sincerely,
Darling Geomatics
Bryan C. Jesse

Bryan Jesse
3D Scanning Division Manager

It is agreed the attached terms and conditions are incorporated into and made a part of the Agreement when this proposal is accepted.

Offered by:

Bryan C. Jesse 4-4-17
Bryan C. Jesse
3D Scanning Division Manager
Darling Geomatics

Accepted by:

Signature Date
Printed name/title:

Firm



OPTION 1 FULL PROJECT SCANNING PLUS PROVIDING ROW AND UTILITY SURVEY

Survey

Discipline	Billing Rate	Hours	Total Fee
AE (RLS)	\$ 125.00	50	\$ 6,250.00
Survey Crew 2-man	\$ 135.00	44	\$ 5,940.00
Prof Level III	\$ 125.00	20	\$ 2,500.00
CADD (3D & 2D)	\$ 75.00	40	\$ 3,000.00
Clerical/Admin	\$ 50.00		\$ -
			\$ 17,690.00

Scanning

Discipline	Billing Rate	Hours	Total Fee
Project Management	\$ 125.00	40	\$ 5,000.00
Scan Crew 2-man	\$ 290.00	72	\$ 20,880.00
Post Process/CAD	\$ 90.00	148	\$ 13,320.00
Mobilization	\$ 75.00	35	\$ 2,625.00
Clerical/Admin	\$ 50.00	4	\$ 200.00
			\$ 42,025.00

OPTION 2 PARTIAL PROJECT SCANNING SCAN PLUS ROW AND UTILITY SURVEY

Survey

Discipline	Billing Rate	Hours	Total Fee
AE (RLS)	\$ 125.00	50	\$ 6,250.00
Survey Crew 2-man	\$ 135.00	80	\$ 10,800.00
Prof Level III	\$ 125.00	20	\$ 2,500.00
CADD (3D & 2D)	\$ 75.00	40	\$ 3,000.00
Clerical/Admin	\$ 50.00		\$ -
			\$ 22,550.00

Scanning

Discipline	Billing Rate	Hours	Total Fee
Project Management	\$ 125.00	40	\$ 5,000.00
Scan Crew 2-man	\$ 290.00	28	\$ 8,120.00
Post Process/CAD	\$ 90.00	140	\$ 12,600.00
Mobilization	\$ 75.00	21	\$ 1,575.00
Clerical/Admin	\$ 50.00	2	\$ 100.00
			\$ 27,395.00



April 10, 2017
Proposal No. 12-00389

Mr. Jason A Simmers, PE
Kittelson & Associates, Inc.
2 East Congress Street, Suite 705
Tucson, Arizona 85701

Subject: Proposal to Perform Geotechnical Engineering Services
Aerospace Parkway Widening: Nogales Highway to East of Raytheon Parkway
Pima County, Arizona

Dear Mr. Simmers:

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

SITE/PROJECT DESCRIPTION

We understand that the project consists of a four-lane desert parkway expansion along the existing two-lane parkway from the Nogales Highway Intersection to 3,800 linear feet east of Raytheon Parkway, approximately 1.5 miles long, including a widening of the existing Union Pacific Railroad (UPRR) crossing near Nogales Highway and as-needed improvements to the Nogales Highway and Aerospace Parkway Intersection. In general, the road will be expanded to the south with a "desert median" divider, except at the west end approaching the railroad and Nogales Highway intersection where it will be designed as a single UPRR crossing with traffic in both directions. Other potential improvements include the extension of the two existing cross drainage pipe culverts located east and west of Raytheon Boulevard.

We understand that the existing Aerospace Roadway will not be demolished but used for the project expansion. We have not reviewed the project grading plans and the project vertical alignment design. However, through our communication with Kittelson & Associates, Inc. (Kittelson), we understand that the new lanes will be constructed at grade or on fill to match the existing terrain configuration and the existing Aerospace Parkway vertical alignment.

1991 East Ajo Way, Suite 145 • Tucson, Arizona 85713 • Phone (520) 577-7600 • Fax (520) 577-7606

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Las Vegas • Phoenix • Tucson • Prescott Valley • Flagstaff • Denver • Bloomfield • Houston



We further understand that the roadway and pavement design will be performed in accordance with the 2013 Pima County Roadway Design Manual (Design Manual) standards, with relevant updates through 2017.

SCOPE OF GEOTECHNICAL SERVICES

The scope of services we will perform for this phase of the project generally follows Sections 3.12 and 3.13 of the Design Manual as outlined below:

- Attend meetings with the project team per the Kittelson meeting schedule which will include a kickoff meeting, one working meeting and status checkings over a period of 2 months;
- Prepare applications for right-of-way encroachment permits for submittal to Pima County, Permits Department;
- Review available published and in-house geotechnical reports, as-built plans, and aerial photographs of the project area;
- Conduct a field trip to the site for geologic reconnaissance to select and to mark out the proposed boring and sampling locations;
- Contact Arizona 811 to evaluate public utility locations;
- Arrange for appropriate traffic control measures;
- Perform a geotechnical exploration, which will include up to six soil borings using a truck-mounted drill rig equipped with hollow-stem augers in accordance with the following schedule:
 - Three borings to 5 feet below existing grade (bgs) along the proposed alignment of the new Aerospace Parkway lanes;
 - One boring to 15 feet bgs within the joint utility trench (JUT) where Aerospace Parkway crosses; and
 - Two borings to 5 feet bgs at the Old Nogales Highway intersection.

The borings will extend to the target depths or refusal on very dense/cemented deposits. The holes will be backfilled with drilling soil spoils.

- Perform one double-ring infiltrometer test at a depth of up to 2 feet bgs within the area of the planned detention basin.
- Collect soil samples in the borings at 2.5- to 5.0-foot intervals using American Society for Testing and Materials (ASTM) D-1586 (standard penetration test with split-barrel sampling of soils) and D-3550 (ring-lined barrel sampling of soils) for laboratory testing and analysis;

- Ninyo & Moore personnel will log the borings in general accordance with the Unified Soil Classification System and ASTM D 2488 by observing cuttings and split-spoon samples. The ring samples will be trimmed in the field, wrapped in plastic bags, and placed in moisture-tight cylindrical plastic containers, while the SPT samples will be placed in resealable bags to help preserve their natural moisture. Bulk samples will also be placed in large plastic bags. The soil samples will be transported to a Ninyo & Moore laboratory for testing;
- Collect up to two shallow-depth grab soils samples at proposed drainage crossing locations;
- Perform laboratory testing that will evaluate the on-site soils characteristics for representative soil samples. The proposed laboratory tests will include in-situ density and moisture content, gradation, Atterberg limits, consolidation (response-to-wetting), Swell potential, standard Proctor, R-value, electrical resistivity, pH, and soluble sulfates and chlorides contents;
- Prepare a draft pavement design report to include the following:
 - A summary of the general geotechnical characteristics of the soil;
 - Evaluation of the soil swell and collapse potential;
 - Evaluation of the soils along the new pavement alignment to evaluate consistency with those under the existing pavement;
 - Evaluation of the soil corrosivity characteristics;
 - Grading recommendations for the new roadway;
 - Soil infiltration rate;
 - Discussion concerning the procedures and results of the pavement structure design;
 - Recommend treatment of soils or modification of existing pavement section at the JUT crossings; and
 - Recommended structural sections for the Nogales Highway intersection, including feasible alternatives.
- Collect comments from one review of the aforementioned report and incorporate these changes for the final report submittal; and
- Prepare and submit a Final Pavement Design Report.

FEE ESTIMATE FOR GEOTECHNICAL SERVICES

We propose to perform the work scope described above for a fixed fee of \$18,760.37 (Eighteen Thousand Seven Hundred Sixty Dollars and Thirty-Seven Cents). Any additional services, not included in the aforementioned scopes, will be charged on a time-and-materials basis in accordance with our current Schedule of Fees.

ASSUMPTIONS

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

- The site is accessible to normal, two-wheel drive, truck-mounted drilling equipment, and site access will be granted;
- The boring and sampling locations will receive archaeological/cultural clearance prior to our field activities, and no services or archaeological/cultural monitors are anticipated;
- The work can be accomplished using hollow-stem augers operating at a normal rate of penetration;
- Borings will not be performed in paved areas and no pavement coring is anticipated;
- If auger refusal or groundwater is encountered we will terminate the drilling and notify your office;
- The boreholes can be backfilled with the drilling spoils;
- Traffic control will involve shoulder closures;
- Pavement coring is not anticipated;
- Boring/sampling locations will be surveyed by others;
- Traffic data for the pavement design will be provided by others; and
- ADOT-style Pavement Materials Design Memorandum will not be needed.

SCHEDULE

We are prepared to commence this work immediately. The field work could be scheduled within 2 weeks of receiving notice to proceed and should take about 2 days to finish. After the field work is done, the draft report will be submitted within about 5 weeks after finishing the laboratory testing. The final report will be submitted 1 week after receiving comments to the draft report.

Nogales Highway to East of Raytheon Parkway
Pima County, Arizona

April 10, 2017
Proposal No. 12-00389

If this proposal meets your expectations, please sign and return the attached Work Authorization and Agreement or provide formal authorization in the form of a sub-consultant agreement, purchase order, or work authorization form.

We appreciate the opportunity to submit this proposal and look forward to working with you on this project.

Sincerely,
NINYO & MOORE



Marek J. Kasztalski, PE, PMP, LEED AP
Senior Geotechnical Engineer



Fred F. Narcaroti
Principal/Tucson Office Manager

MJK/FFN/hmf

Attachments: Cost Estimate
Work Authorization and Agreement

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

**FEE ESTIMATE FOR GEOTECHNICAL SERVICES
AEROSPACE PARKWAY, PIMA COUNTY, ARIZONA**

Project Logistics/Coordination/Permit

Classification	Estimated Hours	Direct Rate	Overhead 150%	Profit 10%	Loaded Costs
Principal Engineer	2	\$85.45	\$163.63	\$179.99	\$369.98
Senior Project Engineer	4	\$54.55	\$136.38	\$150.01	\$800.05
Staff Engineer		\$40.00	\$100.00	\$110.00	\$0.00
Engineering Assistant	2	\$27.27	\$68.18	\$74.99	\$149.99
Drafting Technician		\$27.27	\$68.18	\$74.99	\$0.00
Secretarial		\$20.00	\$50.00	\$55.00	\$0.00
	<u>8</u>				\$1,110.01

Meetings

Classification	Estimated Hours	Direct Rate	Overhead 150%	Profit 10%	Loaded Costs
Principal Engineer	2	\$85.45	\$163.63	\$179.99	\$369.98
Senior Project Engineer	10	\$54.55	\$136.38	\$150.01	\$1,500.13
Staff Engineer		\$40.00	\$100.00	\$110.00	\$0.00
Engineering Assistant		\$27.27	\$68.18	\$74.99	\$0.00
Drafting Technician		\$27.27	\$68.18	\$74.99	\$0.00
Secretarial		\$20.00	\$50.00	\$55.00	\$0.00
	<u>12</u>				\$1,860.10

Site Reconnaissance and Markout

Classification	Estimated Hours	Direct Rate	Overhead 150%	Profit 10%	Loaded Costs
Principal Engineer		\$85.45	\$163.63	\$179.99	\$0.00
Senior Project Engineer		\$54.55	\$136.38	\$150.01	\$0.00
Staff Engineer		\$40.00	\$100.00	\$110.00	\$0.00
Engineering Assistant	8	\$27.27	\$68.18	\$74.99	\$589.94
Drafting Technician		\$27.27	\$68.18	\$74.99	\$0.00
Secretarial		\$20.00	\$50.00	\$55.00	\$0.00
	<u>8</u>				\$589.94

Field Exploration

Classification	Estimated Hours	Direct Rate	Overhead 150%	Profit 10%	Loaded Costs
Principal Engineer		\$85.45	\$163.63	\$179.99	\$0.00
Senior Project Engineer		\$54.55	\$136.38	\$150.01	\$0.00
Staff Engineer		\$40.00	\$100.00	\$110.00	\$0.00
Engineering Assistant	20	\$27.27	\$68.18	\$74.99	\$1,499.85
Drafting Technician		\$27.27	\$68.18	\$74.99	\$0.00
Secretarial		\$20.00	\$50.00	\$55.00	\$0.00
	<u>20</u>				\$1,499.85

Data Compilation/Analysis

Classification	Estimated Hours	Direct Rate	Overhead 150%	Profit 10%	Loaded Costs
Principal Engineer	1	\$85.45	\$163.63	\$179.99	\$179.99
Senior Project Engineer	14	\$54.55	\$136.38	\$150.01	\$2,100.18
Staff Engineer	4	\$40.00	\$100.00	\$110.00	\$440.00
Engineering Assistant		\$27.27	\$68.18	\$74.99	\$0.00
Drafting Technician		\$27.27	\$68.18	\$74.99	\$0.00
Secretarial	4	\$20.00	\$50.00	\$55.00	\$220.00
	<u>23</u>				\$2,940.16

**FEE ESTIMATE FOR GEOTECHNICAL SERVICES
AEROSPACE PARKWAY, PIMA COUNTY, ARIZONA**

Alternative Pavement Structural Section Analysis

Classification	Estimated Hours	Direct Rate	Overhead 150%	Profit 10%	Loaded Costs
Principal Engineer	1	\$65.45	\$163.63	\$179.99	\$179.99
Senior Project Engineer	8	\$64.55	\$136.38	\$150.01	\$1,200.10
Staff Engineer		\$40.00	\$100.00	\$110.00	\$0.00
Engineering Assistant		\$27.27	\$68.18	\$74.99	\$0.00
Drafting Technician		\$27.27	\$68.18	\$74.99	\$0.00
Secretarial		\$20.00	\$50.00	\$55.00	\$0.00
	<u>9</u>				<u>\$1,380.09</u>

Report Preparation (Draft)

Classification	Estimated Hours	Direct Rate	Overhead 150%	Profit 10%	Loaded Costs
Principal Engineer	2	\$65.45	\$163.63	\$179.99	\$359.98
Senior Project Engineer	14	\$64.55	\$136.38	\$150.01	\$2,100.18
Staff Engineer		\$40.00	\$100.00	\$110.00	\$0.00
Engineering Assistant		\$27.27	\$68.18	\$74.99	\$0.00
Drafting Technician	2	\$27.27	\$68.18	\$74.99	\$149.99
Secretarial	5	\$20.00	\$50.00	\$55.00	\$275.00
	<u>23</u>				<u>\$2,885.14</u>

Report Preparation (Final)

Classification	Estimated Hours	Direct Rate	Overhead 150%	Profit 10%	Loaded Costs
Principal Engineer	1	\$65.45	\$163.63	\$179.99	\$179.99
Senior Project Engineer	8	\$64.55	\$136.38	\$150.01	\$1,200.10
Staff Engineer		\$40.00	\$100.00	\$110.00	\$0.00
Engineering Assistant		\$27.27	\$68.18	\$74.99	\$0.00
Drafting Technician	1	\$27.27	\$68.18	\$74.99	\$74.99
Secretarial	4	\$20.00	\$50.00	\$55.00	\$220.00
	<u>14</u>				<u>\$1,675.08</u>

Direct Fees

Laboratory Testing					\$2,990.00
Mileage		\$ 0.545			\$ -
Per Diem/Lodging					\$ -
					<u>\$2,990.00</u>

Subtotal Direct Fees

Reimbursable Fees

Driller					\$820.00
Traffic control					\$1,000.00
Subcontractor Markup (0%)					\$ -
					<u>\$1,820.00</u>

Subtotal Reimbursable Fees

Total Proposed Fee \$18,760.37

FEE ESTIMATE FOR GEOTECHNICAL SERVICES
LABORATORY TESTING BREAKDOWN
AEROSPACE PARKWAY, ARIZONA

Laboratory Tests	Approx. No. of Tests	Cost per Test	Total Cost of Each Test
Grain Size Distribution, ASTM D422	6	\$100	\$600
Direct Shear, ASTM D 3080		\$250	\$0
Organic Content		\$80	\$0
Atterberg Limits, ASTM D 4318	6	\$90	\$540
Molsture/Density	6	\$35	\$210
Consolidation (response to wetting)	2	\$85	\$170
Swell potential (in situ)	2	\$95	\$190
R Value	2	\$250	\$500
Maxdmm Density Relationship Tests, ASTM D1557	2	\$125	\$250
pH and resistivity	2	\$20	\$40
Swell Potential (remolded)	2	\$195	\$390
Sulfide Content		\$30	\$0
Chloride & Sulfate Content	2	\$50	\$100
			\$2,990

APPENDIX “C” – GENERAL CONDITIONS (44 pages)

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ARTICLE 1 – GENERAL ARTICLES

1.1 MUTUAL OBLIGATIONS

COUNTY, Construction Manager at Risk (CMAR), and Design Professional (DP) commit, at all times, to cooperate fully with each other, and proceed on the basis of trust, confidence, and good faith to permit each party to realize the benefits expected and afforded under the Contract Documents, which benefits include the satisfactory and timely completion of the Project and performance of all obligations required by or inferable from the Contract Documents.

1.2 BASIC DEFINITIONS

- 1.2.1 "Actual Cost of the Work" is the aggregate amount of CMAR Direct Construction Costs and Indirect Construction Costs properly and actually chargeable to COUNTY when calculated under the provisions of **Appendix "B" of the CMAR Contract** throughout the Project up to the time of Final Completion.
- 1.2.2 "Allowances" are items established by COUNTY in the GMP as estimates for the cost of items of included in the Work. To the extent that the Actual Cost of the Work is lesser or greater than the corresponding estimate, the GMP will be reduced or increased by Change Order with such amount being added to or taken from COUNTY's Contingency.
- 1.2.3 "Bidding Contingency", or "CMAR Contingency" means that part of the Guaranteed Maximum Price (GMP) the CMAR may use during the Bidding or Construction Phase as provided in these General Conditions at 7.11, to cover any excess of the amount bid by a subcontractor over the amount for that Work in the GMP, or to cover legitimate unforeseen construction expenses once construction begins. Contingency may not be used to cover the cost of any Work on the Project after issuance of the Certificate of Final Completion.
- 1.2.4 "CMAR Authorization" – Chapter 6 of Title 34, Arizona Revised Statutes
- 1.2.5 "CMAR" means the CMAR and all persons and entities identified as members of the CMAR team in the CMAR's response to COUNTY's SFQ that led to the Contract with all Contract Amendments, and any substitutes permitted under the terms of the Contract, and these General Conditions. The CMAR participates in the Pre-Construction Phase as set forth in Pre-Construction Phase Services Contract by, among other things, developing a cost model and refining it during design to ensure construction costs remain within COUNTY's budget, doing value engineering and reviewing constructability, preparing schedules, and identifying the life-cycle implications of alternate designs, systems, and materials. **During construction, the CMAR assumes all risk for price and schedule under the Contract and its GMP, except as otherwise provided in the Contract.**
- 1.2.6 "Construction General Conditions" include, but are not limited to, the following types of costs during construction: Project Director costs directly attributable to time expended in execution of the project, whether on- or offsite; payroll costs for project manager or construction manager for work conducted at the site; payroll costs for the superintendent and full-time general foremen; payroll costs for other management personnel resident and working on the site; general support workers not included in direct labor costs (e.g. loading/unloading, clean-up, etc.); onsite administrative office personnel; costs of offices and temporary facilities including office materials, office supplies, office equipment, minor expenses; utilities, fuel, sanitary facilities and telephone services at the site; and fees for licenses. General Conditions specifically exclude, without limitation, the following: Home (off-site) Expenses, Profit & Overhead; Home Office Personnel such as Corporate Executive, Project Executive; Home Office Staff Transportation & Travel Costs; Home Office Accounting & Contract Forms; Legal Expenses; Project Staff Moving Expense; off-site Staff Training & Education; Pre-Mobilization Office Space; off-site Equipment & Supplies; Forms; Estimating & Value/Constructability Analysis; Warranty Coordination; Legal Expenses, Contractor Yard not Dedicated to Project, Contractor Association Fees, Licenses & Memberships; Cost over GMP, Corrective Work, Bonuses, Cost of Living Allowance, marketing expenses, corporate sponsorships and entertainment, and Promotional or Celebratory Expenses the CMAR incurs while performing and completing the Project. The Parties acknowledge that some portion of the General Conditions represent upfront costs associated with mobilization and startup of construction. These amounts will be deducted from the total amount of General Conditions in the GMP and the balance will be divided by the number of days allowed for performance to arrive at a fixed daily rate for use in estimating the amount, if any, of the adjustment for General Conditions associated with changes in Contract Time or for the number of workdays in any particular month.

- 1.2.7 "Construction Documents" are the plans and specifications prepared by the DP for the Project, approved by COUNTY, and incorporated into the Contract by reference after such approval, to be used to construct the Project. All Contract Amendments, Change Orders, and other modifications to the Construction Documents must be approved by COUNTY prior to incorporation into the Contract.
- 1.2.8 "Construction Phase Fee" includes profit and unallowable costs, and overhead in the case of vertical construction. The Construction Phase Fee will initially be calculated not to exceed five percent (5%) of Direct Construction Cost only, and then will be fixed as a dollar amount as mutually negotiated and agreed to by the Parties. Overhead will be treated as described in 1.2.24.
- 1.2.9 "Contract Float" - If the CPM schedule of the Work anticipates early completion of all or any part of the Work, Contract Float is the number of calendar days between CMAR's anticipated date for early completion of all or any such part of the Work and the corresponding specified Contract Time. It is owned jointly by COUNTY and CMAR.
- 1.2.10 "Contract Time" is the time allotted in the Contract Documents for completion of the Work.
- 1.2.11 "Cost of the Work" consists of those items of Work that are paid for by COUNTY to the CMAR consisting of those Direct Construction Costs and Indirect Construction Costs set forth as allowable in **Appendix "B" Construction Costing of the CMAR Contract**.
- 1.2.12 "Day" as used in these General Conditions refers to a calendar day unless otherwise denoted.
- 1.2.13 "Deliverables" - the Work product prepared by the CMAR within the definition of the Scope of Work in the Contract. Some of these deliverables provided by the CMAR during the Pre-Construction Phase are the Cost Model, Project Schedule, Schedule of Values, Evaluations of Alternatives, Procurement Strategies, proposed SBE Utilization, Subcontractor and Supplier bid packages and Contracts.
- 1.2.14 Design Professional ("DP") or Engineer is contracted with COUNTY, and a) is a qualified professional properly licensed in the State of Arizona to furnish applicable design services (and construction administration services, if so designated by COUNTY), and b) is responsible for the review of submittals, responding to CMAR Requests for Information (RFI), and Substantial Completion, if so designated.
- 1.2.15 "Design Submission Documents" consist of the drawings and specifications submitted at specific milestones in the design effort by the DP and other documents prepared by the CMAR that are submitted for COUNTY's approval for each milestone in Project design. Because design milestones may vary from project to project, COUNTY will notify CMAR in writing of the milestones applicable to the project covered by this Contract. Such milestones will be as binding as if set forth herein.
- 1.2.16 Direct Construction Cost is the sum of all applicable Construction General Conditions costs, subcontractor costs, costs of self-performed Work (if approved in writing in advance by COUNTY), Allowances and Contingencies. Contingencies specifically include Bidding and Construction Contingency, Design Contingency, and Schedule Contingency, as applicable.
- 1.2.17 "Final Completion" is defined as one hundred percent (100%) completion of all Work described by or reasonably inferred from the Project Criteria and Contract Documents, including but not limited to all punch lists, Close-Out Documents, and COUNTY training/start up activities, if included.
- 1.2.18 "Guaranteed Maximum Price" (GMP) is the dollar amount that the CMAR guarantees to be the maximum amount due from COUNTY to the CMAR under the Contract for Construction Phase services. It is the sum of CMAR's Construction Phase Fee, the Cost of the Work, and Contingencies and Allowances established in accordance with the Contract. The GMP is subject to additions or deductions due to changes in the Scope of Work. All costs, which exceed the GMP and are not authorized by written Change Order, are to be paid by the CMAR and not COUNTY.
- 1.2.19 Governmental Agency is any unit of federal, state, or local government with regulatory authority over any aspect of the Work.

- 1.2.20 "Hazardous Material" means any waste, substance, object, or material deemed hazardous under federal, state, or local law, including "hazardous substance" as defined under CERCLA, "hazardous waste" as defined under RCRA, and "hazardous material" as defined under US DOT regulations (49 CFR 100-180).
- 1.2.21 Indirect Construction Cost is the sum of all applicable insurance costs, bond costs and applicable sales or use taxes, but excludes Construction Phase Fee.
- 1.2.22 "Legal Requirements" include all regulations, policies, procedures, and practices of COUNTY and all applicable rules, laws, codes, ordinances, and regulations of any federal, state, or local government or quasi-governmental entity having jurisdiction over the Work, the practices involved in the Work, or any Work performed.
- 1.2.23 "Open Book Cost" is the Actual Cost of the Work as compiled and recorded in accordance with the provisions of Subsection 2.1.14 of these General Conditions.
- 1.2.24 "Overhead" is generally comprised of those items specifically excluded from General Conditions in paragraph 1.2.6 except for Estimating and Value/Constructability Analysis and profit. If this Contract is for vertical construction, Overhead will be included in the Construction Fee. If this Contract is not for vertical construction, then Overhead will be separately stated in the GMP Summary. Job Overhead will be included in General Conditions.
- 1.2.25 "Partnering or Teaming" is a mutual effort by all parties involved in the Project, principally COUNTY, the DP, and the CMAR, to cooperate and coordinate efforts to achieve the final result intended by the Project criteria. All involved use their expertise for the benefit of all. Partnering requires flexibility and appreciation of the positions of other parties and willingness to make compromises for the benefit of all. COUNTY has the exclusive right to decide whether to use Partnering on the Project and will indicate its decision during the Pre-Construction Phase.
- 1.2.26 "Pre-Construction Phase Fee" includes all direct and indirect costs of CMAR in providing Pre-Construction Phase Services until completion of the Construction Documents and the award of all bid packages, plus associated Overhead and profit.
- 1.2.27 "Project Budget" is the funding available to the COUNTY for the total cost of the Project, including the DP, CMAR's Pre-Construction Phase Fee, the GMP (including CMAR's Construction Phase Fee, Construction Services, and Contingencies), permit fees, and other costs necessary to achieve Final Completion of the Project.
- 1.2.28 "Project Criteria" developed by or for COUNTY describe COUNTY's program, requirements and objectives for the Project, including (if vertical) use, space, price, time, site, utility, parking, and expandability requirements, as well as all submittal requirements and other requirements affecting CMAR's performance of its Work. The Project Criteria may include conceptual documents, design criteria, performance requirements, and other Project specific technical materials and requirements prepared by or for COUNTY.
- 1.2.29 "Project Manager" refers to the COUNTY Representative that is responsible to COUNTY for the Project completion within COUNTY established Schedule, Budget and Scope. In this document "Project Manager" is the same as "COUNTY"
- 1.2.30 "Punch List" are those minor items of Work identified and listed by COUNTY or DP and agreed to be completed by CMAR after Substantial Completion and prior to Final Completion, which do not prevent the Project from being fully used for the purpose for which it is intended.
- 1.2.31 "Savings" is the difference, if any, between the GMP and the Actual Cost of the Work and will be allocated as set forth in Article 7. Amount of savings is to be determined by COUNTY with such assistance as COUNTY requests of CMAR and is to be based on the GMP in effect on the date of Final Completion of the entire Work.
- 1.2.32 "Site" is the land and other areas on which the Project is located.

- 1.2.33 "Subcontractor" (of any tier) is any entity or person who performs a portion of the Work, on or off site, directly on behalf of the CMAR, including any materials, workers and suppliers, and includes all employees, agents and authorized representatives of such entities or persons.
- 1.2.34 "Substantial Completion" is the date on which CMAR's Work, or an agreed upon portion of the Work, is sufficiently complete, as determined by the DP or COUNTY's issuance of a Certificate of Substantial Completion, so that COUNTY can fully occupy and utilize the Project, or a portion thereof, for the purposes for which it is intended. In order to achieve substantial completion, all Work must be complete, including all tests and inspections, except for items included on the approved punch list.
- 1.2.35 "Total Float" is the number of calendar days by which the Work or any part of the Work may be delayed without necessarily extending a pertinent Contract Time. Total Float is at least equal to Contract Float.
- 1.2.36 "Value Engineering Proposal" is a modification to the Work proposed by the CMAR after the Effective Date of the Contract for the purpose of reducing the total cost of construction while still delivering a quality and functional Project. Value Engineering is part of the broader goal of obtaining optimum value for each dollar COUNTY spends on the Project.
- 1.2.37 "Work" is comprised of all activities required in order to complete the Project as defined by the Project Criteria and Contract Documents, including procuring and furnishing all materials, equipment, services, and labor reasonably inferable from the Contract Documents, or from prevailing trade usage and custom.

1.3 CONTRACT GENERAL CONDITIONS

These provisions set forth the mutual understanding and agreement of the Parties regarding the Contract general conditions or subjects addressed therein.

- 1.3.1 COUNTY has hired or will hire a DP to design the Project.
- 1.3.2 The design for the Project may not be complete at a) the time the GMP is agreed to; b) the time of execution of the Contract; or c) both a) and b).
- 1.3.3 CMAR will cooperate and interact with and advise the DP in producing a completed design for the Project that is acceptable to COUNTY, all as more fully described in the Contract Documents.
- 1.3.4 When the Design Documents are complete and requisite approvals obtained and are then accepted by COUNTY, they become part of the Contract Documents without further action by the Parties as though they were specifically set forth therein at the time of execution of the Contract.

ARTICLE 2 – CMAR'S SERVICES AND RESPONSIBILITIES

2.1 GENERAL SERVICES

- 2.1.1 CMAR's Representative will attend all meetings and assist COUNTY during the Pre-Construction Phase in accordance with these General Conditions. During the Construction Phase, the CMAR's Representative, and Superintendent as necessary, will be at the Site at all times when Work is being performed, and will have the necessary expertise and experience required to properly supervise the Work. CMAR's Representative will communicate regularly with COUNTY and DP and be vested with the authority to act on behalf of CMAR as to all matters. The expectation is that meetings will be collaborative among the COUNTY, DP and CMAR as described below.
- 2.1.1.1 The CMAR, DP and COUNTY will attend all regular meetings, including rolling design reviews, and such additional meetings that are called as provided below.
- 2.1.1.2 During the Design Phase all regular meetings will be scheduled by the DP with the agreement of the CMAR and approval of COUNTY. Unless otherwise agreed, meetings will be held weekly for the purpose of tracking design progress and consistency with COUNTY's requirements. DP will be responsible for tracking and reporting on the design evolution log. CMAR will be responsible at such meetings for cost and scope tracking, early identification of long-lead items, and making recommendations regarding constructability, construction sequencing, materials, and other

factors that can have a material impact on cost or schedule. COUNTY will schedule all additional meetings.

- 2.1.1.3 During the Design Phase, DP will take minutes at each meeting and distribute draft minutes within three (3) business days after each meeting. The CMAR and COUNTY will promptly review the minutes of each meeting and deliver any comments to the DP. The DP will promptly issue final minutes of each meeting, which will be approved by DP, CMAR and COUNTY.
- 2.1.1.4 At the commencement of the Construction Phase, COUNTY, CMAR, and DP will meet to review cooperation, coordination, and if applicable, partnering during the construction phase and to establish procedures governing, among other matters, submittals and scheduling of site activities.
- 2.1.1.5 During the Construction Phase there will be weekly progress meetings of the DP, CMAR, and COUNTY. The CMAR will schedule and conduct the progress meetings during the Construction Phase. The weekly progress meetings will be used to discuss jointly such matters as procedures, progress, scheduling, submittals, requests for information (RFI), any Work deficiencies, any other actual problems or potential problems, fixes to and limits on actual problems, and ways to avoid, limit, or fix potential problems. At each meeting, the CMAR will provide and discuss a CPM-based look ahead schedule of construction activities to be accomplished in the next three weeks. Presentation of the look-ahead does not substitute for the twenty-four (24) hour advance notice required in section 2.6.10.8 prior to all special inspections. COUNTY, DP, and CMAR will contribute their good faith efforts in such discussions to find ways (i) to complete the Project within the Contract Time(s) in accordance with the Construction Documents and the other CMAR Contract Documents and within the Guaranteed Maximum Price; (ii) to limit and fix actual problems; (iii) to anticipate and then avoid, limit or fix potential problems; and (iv) to discuss and decide other matters brought up by COUNTY, DP, or CMAR. None of these discussions will affect or impair the respective rights, responsibilities and obligations of DP, COUNTY, and CMAR under the DP Contract or the CMAR Contract.
- 2.1.1.6 During the Construction Phase, special on-site meetings will be held as requested by COUNTY, DP, or CMAR.
- 2.1.1.7 During the Construction Phase, the CMAR will take minutes at each meeting and distribute draft minutes within three (3) business days after each meeting. The DP and COUNTY will promptly review the minutes of each meeting and deliver any comments to the CMAR. The CMAR will promptly issue final minutes of each meeting, which will be approved by CMAR, DP, and COUNTY.
- 2.1.1.8 CMAR and DP, when requested by COUNTY, will attend, make presentations and participate as may be appropriate in public agency or community meetings related to the Project. DP will provide drawings and illustrations and CMAR will provide schedule diagrams, budget charts and other materials describing the Project when their use is required or appropriate in any such meetings.
- 2.1.2 During both the Pre-Construction and Construction Phases the CMAR will provide COUNTY and DP, on a monthly basis, a written status report detailing the progress of the Work during that month, including whether the Work is proceeding according to Schedule, an updated and current Critical Path Method (CPM) Schedule, an updated and current Work cash flow projection for the duration of the Project, copies of the construction Superintendent's daily site reports, identification of any discrepancies, conflicts, or ambiguities existing in the Construction Documents that require resolution, whether health and safety issues have arisen in connection with performance of the Work, and whether other matters exist that require resolution so as not to jeopardize CMAR's ability to complete the Work for the GMP(s) on schedule and within the Contract Time(s). The CMAR's monthly report will also include a cost tracking report with the updated Cost Model, projected final cost, subcontract amounts and buy-out status and status of contingency and allowance usage.
- 2.1.3 Within thirty (30) days after executing the Contract, CMAR will prepare and submit to COUNTY:
 - 2.1.3.1 A Critical Path Method Master Schedule (CPM Schedule) for the Work including the activities in the Design Phase and the Construction Phase through bid and award. The CPM Schedule must

include three (3) weeks of COUNTY review time for Design Submission Documents at each milestone and adequate time for Government Agency and for other regulatory-type reviews and for all other necessary approvals. The CPM Schedule will indicate the dates for the start and completion of the various stages of 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). The CPM Schedule must allow for such multiple bid packages and fast-tracked construction as may be required and include any contemplated completion date(s) earlier than those required by the Contract Documents.

2.1.3.2 A Cost Model for construction of the project. The Cost Model must contain all of the costs that will be included in the GMP, including cost of the Work, general conditions, bonds, insurance, permits, taxes, including, without limitation, applicable sales taxes and transaction privilege tax, CMAR's construction fee, contingency, and any other costs in the GMP. As part of the Cost Model, the CMAR will also identify all areas of concern or risk and assign a separate and reasonable contingency to each of them. The COUNTY and DP will review these submissions and may request changes. Final contingency amounts will be as agreed by the Project Team. The statement of areas of concern/risks will be stratified by cost to enable the Project Team to focus in pre-construction on resolving or eliminating the most costly uncertainties. CMAR will update the Cost Model not less than monthly as design progresses and uncertainties are resolved.

2.1.4 COUNTY, DP, and CMAR will have an initial meeting promptly after selection of the DP and the CMAR to discuss issues affecting Project administration and to implement procedures to permit COUNTY, DP, and CMAR to perform their respective obligations under the CMAR Contract and the DP Contract. Among other matters to be covered at this meeting will be procedures for efficient interaction during the Design Phase so that each can perform its activities, functions, and obligations in an efficient, cooperative, coordinated, collaborative, and communicative manner. Among other subjects to be covered by the procedures will be:

2.1.4.1 Arrangements for collaboration between the DP and CMAR in 1) preparing Design Submission Documents, the DP's Construction Cost Estimates, and the CMAR's Construction Costs Estimates, as required during the development of Preliminary Design, Final Design, and Construction Documents; and 2) submitting each set of Design Submission Documents and the related DP and CMAR Construction Cost Estimates to COUNTY for review and comment by COUNTY and for group discussion among the DP, CMAR, and COUNTY.

2.1.4.2 Arrangements that encourage frequent informal interaction, cooperation, coordination, collaboration, and communication among DP, COUNTY, and CMAR during the Design Phase, especially between submissions of Design Submission Documents and Construction Cost Estimates. These will include among other activities, the CMAR offering value engineering and constructability recommendations on the design of the Project and the DP using that information in its design work on the Project.

2.1.4.3 A schedule for the activities of the CMAR, COUNTY, and DP during the Design Phase.

2.1.4.4 Formal partnering for the Design Phase, at the option of COUNTY. Partnering is a mutual effort by all the parties involved in the Project to cooperate and coordinate efforts in order to achieve the final result. Partnering requires that all parties use their particular expertise for the mutual benefit of all, rather than for the benefit of the one. Partnering requires flexibility, the ability to appreciate the positions of the other parties and to make compromises for the benefit of all. Partnering will be implemented through a formal partnering process developed as described above and presented in a separate workshop attended by CMAR, COUNTY, DP, and their key participants. Follow up sessions will occur every three (3) months or as mutually agreed to ensure that all commitments are updated and being followed by all parties. The cost of this partnering effort during Design Phase will be shared equally by COUNTY, the CMAR, and the DP.

2.1.4.5 A responsibility matrix developed with the cooperation and collaboration of COUNTY, CMAR, and DP.

- 2.1.4.6 No action, or attempted action, of cooperation, coordination, collaboration, or communication, and no failure to cooperate, coordinate, collaborate, or communicate, on any matter will affect or impair the respective rights and obligations of COUNTY, DP, and CMAR under the DP or CMAR Contracts. No failure by any one party to perform its obligations under this Section excuses any failure by another party to perform any obligation under other provisions of the Contract Documents, unless the obligation that the first party failed to perform is an essential predicate to performance by the second party. In such case, it is the second party's duty to make all reasonable efforts to perform its obligations.
- 2.1.5 The CMAR will interact and cooperate fully with COUNTY and DP during the design and construction phases so as to keep the Work within COUNTY's budget and schedule limitations.
- 2.1.6 The CMAR covenants with COUNTY to furnish its best skill and judgment and to cooperate with the DP in furthering the interests of COUNTY. CMAR agrees to furnish efficient business administration and superintendence and to use its best efforts to timely complete the Work in an expeditious and economical manner consistent with the interests of COUNTY.
- 2.1.7 The CMAR, COUNTY, and DP, collectively the "Project Team", will cooperatively work together during all phases of the Work to achieve completion. The CMAR will provide leadership to the Project Team during the Pre-Construction Phase for all cost, schedule, or alternative systems issues, and all matters relating to construction. During the pre-construction phase the CMAR will provide to COUNTY and the DP a written evaluation of COUNTY's Project Program and Project Budget and Schedule, each in relationship to the other with recommendations on the appropriateness of each.
- 2.1.8 The Contract Documents do not create any contractual relationship between the DP and the CMAR or any separate contractors, consultants, subcontractors of any sub-tier, or suppliers on the Project, nor does anything contained in the Contract Documents give any third party any claim or right of action against COUNTY, the DP, or CMAR which does not otherwise explicitly exist in the Contract Documents.
- 2.1.9 The CMAR's initial Work consists of its services in connection with the Pre-Construction Phase. The CMAR's Services in that phase will be parallel to and coincidental with the DP's Services. CMAR will prepare an itemized systems type cost estimate at the completion of the Schematic/Conceptual Design Phase, and at other times as agreed upon by the Project Team, in a format consistent with that used by DP or in a format otherwise mutually agreed upon prior to the cost estimate preparation. CMAR will prepare Construction Specifications Institute (CSI) Master Formatted cost estimates at each submittal phase after the completion of Schematic/Conceptual Design, to verify that the Project is staying within the applicable portions of COUNTY's identified budget. CMAR will keep all Deliverables required of it up to date during the Pre-Construction Phase so that the Project activities will continue uninterrupted while progressing into the Construction Phase.
- 2.1.10 The CMAR will provide a GMP during the Pre-Construction Phase as called out in **Article 3(A) of the Contract of the CMAR Contract**.
- 2.1.11 Subject to the other provisions of these General Conditions, execution of the Contract by the CMAR is a representation that the CMAR has visited the Site, has become familiar with the locale and any specific conditions under which the Work is to be performed, and has correlated CMAR's personal observations with the requirements of COUNTY's Project criteria.
- 2.1.12 The intent of the Contract Documents is to include all items and services necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one is binding as if required by all. Work not covered in the Contract Documents but that the DP considers necessary for the proper completion of the Work will be required of CMAR unless it is inconsistent with the Contract Documents, or is not reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations that have well known technical or trade meanings are used in the Contract Documents in accordance with their recognized meanings.
- 2.1.13 The organization of the Specifications into division, section, and article, and the arrangement of Drawings does not obligate or control the CMAR in dividing performance of the Work among subcontractors, or in establishing the extent of the Work to be performed by any one trade.

2.1.14 With respect to all Work performed by CMAR and its Subcontractors and Consultants, CMAR and its Subcontractors and Consultants will keep full and detailed accounts and exercise such cost controls as may be necessary for proper financial management, using accounting and control systems in accordance with generally accepted accounting principles and subject to review by COUNTY. During performance of the Work and for five (5) years after Final Payment, the CMAR will retain and will also require all Subcontractors and Consultants to retain for review or audit, or both, by COUNTY all correspondence, meeting minutes, memoranda, electronic media, books, accounts, reports, files, time cards, material invoices, payrolls, and evidence of all communications, direct and indirect costs, and all other matters related to the Work. Upon request by COUNTY, CMAR will produce a legible copy or the original of any or all such records as are described above at any time during or after the Work as COUNTY may request. Upon request, the CMAR will submit to COUNTY copies of all payrolls, reports, estimates, records, Change Order costs and data, and any other data concerning Work performed or to be performed, materials supplied or to be supplied, including Subcontractor or Consultant payment applications or invoices and such Subcontractor's or Consultant's progress payment checks. The requirements of this Section will be provided for in all contracts between the CMAR and its Subcontractors and Consultants. COUNTY may exercise its rights under this Paragraph as often as reasonably necessary in COUNTY's sole judgment to assure COUNTY has a complete and accurate understanding of all Project costs.

2.2 PRE-CONSTRUCTION SERVICES

The CMAR's primary responsibility during pre-construction is to apply its knowledge and experience to keeping the design capable of being constructed within the budget and schedule. CMAR must track costs on an ongoing basis and proactively advise DP and COUNTY of lower cost or more effective means, methods, materials, design aspects, etc., or anytime when construction costs exceed, or threaten to exceed the budget, so the Project Team can take appropriate action.

2.2.1 The CMAR will independently develop a Construction Cost Model for the Project for COUNTY's review and approval. COUNTY will advise the DP and CMAR in writing of the amount of COUNTY's Construction Budget. DP and CMAR will evaluate COUNTY's Construction Budget for cost realism and prepare construction cost estimates for the completion of the Work. DP and CMAR's cost estimates must include all of the costs that will be included in the GMP, including labor, materials, general conditions, bonds, taxes, CMAR construction fee, CMAR's contingency, and all other GMP costs. DP, CMAR, and COUNTY will reconcile the differences between COUNTY's Construction Budget and the DP and CMAR estimates, if any, to develop an agreed estimate for the cost of construction. If the agreed estimate exceeds COUNTY's Construction Budget, COUNTY, at its sole discretion, may 1) seek additional funding; 2) direct redesign or re-scoping of the Project to bring it within the available funding; or 3) any combination of 1) and 2); or 4) determine not to go forward with this Contract for all or part of the Project. Any adjustment to COUNTY's budget or scope must be in writing and approved by COUNTY.

2.2.2 Unless otherwise agreed by COUNTY and the DP, COUNTY may retain or authorize DP or CMAR to retain surveyors, engineers, or other consultants in connection with the following items, provided such information is specifically requested by the DP or COUNTY:

- a. A survey of existing site conditions. A complete and accurate survey of the Project site and existing improvements including, but not limited to, grades and lines of streets, pavements, and adjoining properties, contours of the site, and full information as to sewer, water, gas, electrical service, telephone lines, or other utilities.
- b. A report on subsurface investigations. Professional recommendations regarding local conditions accompanied by test borings, or test pits, soil bearing values, percolation tests, air and water pollution tests, ground corrosion, and resistivity tests including necessary operations for determining subsoil, air and water conditions, and chemical, mechanical, laboratory, or other tests.
- c. CMAR may recommend such additional geotechnical or investigative tests, such as potholing, as CMAR believes may be necessary to support construction on the site.
- d. As-built information in possession of COUNTY concerning any existing improvements that will remain on the Site and that will be incorporated into the Project, to which the Project will be attached, or with which the Project will be interconnected.
- e. Other tests recommended by DP or CMAR and agreed to by COUNTY.

In addition to the above information, the DP is responsible for obtaining information concerning conditions of the Site required by law or typically obtained within the DP's industry to assess conditions for similar projects and will advise COUNTY of any such information so obtained that may be significant to the Project.

COUNTY will deliver to DP a copy of all available surveys, reports, test results, and other information described in this Section 2.2.2. Such items, any other information concerning the Site delivered by COUNTY to DP, and all information DP is obligated to obtain on its own initiative are referred to as the "DP Site Information".

The DP and CMAR will thoroughly acquaint themselves with all DP Site Information.

By making each submission of any Design Submission Documents (including, without limitation, the Construction Documents) the DP represents and warrants to COUNTY that DP has examined and evaluated the DP Site Information and has taken the DP Site Information into account in preparing the Design Submission Documents.

The DP and CMAR have the right to rely upon surveys, soil test reports, other test reports and other information provided by COUNTY, but only to the extent provided in said reports or information. The DP will carefully examine all surveys, soil test reports, other test reports and other information, whether obtained by the DP or COUNTY, and will promptly report to COUNTY any obvious or reasonably suspected errors, omissions, or inadequacies in such surveys, soil test reports, other test reports, and other information of which the DP becomes aware as a result of such examination or otherwise, and of any disagreement the DP may have with the conclusions of such surveys, soil test reports, other test reports, and other information. The DP and the DP's Consultants will make themselves available to the soils engineer and any other person retained by COUNTY to prepare any surveys, soils test reports, other test reports, or other information, for the purpose of reconciling such concerns.

2.2.3 The DP will submit to COUNTY and CMAR all required Design Submission Documents to describe the Project's essential elements. The Design Submission Documents required of the DP will include such drawings, specifications, and other documents as may be necessary to fully identify the Project scope and materials, together with the DP's Construction Cost Estimates. The CMAR will submit to COUNTY detailed Construction Cost Estimates as part of each design submission. At the time of each scheduled submission, CMAR, DP, and COUNTY will meet and confer about the submission. During the meeting, the CMAR and DP will identify, among other things, the evolution of the design and any significant changes or deviations from previously submitted Design Submission Documents and any changes in the CMAR's Construction Cost Estimate or the DP's Construction Cost Estimate. Within three (3) weeks following each design review meeting, COUNTY will approve or reject the Design Submission Documents, CMAR's Construction Cost Estimate, and the DP's Construction Cost Estimate. COUNTY may reject in full or in part any Design Submission Documents or Construction Cost Estimates which do not conform to COUNTY's Project Criteria or overall Project concepts, which exceed the Construction Budget, or are not within the Guaranteed Maximum Price, or not consistent with the GMP Setting Drawings, Specifications, Assumptions, and Clarifications (unless the inconsistency was approved or requested by COUNTY), or for any other reasonable cause consistent with the intent of the DP Contract Documents or the CMAR Contract Documents, as applicable. In the event of such rejection, the DP or CMAR respectively will bear the costs of redesign or of revising the construction costs estimates, unless the deficiencies upon which rejection is based are attributable to COUNTY-requested changes. All deviations from COUNTY's Project Criteria, the Construction Budget, the Guaranteed Maximum Price, or the GMP Setting Drawings, Specifications, Assumptions, and Clarifications must be approved in writing by COUNTY.

2.2.4 The CMAR will prepare a Project Management Plan (PMP), which will include:

- a. Project milestone dates and the Project Schedule, including the broad sequencing of the design and construction of the Project,
- b. Required and recommended investigations to be undertaken to ascertain subsurface conditions and physical conditions of existing surface and subsurface facilities and underground utilities,
- c. Alternate strategies for fast-tracking and/or phasing the construction,
- d. Construction management plan,

- e. Permitting strategy,
- f. Safety and training programs,
- g. Construction quality control,
- h. A commissioning program, if required for the Project,
- i. Cost estimate and basis of the model,
- j. A site security plan,
- k. Defined scope basis,
- l. Work breakdown structure if required,
- m. Organization chart,
- n. QA/QC Plan,
- o. Communication plan,
- p. Risk Management plan, and
- q. Procurement plan

Until such time as the CMAR has been selected and receives Notice to Proceed, the DP will develop and maintain the Project Schedule on behalf of, and to be used by, the Project Team, based on input from the existing Project Team members. When the CMAR is brought into the Project Team, the CMAR will assume ownership and responsibility for the Project Schedule that will be incorporated into the PMP.

The fundamental purpose of the PMP is to identify, coordinate, and record the tasks and activities to be performed by all of the Project Team members. The Project Team will utilize the PMP as a basis for managing and monitoring all members' compliance with the requirements of the Project. Project Team members are responsible for their compliance with the PMP requirements. A member's failure to complete a task does not excuse a subsequent failure by another member unless the first member's task is a direct prerequisite to the latter's performance provide, however, the latter team member must make reasonable efforts to mitigate impacts of the failure. Resolution of compatibility issues between the different tracking programs that may be used is the responsibility of the CMAR (i.e. The CMAR may choose to re-enter all tracking data provided by the DP in its tracking program). The Project Schedule will be a CPM diagram schedule that shows the sequence of activities, the interdependency of each activity, will indicate the Critical Path including the Design and Construction phases, and will satisfy the requirements in **Section 2.2.5**.

- 2.2.5 The 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:

The DP and CMAR 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 three (3) weeks for COUNTY to review Design Submission Documents at each sub-phase of the Design Phase and provide adequate time for Government Agency reviews and all other necessary approvals and permits. The 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). CMAR will update and reissue the Project Schedule throughout the Design Phase 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 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 must 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 Project 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 CMAR, will be based on information from the National Weather Services or other COUNTY-approved source.

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 CMAR, 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.

CMAR 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.

Since Float time within the schedule is jointly owned, COUNTY-caused delays on the Project may be offset by COUNTY-caused time savings (*i.e.*, critical path submittals returned in less time than allowed by the contract, approval of substitution requests and credit changes which result in savings of time to the CMAR, etc.). In such an event, the CMAR is not entitled to receive a time extension or delay damages until all COUNTY-caused time savings are exceeded, and the Substantial Completion date is also exceeded.

Throughout the Design Phase, CMAR 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 CMAR will add detail to previous version of the Project Schedule to keep it current throughout the Design Phase, so that the Project Schedule is ready for implementation at the start of the construction phase. The update/revisions will include:

- a. A narrative analyzing the progress achieved to-date vs. planned
- b. Any concerns regarding delays or potential delays, and any recommendations regarding mitigating actions
- c. Revisions in Drawings and Specifications
- d. 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, DP or the CMAR
- e. Unresolved permitting issues, and significant issues, if any, pertaining to the acquisition of land and right of way
- f. The fast-tracking of any of the construction, or other chosen construction delivery methods
- g. The requisite number of separate bidding documents to be advertised
- h. The status of the procurement of long-lead time equipment and materials
- i. Funding issues (*i.e.*, delays) identified by COUNTY

If phased construction is deemed appropriate and both COUNTY and DP approve, CMAR 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 CMAR 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.

2.3 CMAR – DP DESIGN COOPERATION

2.3.1 CMAR will continuously and actively track Project costs throughout the design phase, will proactively advise DP and COUNTY, and will make recommendations relating to construction costs and concerns regarding the feasibility and practicality of any proposed means and methods, selected materials, equipment, building systems, and labor and material availability, and long-lead items. CMAR will further advise COUNTY and DP regarding proposed site improvements, excavation, utility coordination, traffic control and public access, or other issues, as well as any concerns regarding the coordination of drawings and specifications. CMAR will advise COUNTY and DP any time that a design revision results in the CMAR's estimate of the Cost of Construction exceeding the COUNTY's construction budget.

2.3.2 Conceptual/Schematic Design

- a. The DP will review COUNTY's Project Criteria to ascertain the basic requirements for the Project. COUNTY will provide such planning and other documents to DP as are available.
- b. The DP will prepare an expanded Project description for review by COUNTY and CMAR and for COUNTY's approval, which expands and refines the Project Criteria. The description will include all site conditions affecting the Project, including utilities, drainage and flood control implications, and other requirements specified by COUNTY.
- c. The CMAR will work in a collaborative, cooperative, coordinated and communicative manner with the DP in developing items defined in Item (b) above. If agreement by the DP and the CMAR is not attainable with respect to any item, DP and CMAR will promptly refer the matter to COUNTY who will make the final determination on the matter.
- d. The CMAR will develop and submit to COUNTY and DP a conceptual Construction Cost Estimate.
- e. Depending upon the stage of the Project at the inception of this Contract, COUNTY, in its sole discretion, may decide to forgo performance of the activities under this Paragraph 2.3.2 in whole or in part without liability to CMAR or DP.

2.3.3 Preliminary Design

- a. The DP will review the Project description with COUNTY and the CMAR, solicit and receive comments and recommendations from the CMAR and COUNTY, confirm COUNTY's and CMAR's understanding of the subject matter, determine any additional, modified or alternative requirements, and obtain COUNTY's approval.
- b. The DP will provide COUNTY with a preliminary evaluation of the requirements of the Project in light of the amount of the Construction Budget.
- c. The DP will review with COUNTY and CMAR alternate methods and approaches to design and construction of the Project, recommend an approach, and jointly decide with COUNTY and CMAR on the method best suited to COUNTY's requirements and the Project.
- d. Based upon the Project description, discussions with COUNTY and CMAR, the Construction Budget, and the DP Site Information, the DP will prepare Preliminary Design Documents (SDs), which will consist of drawings and other documents depicting the scale and relationship of Project components, for review with COUNTY and CMAR and for COUNTY's approval.
- e. The DP will work in a collaborative, cooperative, communicative, and coordinated manner with the CMAR in developing items defined in Item (d) above. If agreement by DP and CMAR is not attainable, DP and CMAR will promptly refer the matter to COUNTY who will make the final determination on the matter.
- f. The CMAR will develop and submit to COUNTY and DP a Construction Cost Estimate.

- g. The DP and CMAR will reconcile each of the DP's Construction Cost Estimate and CMAR's Construction Cost Estimate with the other, and will reconcile both of them with COUNTY's Construction Budget. DP and CMAR will complete the reconciliation not later than seven (7) days after completion of both estimates. This reconciliation must provide an estimate no greater than COUNTY's Construction Budget before the Final Design sub-phase under **Section 2.3.4** may begin.

2.3.4 Final Design

Based on the SDs and any amendments thereto approved by COUNTY to the Project or the amount of COUNTY's Construction Budget, the DP will prepare Design Development Documents (DDs) for review with COUNTY and the CMAR and for COUNTY's approval. The DDs will consist of drawings and other documents to delineate and define the general design of the entire Project.

The DP will work in a collaborative, cooperative, communicative and coordinated manner with the CMAR in developing the DDs defined above. If agreement between DP and CMAR is not attainable, DP and CMAR will promptly refer the matter to COUNTY who will make the final determination on the matter.

The CMAR will develop and submit to COUNTY and DP a Construction Cost Estimate.

The DP and CMAR will reconcile the DP's Construction Cost Estimate and the CMAR's Construction Cost Estimate with each other and will reconcile both of them with the amount within COUNTY's Construction Budget. DP and CMAR will complete the reconciliation not later than seven (7) days after completion of both estimates. This reconciliation will provide an estimate no greater than the amount within COUNTY's Construction Budget before the Construction Documents sub-phase under **Section 2.3.5** may begin.

2.3.5 Construction Documents

Based upon the approved Final Design Documents (DDs) and any further amendments thereto of any kind approved by COUNTY, the DP will prepare detailed Construction Documents (CDs) setting forth the requirements for construction of the entire Project, including complete Drawings, Specifications, and a revised Construction Cost Estimate. The DP must be aware of, and conform to, the **order of precedence provisions in Section 2.6.12.3**. The Construction Documents are subject to review by COUNTY and CMAR and to approval by COUNTY.

If the GMP has been agreed by COUNTY and CMAR before completion of the Construction Documents, the Construction Documents will be subject to review by CMAR for conformance with the GMP Drawings, Specifications, Assumptions, and Clarifications as provided in **Appendix "B" Construction Costing of the CMAR Contract**.

All drawings and specifications included in the Construction Documents must bear the dated signature and seal of the DP. Except as expressly provided in the DP Contract Documents, the DP is fully responsible for all designs it provides for the Project.

Unless otherwise specified, DP will file all documents and obtain all approvals required for design approval by Governmental Agencies having jurisdiction over the Project and/or designated by COUNTY. COUNTY will cooperate with the DP in preparing applications for necessary approvals, sign applications, and pay applicable fees. The DP will also assure that the Project meets all applicable statutory requirements for public works of the nature of the Project.

2.3.6 DP's Construction Cost Estimates and CMAR's Construction Cost Estimates

The DP will cooperate and exchange information with CMAR in CMAR's development of its Construction Cost Estimates and the Guaranteed Maximum Price. The CMAR will cooperate and exchange information with the DP in the development of DP's Construction Cost Estimates.

Each DP Construction Cost Estimate, CMAR Construction Cost Estimate and CMAR Schedule of Values will include without duplication:

- a. All labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Construction Work, whether temporary or permanent, and whether or not incorporated or to be incorporated in the Construction Work. All fixed equipment, site improvements, utility and utility relocations, and equipment installations will also be included.
- b. General Conditions;
- c. The Construction Phase Fee;
- d. All bond and insurance premiums;
- e. All applicable taxes, including, without limitation, applicable sales taxes and transaction privilege tax; and
- f. A CMAR Contingency.

The DP and CMAR Construction Cost Estimates will include the costs of the Construction Work and will not include the CMAR's Design Phase Services Fee, sums due the DP, costs of land, rights of way, financing, or other costs which are the responsibility of COUNTY.

The DP and the CMAR will base each of their Construction Cost Estimates on the latest Design Submissions Documents. The DP and CMAR will discuss the materials, equipment, component systems, and types of construction contemplated by the DP to the extent such items are not in the latest Design Submission Documents.

The CMAR will make any recommendations the CMAR determines necessary or appropriate for modifications in the latest Design Submission Documents or in the materials or items the DP proposes to use.

All DP and CMAR Construction Cost Estimates will use a consistent method of allocating costs of the Construction Work, will follow the standard construction format, and will otherwise be in a form agreed to by DP, CMAR, and COUNTY.

After COUNTY and CMAR agree on a Guaranteed Maximum Price and in any event during the Construction Documents sub-phase of the Design Phase, CMAR will continually monitor costs and develop cost estimates to help ensure that the cost of the Construction Work remains within both the COUNTY's Construction Budget and the Guaranteed Maximum Price.

DP Construction Cost Estimates and CMAR Construction Cost Estimates will be independently prepared, will be based on quantitative takeoffs whenever possible, and will be in sufficient depth and organization to be used in preparing budgets based on the Schedule of Values.

CMAR will submit its Construction Cost Estimates to the DP for review prior to submission of the estimates to COUNTY. DP will submit its Construction Cost Estimates to CMAR for review before submission of the estimates to COUNTY. DP and CMAR will meet and reconcile their respective cost estimates not later than seven (7) days after exchanging Construction Cost Estimates and the respective Design Submission Documents and submit the reconciled Cost Estimates and Design Submission Documents to the COUNTY. If DP and CMAR cannot agree on any individual cost items, then the highest identified cost will be utilized and noted as such by the CMAR and the DP in their respective estimates submitted to the COUNTY.

In the event the reconciled Cost Estimates are not within the COUNTY's Construction Budget or GMP, the DP and CMAR will:

- a. Notify COUNTY if it appears that the DP's Construction Cost Estimate or the CMAR's Construction Cost Estimate will exceed COUNTY's Construction Budget or the GMP.
- b. Satisfactorily demonstrate the accuracy of its estimate in such detail as COUNTY may reasonably require.
- c. Make reasonable recommendations for corrective action to bring the estimates back within COUNTY's Construction Budget or the GMP, if the estimates exceed COUNTY's Construction Budget.

The overall design objective is to develop a design that can be constructed for an amount within COUNTY's Construction Budget. If, in connection with any submission of Design Submission Documents and Cost Estimates, the Cost Estimates exceed COUNTY's Construction Budget, then the costs of redesign and of revising the cost estimates will be allocated as follows:

- a. If the excess costs of the Design Submission Documents are attributable to COUNTY-directed design choices, unanticipated significant materials cost increases or other unforeseen market dislocations, or other causes beyond the control of DP and/or CMAR, then the costs of revision will be the responsibility of COUNTY.
- b. If the excess costs are attributable to unapproved deviations from COUNTY's Final Schematic Design Report or unreasonable or negligent design choices, then the costs of revision will be the responsibility of DP.
- c. If the excess costs are attributable to the application of unsubstantiated deviations from the cost model by CMAR, then the costs of revising the costs estimates will be the responsibility of CMAR.
- d. If the excess costs are attributable to any combination of the causes identified above, then the costs of design and or cost estimate revision will be allocated to each party in the percentage by which their cause contributed to the excess.
- e. In the event the excess costs are attributable to an unanticipated cause not identified above, then the costs of revision will be the responsibility of COUNTY, unless the unanticipated cause arises from the error, omission, or negligence of the DP or CMAR, in which case the offending Party will bear the costs.
- f. If the Parties are unable to agree on causation or the allocation of costs, then COUNTY will make a determination with respect thereto and provide a copy of the determination in writing to each of the other parties. COUNTY's determination will be final and conclusive unless, within seven (7) calendar days from delivery of the COUNTY's determination, the party or parties objecting to COUNTY's determination notifies each of the other parties in writing that they are initiating the Dispute Resolution procedure of the Contract. The notice will include a brief statement of the basis for the initiating party's objection to COUNTY's determination.

2.3.7 BUDGETING AND GUARANTEED MAXIMUM PRICE

- 2.3.7.1 The CMAR will provide its Pre-Construction Services for the Pre-construction Phase Fee identified in the Contract. That fee will be earned based upon the amount of Design Phase Work completed. That fee will be billed and payable monthly as a percentage of completion of Pre-Construction Services. The Construction Phase services of CMAR will be provided based upon an Open Book Cost of the Work, plus the separate Construction Phase Fee for CMAR identified in the Contract.
- 2.3.7.2 As provided for in **the Contract** and when the design has sufficiently progressed, COUNTY will require CMAR to propose a GMP for the construction that is to be based on the Cost of the Work. The GMP will be prepared in accordance with these Sections 2.3.7.2 and 2.3.7.3 and **Appendix "B" Construction Costing of the CMAR Contract**.
- 2.3.7.3 COUNTY will, at its sole discretion, have the option to accept the GMP submitted by CMAR, request that CMAR submit another GMP, or reject the GMP and terminate all contracts and agreements with the CMAR. In the event of such a termination, the CMAR will receive payment for services it has provided to date. In this situation, there will be no amounts paid for any termination cost, lost profits, lost opportunity or any other reason.
- 2.3.7.4 Once accepted by COUNTY, the GMP may be revised only by an approved Change Order or Contract Amendment.
- 2.3.7.5 In the event the CMAR elects, in its sole discretion, to maintain a construction contingency within the GMP, the criteria for the development of that contingency must be acceptable to the COUNTY.

Thereafter, the CMAR must inform the COUNTY of any intended usage of the contingency, with supporting itemized schedule and pricing documentation, to maintain complete records and confirm its appropriate use for the Project.

2.3.8 COST ESTIMATES

- 2.3.8.1 Construction Cost: All estimates of GMP, and associated Schedule(s) of Values must include without duplication:
- a) All labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent, and whether or not incorporated or to be incorporated in the Work;
 - b) The CMAR's Construction Phase Fee;
 - c) All bond and insurance premiums;
 - d) All applicable taxes, including without limitation, applicable sales taxes and transaction privilege tax;
 - e) A Contingency for bidding/construction;
 - f) Construction General Conditions;
 - g) Overhead
- 2.3.8.2 The CMAR's estimates of Construction Costs will not include sums due the DP, the CMAR's Pre-Construction Phase Fee, costs of land, rights of way, financing, or other costs that are the responsibility of COUNTY. CMAR's allowable labor rates within rates or part of Construction General Conditions are restricted to direct labor costs, *i.e.*, actual salaries/wages plus associated costs required by statute or regulation (social security, Medicare employee's match, unemployment, etc.) and employee benefits (vacations, health insurance, etc.). Non-Project specific training costs, bonuses, cost of living allowances, education, and training are not allowable labor costs and are not reimbursable. Promotional or celebratory expenses the CMAR incurs while performing and completing the Project are not reimbursable as part of Construction General Conditions and must be paid out of the CMAR Construction Phase fee.
- 2.3.8.3 The CMAR, prior to and in preparing its estimates of Construction Costs and providing the GMP, will consult with the DP to determine to the extent possible what materials, equipment, component systems, and types of construction are to be included in the Construction Documents and to make recommendations for reasonable adjustments in the Scope of Work, and to include in the Construction Documents such alternate items as COUNTY approves in writing.
- 2.3.8.4 The CMAR will take the lead in developing a cost model, preparing an estimate of Construction Cost as soon as major Project requirements have been identified, and updating the cost model and estimate for each submittal of the Design Submission Documents specified in 1.2.14 of the General Conditions. For all Bid Packages for Construction, the CMAR will prepare a quantity take-off cost estimate based on CSI formats within two weeks of receipt of applicable documents from the DP. All estimates of Construction Cost must make allowance for bidding and price escalation. During the Pre-construction Phase, the CMAR will continually monitor the cost estimates and develop a cost estimate to help assure that the Cost of the Work remains within the applicable portion of the Project Budget or GMP, as applicable. No Construction Services or Work to be performed under the Contract will commence until a GMP is established by the CMAR, submitted and accepted by COUNTY, and incorporated into this Contract by Contract Amendment.
- 2.3.8.5 All CMAR cost estimates will be prepared separately and independently from DP estimates, will be based on quantitative takeoffs whenever possible, and will be completed in sufficient depth and organization to be used in preparing budgets based on sub-trades, combinations of sub-trades, building systems (if any), and Bid Packages. Lump sum estimates are not acceptable.
- 2.3.8.6 CMAR will submit all applicable cost estimates to the DP and COUNTY for review, scope verification, and reconciliation with the DP's estimates of cost. If the DP and CMAR cannot agree on any individual cost items, then the highest identified cost of either will be utilized and noted as such by the CMAR in the submission of the cost estimate to COUNTY as part of the Design Submittal.
- 2.3.8.7 After review and scope verification of the cost estimate done by the DP, the CMAR will a) notify COUNTY if it appears that the DP estimate of Construction Costs will exceed the applicable portion of the projected Construction Cost Budget or GMP as may be applicable; b) satisfactorily demonstrate the accuracy of its estimate in such detail as COUNTY may reasonably require; and c) make

reasonable recommendations for corrective action consistent with the Project Budget or GMP, as may be applicable. All such cost estimates must be within Project Budget or GMP as applicable, or include reasonable recommendations for bringing the estimates within the Project Budget or GMP, as applicable, prior to final submission to COUNTY for review and acceptance. CMAR will not bear any costs to correct Design Documents to bring the Project back within the Project Budget or GMP, as applicable, except for the CMAR's own costs incurred in re-estimating.

- 2.3.8.8 DP/CMAR Cooperation: The DP, by the terms of its contract with COUNTY, is obligated to provide reasonable cooperation to the CMAR in the development of estimates of Construction Cost and the GMP. Conversely, the CMAR shall provide reasonable cooperation to the DP in the development of estimates of Construction Cost and the GMP. DP and CMAR shall reconcile their Cost estimates with each other and COUNTY not later than seven (7) days after the completion of CMAR's estimate or receipt of DP's estimate to assure COUNTY that the Project Cost is within the designated budget.

2.3.9 OTHER PRE-CONSTRUCTION SERVICES

- 2.3.9.1 The CMAR will review the Drawings and Specifications as they are being prepared, recommending alternative materials, alternatives, methods, means, constructability, and/or sequencing whenever design details affect construction feasibility, schedules, or cost. However, nothing contained in this section 2.3.9.1 requires the CMAR to provide design services.
- 2.3.9.2 The CMAR will make recommendations to COUNTY and the DP regarding the division of work in the Drawings and Specifications to facilitate the bidding and awarding of subcontracts, allowing for phased construction, if applicable, taking into consideration such factors as time of performance, availability of labor, overlapping trade jurisdictions, provisions for temporary facilities, and similar factors.
- 2.3.9.3 Coordinating with the DP, the CMAR will provide a written Constructability Review of all Drawings and Specifications, in a form acceptable to COUNTY. The Constructability Review will (a) minimize areas of conflict, errors, omissions, and overlapping of the Work to be performed by the various subcontractors; (b) confirm that the full Scope of Work has been included in the drawings; (c) endeavor to minimize cost and to Value Engineer where appropriate; and (d) allow for phased and/or fast-track bid packages and construction, as required. An acceptable and effective Constructability Review is a goal for the CMAR and the COUNTY.
- 2.3.9.4 The CMAR will attend all regular meetings with COUNTY and DP and such additional meetings as COUNTY may request. The DP will schedule all regular meetings with the prior agreement of the CMAR and approval of COUNTY. COUNTY will schedule all additional meetings.
- 2.3.9.5 The CMAR will investigate and recommend materials and equipment that COUNTY could purchase directly; consider long lead time procurement and mass purchasing power in making such recommendations; recommend a schedule for such purchases after coordination with the DP regarding the timetable for preparation of Construction Documents; and expedite and coordinate delivery of these purchases to facilitate their delivery by the required dates.
- 2.3.9.6 If COUNTY determines that Integrated Project Delivery (IPD) or Building Information Modeling (BIM) objectives will benefit the Project and it is or will be to the advantage of COUNTY or the Project to select certain subcontracting trades to participate in the design process during the Pre-Construction Phase, as well as provide Construction Services during the Construction Phase, then the following procedures will apply:
- a. CMAR will prequalify Subcontractors from the trades needed in the Pre-Construction Phase.
 - b. Upon acceptance of COUNTY, a Request for Proposal (RFP) will be requested from pre-qualified Subcontractors. The RFP will request additional qualification information in addition to pricing information, such as labor rates and overhead and profit factors.
 - c. The Statement of Qualifications (SOQ) from the Subcontractors will be reviewed by a committee consisting of CMAR, COUNTY, and design team members. The qualification and pricing information will be scored by a pre-determined weighted scoring system.

- d. The committee will develop a list of firms that will be interviewed.
- e. The Subcontractors will be interviewed and ranked, and the highest ranked Subcontractor will be selected to provide the services.
- f. All Subcontractor selections will be in accordance with A.R.S. 34-603(C)(2)(e)(i) and CMAR's subcontractor selection plan.

For Subcontractors selected in this manner, the CMAR must establish to COUNTY's satisfaction that the Subcontractor's price submission is reasonable and appropriate by following the procedures outlined for the CMAR in Article 2.3.9.11 and 2.3.9.12.

- 2.3.9.7 The CMAR will: assist COUNTY and DP in the preparation of the necessary and appropriate bidding information, bidding forms, and pre-qualification criteria for bidders; develop subcontractor interest; establish bidding schedules; advertise for bids; and conduct pre-bid conferences to familiarize bidders with the bidding documents and management techniques and with any special systems, materials, or methods. The CMAR will review all potential subcontractors with COUNTY and DP and obtain COUNTY's approval of the pre-qualification of any subcontractor. If the CMAR becomes aware prior to any bid date that fewer than three (3) pre-qualified subcontractors plan to bid any portion of any Bid Package or that anticipated bids from previously approved or pre-qualified subcontractors are likely to exceed the current Schedule of Values or estimate of Construction Cost, the CMAR will promptly notify COUNTY.
- 2.3.9.8 The CMAR's post-bid selection of any subcontractor must be based on qualifications alone, or on a combination of qualifications and price selection, but will not be based on price alone. The CMAR will receive and open bids when advertised, prepare a bid analysis, conduct pre-award conferences, and notify COUNTY and DP concerning which bids from pre-qualified subcontractors will be accepted and awarded. The CMAR will notify COUNTY and DP of the time and place of all bid openings and will permit COUNTY and DP to attend such openings with their representatives and guests. CMAR will justify in writing any proposal to accept other than a low lump sum bid with sufficient detail to satisfy COUNTY, and the proposal will be subject to prior written approval by COUNTY, with no increase in the GMP. Once approved by COUNTY, CMAR may not replace any subcontractor without COUNTY's prior approval and any change in cost to CMAR will not be a responsibility of COUNTY and there will be no increase in GMP or contract price by reason of such change of subcontractor. Within ten (10) days after award, CMAR will furnish one (1) fully executed subcontract for work or services on this Project to COUNTY together with all special or supplementary conditions applicable to the subcontract work.
- 2.3.9.9 The CMAR will provide COUNTY and DP with requirements and assignment of responsibilities for safety precautions and programs as required for the execution of the Work, temporary Project facilities and for equipment, materials and services for common use of subcontractors and verify that all such information is included in the Construction Documents.
- 2.3.9.10.1 If the project covered by this Contract is not "horizontal construction" as defined in A.R.S. § 34-101 and the CMAR indicates it desires to self-perform any portion of the Construction Work, the following procedures will be followed: The CMAR must submit its qualifications to do the listed portion(s) of the Construction Work to COUNTY and if COUNTY is satisfied with CMAR's qualifications as to that portion of the Construction Work, COUNTY will designate the CMAR as a pre-qualified Subcontractor for that portion of the Construction Work. A bid package for each portion of the Construction Work as to which CMAR is a pre-qualified Subcontractor will be prepared in the same manner and content as bid packages for Subcontractors in other trades. CMAR will submit a proposed price for each of these portions of the Construction Work. This proposed price will include labor rates, and certify that sub-sub trades and materials will be bid with a minimum of three pre-qualified bidders.
- 2.3.9.10.2 If the project covered by the Contract is "horizontal construction" as defined in A.R.S. § 34-101, CMAR's submitted GMP will clearly identify the Work the CMAR intends to self-perform and distinguish the costs thereof.

- 2.3.9.11 In order to evaluate the CMAR's Price Submission on self-performed Work, COUNTY may do any or all of the following at COUNTY's discretion: (i) engage an estimator selected by COUNTY to prepare an independent estimate of this portion of the Construction Work; (ii) engage the DP, or other consultants to do a construction market study to confirm construction market impacts to the cost of this portion of the Construction Work; or (iii) take other action to evaluate the CMAR's Price Submission. In any event, CMAR is responsible to establish to COUNTY's satisfaction that the CMAR's Price Submission is reasonable and appropriate. If COUNTY is satisfied that the CMAR Price Submission is reasonable and appropriate, COUNTY will advise the CMAR that the CMAR is selected as Subcontractor for the respective portion of the Construction Work.
- 2.3.9.12.1 If the project covered by this Contract is not "horizontal construction" as defined in A.R.S. § 34-101 and at the conclusion of the review of the CMAR's proposed price, COUNTY is not satisfied that the CMAR's Price Submission is reasonable and appropriate, COUNTY will so advise the CMAR and the CMAR will conduct a normal Subcontractor bid competition for selection of the Subcontractor to perform this portion of the Construction Work, in accordance with the procedures in Section 2.3.9.7, except that, notwithstanding any other provision of the CMAR Design Phase Services Contract Documents to the contrary, (i) the CMAR's Price Submission will be the CMAR's bid for that portion of the Construction Work in the Subcontractor bidding process; (ii) the CMAR must obtain bids for that portion of the Construction Work from a minimum of two other pre-qualified Subcontractors; (iii) the Subcontractor bids for that portion of the Construction Work must be delivered to COUNTY rather than the CMAR; and (iv) COUNTY will decide which Subcontractor bid to accept, in accordance with Article 2.3.9.8.
- 2.3.9.12.2 If the project covered by this Contract is "horizontal construction" as defined in A.R.S. § 34-101 and at the conclusion of the review of CMAR's proposed price, COUNTY is not satisfied that CMAR's Price Submission is reasonable and appropriate, COUNTY may, at its sole discretion: 1) negotiate with CMAR to arrive at a more acceptable price; 2) negotiate with CMAR and request a best and final offer; 3) seek additional funding, if available; 4) terminate the Contract for convenience and acquire construction services by different means; or 5) any combination of these or such other actions as COUNTY deems appropriate within its sole discretion.

2.4 LEGAL REQUIREMENTS.

CMAR will perform all Work in accordance with all applicable Legal Requirements as described in 1.2.20 and otherwise will provide all notices applicable to the Work. It is the responsibility of the CMAR during the Pre-Construction Phase to assist the DP and the COUNTY to ascertain that the Construction Documents under preparation are in compliance with all applicable laws, statutes, ordinances, building codes, rules, and regulations.

2.5 GOVERNMENT APPROVALS AND PERMITS

Unless otherwise provided in the Contract Documents, CMAR has the responsibility to obtain and pay for all necessary permits, approvals, licenses, government charges, and inspection fees required for the prosecution of the Work by any Governmental Agency having jurisdiction over the Project.

2.6 CMAR'S CONSTRUCTION PHASE SERVICES

- 2.6.1 Unless otherwise provided in the Contract Documents to be the responsibility of COUNTY or a separate Contractor(s), CMAR's construction phase services will include: team management and coordination, scheduling, cost controls and Change Order management, submittal process management, subcontracting, field management, safety program, closeout process, and warranty period services. This responsibility includes providing, through itself or its Subcontractors, all necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities, and other temporary facilities needed to complete construction of all Work consistent with the Construction Documents.
- 2.6.2 CMAR will perform all construction Work, services, and activities efficiently and with the requisite expertise, skill, quality, and competence necessary to satisfy the requirements of the Contract Documents. CMAR will at all times exercise complete and exclusive control over the means, methods, sequences, and techniques of construction.

- 2.6.3 CMAR will only employ Subcontractors (of any tier) who are properly licensed and fully able and committed to performing the Work in compliance with the Construction Documents and with the same degree of skill, quality and competence as CMAR.
- 2.6.4 CMAR is fully responsible for the work of its Subcontractors and any of their acts and omissions in connection with the performance of their work. Nothing in the Contract Documents creates any legal or contractual relationship between COUNTY and a Subcontractor (of any tier). In addition, nothing in the Contract Documents creates any third-party beneficiary rights.
- 2.6.5 CMAR is responsible for coordinating the activities and Work of all Subcontractors. If COUNTY is performing other work with separate Contractors under COUNTY's control, CMAR agrees to cooperate and coordinate its Work with the work of COUNTY's separate Contractors so that the Project can be completed in an orderly, efficient, and coordinated manner reasonably free of significant disruption to any party.
- 2.6.5.1 COUNTY reserves the right to award other contracts related to the Project, or to perform certain portions of the Work itself. Any such other work may or may not be known to COUNTY or disclosed to the CMAR prior to execution of the Contract. The CMAR will afford COUNTY and such 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 work with theirs in such manner as COUNTY or DP may direct. The CMAR will also assure at its own cost reasonable access of other contractors to their site and their work.
- 2.6.5.2 Upon request of CMAR, COUNTY will provide CMAR with a copy of Drawings, Specifications, Schedules or other needed data relating to such other contracts or work as may be necessary to meet CMAR's duty to coordinate. The CMAR will thoroughly examine these documents and within three (3) work days of completing such examination will notify COUNTY in writing of any conflicts with the Work to be performed by the CMAR. In no event will such notice be given by CMAR so late as to interfere with or delay the Work to be performed by the CMAR. Failure of the CMAR to request, review, or provide written notice as provided above constitutes a waiver of any objections or claims the CMAR may otherwise have as a result of the necessity to coordinate the CMAR's Work with other activities.
- 2.6.5.3 Should the CMAR sustain any damage through any act or omission of any other contractor or subcontractor, CMAR has no claim or cause of action against COUNTY for such damage and hereby waives any such claim. The CMAR 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 or subcontractor. The phrase "act or omission" as used in this section includes, but is not limited to, any delay on the part of any such other contractor or subcontractor, whether due to negligence, gross negligence, inadvertence, or any other cause.
- 2.6.5.4 Should the CMAR cause damage to the work or property of any other contractor or subcontractor of COUNTY, the CMAR will upon receiving due notice of damage promptly attempt to settle with such other contractor by contract, repair, or otherwise to resolve the dispute. If any such separate contractor sues or initiates a proceeding against COUNTY on account of any damage alleged to have been caused by the CMAR or its subcontractors, COUNTY will notify the CMAR who will at its own cost indemnify and defend County in such proceedings, or pay the costs of COUNTY defending such proceedings, and if any judgment or award against the COUNTY arises therefrom, the CMAR will pay or satisfy it and will reimburse COUNTY for all attorney's fees and court or other costs which COUNTY has incurred in connection with the matter.
- 2.6.6 CMAR will keep the Site free from debris, trash, and construction waste to permit CMAR to perform its construction services efficiently, safely, and so as not to interfere with the use of any adjacent land areas, including the reasonable aesthetic appearance of the jobsite and all storage and staging areas. CMAR is also responsible for and will take precautions and measures to fully secure, safeguard, and protect the Work during the Construction Phase. Unless previously released of responsibility by COUNTY, CMAR's responsibility to secure, safeguard, and protect continues until final completion and acceptance.

- 2.6.7 Upon Substantial Completion of the Work, or a portion of the Work, CMAR will remove all debris, materials, waste, equipment, machinery, and tools from the Work so as to permit COUNTY to safely occupy the Work or a portion of the Work for the use for which it is intended.

2.6.8 CONTROL OF THE WORK

- 2.6.8.1 The CMAR will supervise and direct the work of its employees and Subcontractors and coordinate the work with the activities and responsibilities of COUNTY and the DP so as to complete the Work in accordance with COUNTY's objectives of cost, time, and quality as set forth in the Contract Documents.
- 2.6.8.2 The CMAR will establish an on-site organization with lines of authority in order to carry out the overall plans for completion of the Work.
- 2.6.8.3 The CMAR will schedule, notice, conduct, and take and distribute minutes of weekly progress meetings at which COUNTY, DP, and CMAR can discuss jointly such matters as procedures, progress, and problems.

2.6.9 DAILY LOG

- 2.6.9.1 The CMAR will maintain a daily log of construction activities for each calendar day of the Contract Time, using a form pre-approved by the DP. In that log, the CMAR will document all activities at the Work site, including, but not limited to:
- a) Weather conditions showing the high and low temperatures during work hours, the amount of precipitation received on the job site, and any other weather conditions which adversely affect work at the site;
 - b) Soil conditions which adversely affect work at the site;
 - c) The hours of operation by CMAR and individual Subcontractor personnel;
 - d) The number of CMAR and Subcontractor personnel present and working at the site, by subcontract and trade, and updated schedule activity number;
 - e) The equipment active or idle at the site;
 - f) A description of the work being performed at the site by updated schedule activity number;
 - g) Any delays, disruptions or unusual or special occurrences at the site;
 - h) Materials received at job site; and
 - i) A list of all visitors at the site.
 - j) Any other relevant information as to activities on the site that day.
- 2.6.9.2 The CMAR will provide copies of the daily logs to COUNTY on a weekly basis. The daily log does not constitute written notice to COUNTY of any event or occurrence when such notice is required by the Contract Documents.
- 2.6.9.3 Any changes affecting previously approved work requires prior written approval of COUNTY.

2.6.10 SUPERVISION AND CONSTRUCTION PROCEDURES

- 2.6.10.1 The CMAR will supervise and direct the Work using the CMAR's best skill and attention. The CMAR is solely responsible for the coordination and accomplishment of all portions of the Work under the Contract Documents.
- 2.6.10.2 CMAR is responsible to COUNTY for the acts and omissions of CMAR's employees, Subcontractors of all tiers, their agents and employees, and any other persons performing any of the Work or furnishing materials under a contract with the CMAR.

- 2.6.10.3 The CMAR will not be relieved from its obligation to perform the Work in accordance with the Contract Documents either by the activities or duties of the DP in its administration of this Contract, or by inspections, tests, or approvals required or performed by persons other than the CMAR. Nothing contained in this paragraph precludes the CMAR from asserting any rights it may have under this Contract in the event of unreasonable delays to the CMAR in the conduct of any inspections, test, approvals, or other actions by the DP upon which CMAR's schedule depends.
- 2.6.10.4 The CMAR will employ a competent COUNTY-approved Superintendent and necessary assistants, who will be in attendance at the Project site during the progress of the Work. The CMAR will also employ a COUNTY-approved Representative together with such additional engineering and clerical support as may be reasonably required and appropriate to the stage of construction work. Once designated, the Superintendent and Representative of CMAR will not be changed except with the prior consent of COUNTY, unless the Superintendent or Representative proves to be unsatisfactory to the CMAR or ceases to be in its employ. The Superintendent and Representative will represent the CMAR and all communications given to the Representative are binding on the CMAR. All such communications will be confirmed in writing.
- 2.6.10.5 The CMAR will at all times enforce strict discipline and good order among its employees and its Subcontractors' employees, and will not allow employment on the Work of any unfit person or anyone not skilled in and capable of performing the task assigned to them.
- 2.6.10.6 The CMAR will at all times allow COUNTY, DP, or any other designated representatives access to the construction work to observe progress and inspect the quality of work and conformance to the Construction Documents.
- 2.6.10.7 Any Work required to be inspected by the DP or COUNTY prior to being covered, which is covered up without prior inspection or without prior consent of the DP or COUNTY, must be uncovered by the CMAR, if requested by the DP or the COUNTY, and then re-covered at no cost to COUNTY, notwithstanding the provisions of the following subsection.
- 2.6.10.8 CMAR will notify COUNTY and DP in writing at least twenty-four (24) hours prior to the time at which COUNTY or DP must be present to perform an inspection. Failure to provide such notice makes the CMAR solely responsible for all consequences of non-inspection and any required access to or uncovering of such Work.

2.6.11 ADMINISTRATION

- 2.6.11.1 Except as may be expressly provided to the contrary in the Contract Documents, the CMAR's Representative will forward all communications in writing and all documents simultaneously to COUNTY's Representative and the DP's Representative who shall be determined at the Project kickoff meeting.

2.6.12 DRAWINGS AND SPECIFICATIONS

- 2.6.12.1 The CMAR will study and compare the Construction Documents prior to beginning Work on each phase or portion of the Work and immediately report any material error, inconsistency, conflict, ambiguity, or omission that is discovered to the DP and COUNTY.
- 2.6.12.2 The Construction Drawings are intended to show general arrangements, design, and extent of Work and are not intended to serve as Shop Drawings. Where required, the CMAR will perform no portion of the Work without having Shop Drawings, Product Data, or Samples approved; any Work performed in violation of this provision will be solely at the CMAR's risk regardless of DP's or COUNTY's knowledge of such Work being performed.

- 2.6.12.3 In the event of any conflict or ambiguity, the Construction Documents will be interpreted as being complementary, requiring delivery by CMAR of a complete Project, or designated portion thereof. Any requirement occurring in any one of the Construction Documents is as binding as though occurring in all Construction Documents. In the event of any conflict or ambiguity, perceived or real, the CMAR will request an interpretation by the DP before performing the Work. 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 a conflict is discovered in the Construction Documents, the priorities stated below govern and control:
- a) Addenda govern over all other Construction Documents;
 - b) Subsequent addenda govern over prior addenda, but only to the extent modified;
 - c) In case of conflict between Drawings and Specifications, the Specifications govern;
 - d) Conflicts within the Drawings:
 - (1) Schedules, when identified as such, govern over all other portions of the Drawings.
 - (2) Specific notes govern over all other notes and all other portions of the Drawings, except the schedules described in 2.6.12.3(d)(1) above.
 - (3) Larger scale drawings govern over smaller scale drawings.
 - (4) Figured or numerical dimensions govern over dimensions obtained by scaling.
 - e) Conflicts within the Specifications: These General Conditions govern over all sections of the Specifications except for specific modifications thereto that may be stated in Special Conditions or addenda. No other section of the Specifications modifies these General Conditions; and
 - f) In the event provisions of codes, safety orders, Construction Documents, referenced manufacturer's specifications or industry standards are in conflict, the more restrictive or higher quality governs.
- 2.6.12.4 In the event of conflict between COUNTY's Technical Standards and the Drawings and Specifications, CMAR will promptly call the conflict to the attention of COUNTY and DP and will defer the use of such Drawing until resolution of the conflict to COUNTY's satisfaction.
- 2.6.12.5 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 an implied requirement of the Construction Documents in accordance with such standard. That is to say, a) "minor detail" includes 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 includes a single component which is incidental, even though its cost or importance may be substantial; and b) the quality and quantity of the parts or materials 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.

2.6.13 SUBMITTALS, DRAWINGS AND SHOP DRAWINGS

- 2.6.13.1 The CMAR will maintain at the Site, for the use of COUNTY and of the DP, 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 CMAR to record all approved changes made during construction. The CMAR will turn over all of these to the DP at the time of Substantial Completion for the purpose of the DP assembling and correlating the material for use by COUNTY.
- 2.6.13.2 The CMAR will submit to the DP, with such promptness as to cause no delay in its work or in the work of any other Contractor, all Submittals and Shop Drawings as are required by the Construction Documents, or are necessary to illustrate details of the Work.

2.6.13.3 Each Submittal and Shop Drawing must be accompanied by a CMAR transmittal letter containing a list of the titles and numbers of the Shop Drawings. Each series must be numbered consecutively for ready reference. Each Submittal and Shop Drawing will be marked with the following information:

- a) Date of Submission
- b) Name of Project
- c) Location of Project
- d) Branch of Work (Specification Section)
- e) Project Number
- f) Name of Submitting CMAR
- g) Name of Subcontractors
- h) Revision Number

Submittals identified by COUNTY will be submitted to COUNTY for its review concurrent with review of same by DP. During Construction Phase CMAR will promptly provide COUNTY with an electronic copy of all approved submittals.

2.6.13.4 The CMAR will review all Subcontractor Submittals and Shop Drawings prior to being submitted to the DP and each must bear a written statement by the CMAR that the Submittals and shop drawings are consistent with the Construction Documents and other Contract Documents or, if not totally consistent, they must bear a written statement indicating all variances from the Construction Documents and other applicable Documents. Any submittals or shop drawings submitted without the statements will be returned for resubmission; the submittals or shop drawings will be considered as not having been submitted; and any delay caused thereby is the CMAR's sole responsibility. This review by CMAR of Subcontractor submittals and shop drawings is not CMAR approval of the design therein except that it is a representation that the letter accompanying the submittal or shop drawings does indicate all variations from the Construction Documents and other Contract Documents as required by Section 2.6.13.5.

2.6.13.5 The CMAR will include with Submittals and Shop Drawings, a letter indicating all variances from the DP's Drawings and Specifications. Failure to so notify the DP of such variances will be grounds for subsequent rejection of the related Work or materials. If, in the opinion of the DP, the variances are not acceptable, the CMAR must furnish the item as specified or as indicated on the Construction Drawings.

2.6.13.6 The CMAR must check all of its Submittals and Shop Drawings and be fully responsible for them and for coordination with connecting Work. Submittals and Shop Drawings must indicate in detail all parts of an item of Work, including erection and setting instructions and engagements with work of other trades or other separate Contractors.

2.6.13.7 By the act of reviewing or submitting Submittals or Shop Drawings, the CMAR thereby represents to COUNTY and DP 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 Work and of the Construction Documents. If any specified material item or part is not available, the CMAR must so indicate to the DP.

2.6.13.8 The DP will review and approve Submittals and Shop Drawings and return them to the CMAR within twenty (20) calendar days of receipt unless otherwise previously agreed in writing. For scheduling purposes, the CMAR must assume a 20-day review period for each Submittal or set of Shop Drawings, and ten (10) calendar days for resubmittals, except for complex submittals identified by the DP as having significant deficiencies, in which event the resubmittal turnaround time will be within twenty (20) calendar days. If review and approval are delayed beyond twenty (20) calendar days, the DP will notify the CMAR and COUNTY in writing stating the reason for the delay. Approval does not relieve the CMAR from the responsibility for variances from the drawings and specifications, unless it has been called to the DP'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. Any such modification is subject generally to all other provisions of the Construction Documents, and is without prejudice to any and all rights under any surety bond.

- 2.6.13.9 If the DP returns a Submittal or Shop Drawing to the CMAR with the notation "rejected", "revise and resubmit", or "approved as noted", the CMAR, so as not to delay the Work, will promptly resubmit a Submittal or Shop Drawing conforming to the requirements of the Construction Documents 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 DP. CMAR will also indicate any other differences between the resubmittal and the prior submittal on the Shop Drawing and on the resubmittal as a special note.
- 2.6.13.10 No extension of Contract Time will be granted to the CMAR because of its failure to submit Submittals or Shop Drawings in ample time to allow for review, possible resubmittals, and approval. Fabrication of Work will not commence until the CMAR has received written approval. The CMAR will furnish prints of its approved Submittals and Shop Drawings to all the Subcontractors whose work is in any way related to those Submittals or Drawings. Only prints bearing this approval will be allowed on the Site.

2.6.14 PRODUCT SAMPLES, TESTS, AND CERTIFICATES

- 2.6.14.1 The CMAR will furnish Product Samples of all items requested or required by the Specifications. Product Samples must be properly identified and submitted with such promptness as to cause no delay in Work or in the work of any other Contractor and to allow time for consideration by the DP and the COUNTY. The DP or COUNTY will review Product Samples in accordance with Sections 2.6.13.2 – 2.6.13.10 above.
- 2.5.14.2 Each Product Sample must be accompanied by a letter of transmittal containing the following information:
 - a) Date of Submission
 - b) Name of Project
 - c) Location of Project
 - d) Branch of Work (Specification Section Number)
 - e) Project Number
 - f) Name of Submitting CMAR
 - g) Name of Subcontractor
- 2.6.14.3 The CMAR will furnish the DP a certificate stating that material or equipment submitted by CMAR complies with Contract Documents. If a certificate originates with the manufacturer, the CMAR will endorse it and submit it to the DP together with a statement of compliance in its own name.
- 2.6.14.4 No tests, inspections or approvals performed or given by the COUNTY or the DP or others acting for COUNTY or any agency of Federal, State, or Local government nor any acts or omissions by COUNTY or the DP in administering this Contract relieve the CMAR from its duty to perform the Work in accordance with the Contract Documents and all applicable law or regulation or code.
- 2.6.14.5 Unless the DP is authorized at the time of submittal to return samples at the CMAR's expense, rejected samples will be destroyed.
- 2.6.14.6 After delivery of materials by CMAR, the DP may make such tests, as it deems necessary, with samples required for such tests being furnished by and at the cost of the CMAR. Any test is for the benefit of the COUNTY and does not relieve CMAR of the responsibility for providing quality control measures to assure that the Work strictly complies with the Construction Documents. No test implies acceptance of materials, Work, workmanship, equipment, accessories or any other item or thing.

- 2.6.14.7 Materials, workmanship, equipment or accessories may be rejected on the basis of the test results even though general approval has been previously given. If items have been incorporated in the Work, the DP has the right to cause their removal and replacement by items meeting Construction Document requirements, with the cost therefor being borne by the CMAR and not COUNTY, or to demand and secure appropriate reparation to or price adjustment for the benefit of COUNTY from the CMAR.

2.6.15 AS-BUILT DRAWINGS

- 2.6.15.1 Prior to Final Payment, the CMAR will complete and turn over to the DP the Red Line Drawings kept current at the Project site by CMAR. Red Line Drawings will consist of a set of drawings that clearly indicate all field changes that were made during contract performance to adapt to field conditions, changes resulting from Change Orders and all buried and concealed installation of piping, conduit and utility services. All buried and concealed items both inside and outside the facility must be accurately located on the Red Line Drawings as to depth and in relationship to not less than two permanent features such as interior or exterior wall faces. The Red Line Drawings must be clean and all changes, corrections, and dimensions will be given in a neat and legible manner in a contrasting color. CMAR will also provide an electronic file of the Red Line Drawings to COUNTY in digital form pre-approved by COUNTY. The DP will use the CMAR Red Line Drawings to finalize and seal the As Built Drawings (Record Drawings) which, in turn, will be turned over to COUNTY at the end of construction.
- 2.6.15.2 With respect to any changes or corrections in the Work which are made subsequent to Substantial Completion, such revisions must be submitted to the DP for approval prior to Final Payment.

2.6.16 SCHEDULE AND COORDINATION

- 2.6.16.1 The CMAR will schedule and coordinate the Work of all of its Subcontractors on the Project including their use of the Site. The CMAR will keep the Subcontractors informed of the Project CPM Schedule to enable the Subcontractors to plan and perform their Work properly.
- 2.6.16.2 At the time of the submission of the GMP, the CMAR will submit to the DP a detailed CPM Schedule for the Work, which will provide for the expeditious and practicable execution of the Work. The CPM Schedule will be consistent with and build upon any previous schedules issued during the Pre-Construction Phase. The CPM Schedule is not to exceed time limits under the Contract Documents and must be related to the entire Work to the extent required by the Contract Documents.
- 2.6.16.3 The CPM Schedule required for the performance of the Work will include reasonable detail including a time scaled network and computer printout in accordance with the following requirements:
- a) no activity may be longer than twenty-one (21) calendar days (i.e. task line item duration in the CPM Schedule) in length except fabrication and delivery activities;
 - b) each activity must be logically tied to another activity to show its interdependency with other activities;
 - c) installation activities must be logically tied to submittal/approval, fabrication and delivery;
 - d) only a single critical path is allowed; and
 - e) all activities on the schedule must be clearly designated.
- 2.6.16.4 The CMAR will prepare and keep current, for the DP's approval, a timetable for submittals which is coordinated with the CMAR's CPM Schedule for the Work and allows the DP the specified time to review submittals.
- 2.6.16.5 The CMAR will revise the CPM Schedule monthly to reflect actual conditions in the field and transmit it monthly to COUNTY and DP with a copy and a Narrative Report including a description of current and anticipated problem areas, delaying factors and their impact and

corrective action taken or proposed. This update is to be submitted with each Application for Progress Payment. COUNTY's review of the CPM Schedule update does not relieve CMAR of its complete and exclusive control over the means, methods, sequences, and techniques of construction. The monthly updated CPM Schedule will be the basis for the analysis and granting or rejection of time extensions in accordance with Article 9 of these General Conditions.

- 2.6.16.6 In addition to the monthly CPM Schedule update, the CMAR will also revise its schedule at appropriate intervals as required by the conditions of the Work or as directed by COUNTY or DP with a printed and electronic copy of the revision submitted to COUNTY and DP in a format acceptable to COUNTY.
- 2.6.16.7 The CMAR will perform the Work at all times during the Construction Phase within the identified times of the most recent COUNTY-approved schedule and consistent with the established Contract Time.
- 2.6.16.8 If the CMAR submits an original or updated CPM schedule which shows the Project and/or individual Milestone(s) for the Project completing earlier than required by the adjusted contractual completion date(s), the differences between the forecasted early completion and the required completion will be considered Project-owned float available for use by both COUNTY and the CMAR.
- 2.6.16.9 Since float time within the CPM Schedule is jointly owned, COUNTY will grant no time extensions and will pay no delay damages until a critical path activity delay occurs which extends the Work beyond the adjusted contractual completion date. Since float time within the CPM Schedule is jointly owned, COUNTY-caused delays on the Project may be offset by COUNTY-caused time savings which result in a critical path activity savings of time to the CMAR. In that event, the CMAR is not entitled to receive a time extension or delay damages until all COUNTY-caused time savings are exhausted and the applicable contractual completion date or milestone date is also exceeded.
- 2.6.16.10 No time extensions will be granted or delay damages paid unless 1) the delay is clearly demonstrated by the updated CPM Schedule and the current and supporting narrative as of the month the change was issued or occurred, or the delay took place, and 2) the delay cannot be mitigated, offset, or eliminated through such actions as revising the intended sequence of Work or other reasonable or industry recognized means of mitigating schedule slippage.

2.7 CMAR's RESPONSIBILITY FOR PROJECT SAFETY

- 2.7.1 CMAR recognizes the importance of performing its Work in the safest manner possible so as to prevent damage, injury or loss to (a) all individuals at or in the vicinity of the Work, whether working or visiting the Project; (b) all Work, including materials and equipment incorporated or stored on or off site; and (c) all property adjacent to the site. On that basis CMAR assumes sole responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work and will submit a Safety Plan in complete form to COUNTY and DP at the time of issuance of the Notice to Proceed with the Work. CMAR will, prior to commencing construction, designate a safety manager with the necessary qualifications and experience to supervise the implementation of the plan and the monitoring of all safety precautions and programs related to the Work. The safety manager will make routine daily inspections of the Work site, and will hold at least weekly safety meetings with CMAR's personnel and Subcontractors.
- 2.7.2 CMAR 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 Documents. CMAR will immediately report, in writing, to COUNTY's Representative and all government or quasi-government authorities having jurisdiction over matters involving the Work, any injury, loss, damage, or accident occurring at the site of the Work.
- 2.7.3 CMAR's responsibility for safety under this Section 2.7 is not intended to relieve CMAR's Subcontractors (of any tier) from applicable obligations and responsibilities for complying with all legal requirements, including those related to health and safety matters, and their taking all necessary measures to implement

and monitor all safety precautions and programs to guard against injury, losses, damages, or accidents resulting from their performance of the Work.

2.8 WARRANTY

- 2.8.1 CMAR warrants to COUNTY that the construction, including all materials and equipment furnished as part of the Work, will be new, unless otherwise specified in the Contract Documents; of good quality, in conformance with the Contract Documents; and free of defects in materials and workmanship. CMAR's warranty obligation excludes defects caused by abuse, alterations, or unreasonable failure to maintain the Work by persons other than CMAR, CMAR's subcontractors, or others under CMAR's control. Nothing in this warranty by CMAR limits any manufacturer's warranty which provides COUNTY with greater warranty rights than set forth in this Section 2.8 or the Contract Documents.
- 2.8.2 CMAR will provide COUNTY with all manufacturers' warranties and Operation and Maintenance Manuals upon the date of Substantial Completion of the Work. CMAR will provide COUNTY a two (2) year warranty for all portions of the Work, which warranty commences upon Substantial Completion and acceptance by the COUNTY of the final phase of the Project. All statutory or other warranties, express or implied, related to latent defects will remain in force and are not limited or superseded by this provision.
- 2.8.3 The Warranties identified herein do not limit or control other remedies available to COUNTY at law or their limitation periods, if any.

2.9 CORRECTION OF DEFECTIVE WORK

- 2.9.1 If any portion of the Work is covered over by CMAR or its subcontractor contrary to the request of the DP or COUNTY, or as required by the Construction Documents, or the applicable building standards or codes if requested in writing by the DP or COUNTY, that Work or portion thereof must be promptly uncovered for observation at the CMAR's own expense.
- 2.9.2 If any portion of the Work, other than those portions required to be inspected by the DP, COUNTY, or others, prior to being covered, has been covered over, the DP or COUNTY may request that it be uncovered for observation. If such portion of the Work is found to be in accordance with the requirements of the Construction Documents, the cost of uncovering it will be charged to COUNTY as a Change Order. If such portion of the Work is found not to be in compliance with the requirements of the Contract Documents, the CMAR shall bear such costs to uncover, to remove and replace, or to repair.
- 2.9.3 Unless a specific written waiver of such non-conformance has been provided to the CMAR, CMAR will promptly correct any Work that is found not to be in conformance with the Contract Documents, whether previously inspected by COUNTY's representatives or not. This obligation of CMAR continues for a period of two (2) years from the date of Substantial Completion. Nothing in this Section waives any other rights or remedies that COUNTY may have under applicable law.
- 2.9.4 CMAR, upon receipt of written notice from COUNTY that the Work is not in conformance with the Contract Documents, will, within seven (7) days (except in the case of an emergency or an item on the schedule critical path, which will require immediate response) commence correction of such nonconforming Work, including the correction, removal, or replacement of the nonconforming Work and any damage caused to any other parts of the Work affected by the nonconforming Work. In the event CMAR fails to commence the necessary corrective steps within seven (7) days of the Notice, COUNTY, in addition to any other remedies provided under the Contract Documents, may at the end of the seven (7) day period commence to correct or cause the correction of such nonconforming Work with its own or other forces. CMAR is responsible for all costs and expenses that COUNTY incurs in remedying any such Work not in conformance with the Contract Documents, including at COUNTY's sole discretion, any of its own staff time costs and all DP or other fees incurred. COUNTY will notify CMAR of its intent to make such corrections at or before the commencement of the corrective work.
- 2.9.5 The two-year warranty period referenced in Section 2.8.1 applies only to the CMAR's obligation to correct Work not in compliance with the Construction Documents, and does not constitute a period of limitations with respect to any other rights or remedies COUNTY may have with respect to CMAR's other obligations under the Contract Documents. CMAR acknowledges that, for purposes of statutes of limitations, COUNTY is a body politic and corporate of the State of Arizona acting in its governmental capacity for the general good.

ARTICLE 3 – DP'S SERVICES AND RESPONSIBILITIES

In addition to the DP Responsibilities outlined in Article 2,

- 3.1 The DP will be the initial interpreter of the intent and requirements of the Construction Documents. The DP will render written initial interpretations with reasonable promptness following a written request from COUNTY or the CMAR. These initial interpretations will be consistent with the intent of the Contract Documents.
- 3.2 The DP will timely review and approve or take other appropriate action upon the CMAR's submittals, such as Shop Drawings, Product Data and Samples, for conformance with the Construction Documents. The DP will take such action with reasonable promptness as specified so as to cause no delay. The DP's approval of a specific item or component does not indicate approval of an assembly of which the item is a component.
- 3.3 Following consultation with COUNTY, the DP will take appropriate action on issuance of Change Orders and may authorize minor changes in the Work as defined in Section 10.3.
- 3.4 The DP and COUNTY each have authority to reject Work which does not conform to the Contract Documents and to require special inspection or testing but may take such action only after consultation with the other. However, neither the authority to act given to the DP and COUNTY under this subparagraph nor any decision made by them in good faith either to exercise or not exercise such authority gives rise to any duty or responsibility by them to the CMAR, any Subcontractor, any of their agents or employees, or any other person performing any of the Work.
- 3.5 Based on its observations of the Work and evaluation of applications for payment, COUNTY or COUNTY'S designee will have the responsibility to approve the amounts owing the CMAR from time to time under and in accordance with Article 7 of these General Conditions and applicable law.

3.6 DESIGN SERVICES

- 3.6.1 Under separate contract with COUNTY, the DP will submit to COUNTY all required Design Submission Documents to describe the Project's essential elements. The Design Submissions required of the DP include Drawings, Specifications, cost estimates, and other documents as may be necessary to fully identify the Project scope and materials. The CMAR will submit detailed cost estimates as part of the design submission to COUNTY. At the time of the scheduled submissions, CMAR, DP, and COUNTY will meet and confer about the submission with CMAR and DP identifying during the meeting, among other things, the evolution of the design and any significant changes or variances from the requirements of the Contract Documents, or previously submitted design submissions, and, if any, changes in anticipated costs.
- 3.6.2 DP will maintain minutes of these milestone design review meetings and will provide them to all attendees for review. Following the design review meeting, COUNTY will review and approve or reject the Design Submission within three (3) weeks from receipt. COUNTY may reject full or partial design submittals which do not conform with COUNTY's Project Criteria, overall Project concepts, and budgets, or for any other reasonable cause consistent with the intent of the Contract Documents. Upon such rejection, the DP will redesign or reengineer the rejected portion of the design. CMAR will revise the cost estimate at no additional cost, such that it meets COUNTY's requirements. COUNTY must approve all variances from COUNTY's Project Criteria in writing.
- 3.6.3 As necessary for the timely completion of the Work, the DP will submit to COUNTY for COUNTY's review and approval or rejection, Construction Documents describing the requirements for construction of the Work. The COUNTY, DP and CMAR will have design review meetings to discuss Construction Documents consistent with Section 3.6.1 above, and COUNTY will review and approve or reject the Construction Documents within three (3) weeks of receipt from the DP.
- 3.7 The DP, if so stated through this Contract, or a third party Project Manager under a separate contract with COUNTY, will provide administration of this Contract on behalf of COUNTY as described throughout the Contract and these General Conditions and in COUNTY's contract with the DP. DP is to copy COUNTY on all instructions and communications by the DP to the CMAR.

ARTICLE 4 COUNTY'S SERVICES AND RESPONSIBILITIES

In addition to its responsibilities outlined in Article 2,

- 4.1 COUNTY will, throughout the performance of the Contract, cooperate with CMAR and perform its responsibilities, obligations and services in a timely manner so as not to delay or interfere with CMAR's performance of its obligations under the Contract Documents.
- 4.2 COUNTY's Representative is responsible for processing and delivery of COUNTY-supplied information and approvals or rejections in a timely manner to permit CMAR to fulfill its obligations under the Contract Documents. COUNTY's Representative will also provide CMAR with reasonably prompt notice if and when it observes any failure on the part of CMAR to fulfill its contractual obligations, including errors, omissions, or defects in the CMAR's performance of its Work. Failure of COUNTY or its representatives to notify the CMAR hereunder will not alter the duties and obligations of CMAR under the Contract Documents.
- 4.3 COUNTY will provide reviews and approvals or rejections of the CMAR's cost estimate portion of the Design Submission within three (3) weeks of receipt of those documents. COUNTY will review documents submitted by the CMAR and render any decisions pertaining thereto without unreasonable delay.
- 4.4 COUNTY is responsible for all Work performed at the Project by parties under COUNTY's control other than CMAR or DP. COUNTY will contractually require such parties to cooperate with and coordinate their activities with CMAR so as not to unreasonably interfere with CMAR's ability to complete the Work in a timely manner, consistent with the Contract Documents.
- 4.5 COUNTY will interact and cooperate with the CMAR to keep the Work within the portions of the Project Budget or GMP, as may be applicable, including but not limited to giving appropriate and reasonable consideration to all reasonable recommendations of the CMAR, approving redesign, deductive alternatives or reductions in the Work, consideration of any requested additional Value Engineering, making modifications to the Contract Documents, or exercising such other rights or remedies as may be available elsewhere under this Contract including termination for convenience. If at any time, it is apparent that the cost of the Work cannot be kept within the Project Budget or GMP, COUNTY may terminate this Contract in accordance with the termination for convenience provisions set forth below.
- 4.6 COUNTY acting through the DP and consistent with COUNTY's contract with the DP, will furnish the CMAR a sufficient quantity of documents and information required for the CMAR's performance of its Pre-Construction Services.

ARTICLE 5 – HAZARDOUS MATERIALS AND UNFORESEEN PROJECT SITE CONDITIONS

5.1 HAZARDOUS MATERIALS

- 5.1.1 It is the sole responsibility of the CMAR to properly remove and dispose of any Hazardous Materials in the Project identified as such in the Contract Documents by COUNTY. CMAR, upon encountering any Hazardous Materials not identified in the Contract Documents, will stop work immediately in the affected area and notify COUNTY and, if required by applicable rules, all governmental or quasi-governmental entities with jurisdiction over the Project. COUNTY has responsibility to take the necessary measures required to properly remove and dispose of Hazardous Materials not identified in the Contract Documents as being the responsibility of the CMAR.
- 5.1.2 CMAR will be entitled, in accordance with the provisions of these General Conditions, to an adjustment in the GMP or Contract Time(s) of performance, or both, to the extent that the CMAR's costs or time of performance have been adversely and materially impacted by the presence of unforeseen or undisclosed Hazardous Materials.
- 5.1.3 COUNTY is not responsible for Hazardous Materials introduced to the site by CMAR, CMAR's Subcontractors (at any tier), or anyone else for whom the CMAR is responsible unless the Contract Documents explicitly call for either the provision or removal of the specific Hazardous Materials.

5.1.4 CMAR will indemnify, defend, and hold harmless COUNTY and others under COUNTY's control, and the officers, directors, employees and agents of each of them, from and against all claims, losses, liabilities, costs and expenses, including but not limited to attorney's fees and expenses, arising out of or resulting from CMAR's importation, improper handling, storage, abatement, removal, remediation, or disposal of any Hazardous Materials.

5.1.5 Releases of Hazardous Materials: Upon any release of any Hazardous Material in connection with the Work, whether relating to a pre-existing condition or to acts or omissions of CMAR, CMAR will take immediate action reasonably necessary to contain the release and if the Hazardous Material release is not a CMAR release, COUNTY will pay CMAR the reasonable costs incurred by CMAR in taking such containment action. COUNTY may elect to have CMAR control and carry out any removal and remediation activity needed, provided that if the release is not a CMAR release, COUNTY will be responsible to pay CMAR for such CMAR removal and remediation activities in accordance with the Change Order provision set forth in Section 10.4 of these General Conditions, including allowance of additional Contract Time.

5.2 UNFORESEEN PROJECT SITE CONDITIONS

5.2.1 If CMAR encounters, during the performance of the Work, concealed or latent physical conditions or subsurface conditions at the Project which (a) materially differ from the conditions indicated in the Contract Documents; or (b) are of an unusual nature which differ materially from the conditions ordinarily encountered and generally recognized as inherent in the sort of work provided for in the Contract Documents, CMAR will immediately provide written notice to COUNTY apprising COUNTY of the unforeseen conditions encountered. CMAR will not disturb or modify such conditions without COUNTY's prior written consent. COUNTY will promptly investigate CMAR's notice of an unforeseen site condition and advise CMAR of its findings and determination.

5.2.2 If COUNTY determines that the conditions encountered by CMAR under Section 5.2.1 are an unforeseen Project site condition, CMAR will be entitled, in accordance with the provisions of these General Conditions, to an adjustment in its GMP or Contract Time(s) of performance, or both, to the extent that CMAR's cost or time of performance have been adversely impacted by the unforeseen conditions. Adjustments to GMP will be for the actual direct cost impact incurred by CMAR to address and resolve the unforeseen conditions.

5.2.3 COUNTY will not consider or allow any claim by the CMAR for an increase in the GMP or in Contract Time(s) without compliance with the advance notice requirement set forth above, submission of verifiable documentation of specific direct cost impact, and an adequate opportunity for COUNTY to investigate. Extensions of Contract Time(s) will be considered and allowed only when based upon submission of an updated CPM Schedule and supporting narrative showing an actual unavoidable delay to the Project Critical Path due to the unforeseen Project Site Conditions.

5.2.4 In no event will the Contract Time or GMP be adjusted for conditions that CMAR could or should have identified through past work or its investigations or survey of existing conditions prior to submission and establishment of the GMP and the GMP Schedule.

5.2.5 If COUNTY determines CMAR has no entitlement to an adjustment in GMP or Contract Time for what CMAR contends is an unforeseen Project Site Condition, CMAR may only proceed in pursuit of its position or claim in accordance with the Dispute Resolution provisions of the Contract.

5.3 ARCHEOLOGICAL CONDITIONS:

If in the course of performing the Work, the CMAR, any subcontractor, or other persons or entities under the control of CMAR, encounter any Native American burial site or other archeological artifacts, CMAR will immediately notify COUNTY and suspend any Work or activity in the vicinity of the burial site or artifact. COUNTY will determine with reasonable promptness what action, if any, needs to be taken and advise CMAR how to proceed or adjust the Work. Any claim for adjustment in Contract Time or GMP will be handled under 5.2.2 above.

ARTICLE 6 – RESERVED

ARTICLE 7 – PAYMENT

7.1 GUARANTEED MAXIMUM PRICE; SAVINGS.

7.1.1 COUNTY will pay the CMAR for the CMAR's performance and the CMAR accepts the Pre-construction Phase Fee in full payment for Pre-construction services, and the Actual Cost of Work (as defined in Exhibit B hereto) plus the Construction Phase Fee for construction services, provided, however, that the amount paid to CMAR will not exceed the GMP as originally fixed or as adjusted from time to time as provided in these General Conditions.

7.1.2 Savings will be calculated and paid upon Final Completion of the Work. One hundred percent (100%) of all savings will be allocated to COUNTY. Savings returned to COUNTY will not include return of Construction Phase Fee for the amount of the savings, but will include an appropriate percentage of bonds and insurance premiums and taxes attributable to the savings amount. One hundred percent (100%) of allocations to GMP for allowance and contingency items that remain unused upon Final Completion will be returned to COUNTY.

7.2 SCHEDULE OF VALUES.

7.2.1 Before issuance of the Notice to proceed and commencement of the Work in the Construction Phase, the CMAR will submit to COUNTY, and COUNTY and the CMAR shall agree upon, a complete Schedule of Values on the items constituting the GMP following the sample outline in Exhibit "B", setting forth the various portions of the Work, and the portions of the GMP allocated to each portion of the Work. This Schedule of Values will also be the basis for payment as the Work progresses. Those portions of the Schedule of Values allocable to Work to be performed by Subcontractors of the CMAR will be finalized as and when the Subcontracts are executed. All estimated construction costs not specifically allocated to a Subcontract (including Work self-performed) or to Construction General Conditions will be allocated to "Bidding Contingency" and will, upon approval of COUNTY, be available for later use by the CMAR as Construction Contingency, for reallocation to other line items as provided for in these General Conditions.

7.3 APPLICATIONS FOR PROGRESS PAYMENTS.

7.3.1 CMAR will deliver to COUNTY (or such other person as is designated by COUNTY) on the last day of each month a sworn application for progress payment in the format specified by COUNTY. Each such application for payment will be based on the Schedule of Values and be in an amount determined by the percentage of completion of the Work in the month being billed. It will show the percentage of completion of each category of the Work performed in the billing period. The payment application must be accompanied (as separate documents) by (a) an updated CPM Schedule and narrative schedule update report as provided for herein; and (b) conditional lien waivers from each subcontractor or supplier entitled to progress payment thereunder. In addition, the CMAR will provide the following documentation upon specific request by COUNTY: a) a written accounting in a form agreed by CMAR and COUNTY of the actual cost of the Work completed; b) a report by CMAR on Subcontractor buy-out status, contract sums, and subcontractor pay applications; c) a copy of job cost ledger; d) a copy of timecards for all employees charged to the Project; and e) a copy each of Construction General Conditions invoices and purchase orders for the time periods periodically requested by COUNTY.

7.3.2 The CMAR Construction Phase Fee and the Construction General Conditions will be paid monthly in accordance with the percentage of completion of the Work. The amount approved and paid for progress achieved in the month billed for is not final acceptance of the Work and is subject to final adjustment at the time of Final Acceptance and Final Payment. At no time may the cumulative value of past progress payments plus the current requested progress payment on any pay application exceed the GMP as it may be adjusted under these General Conditions.

7.3.3 COUNTY, within seven (7) days after receipt of CMAR's application for progress payment, and no later, will either issue (a) a certificate of approval for payment of such amount as is invoiced in the

payment application; or (b) specific written findings setting forth those items in detail in the estimate of the Work in the pay application that are not approved for payment under the Contract. All items in the payment application are considered approved that are not made the subject of the written detailed finding of non-approval.

- 7.3.4 COUNTY may withhold an amount from the progress payment to be made for the time period billed for a sufficient sum to pay the expenses that COUNTY reasonably expects to incur in correcting the deficiencies set forth in the written finding issued by the COUNTY as to the items not approved for payment.

7.4 PAYMENT AND RETAINAGE.

- 7.4.1 Within fourteen (14) days following the receipt of the DP certificate of approval for payment and the written detailed findings of items not approved, if any, COUNTY will pay the amount due on the progress payment application to the CMAR. Payment will be limited to ninety percent (90%) of the value approved of the Construction Work in place and for materials suitably stored in accordance with Section 7.6.1, below, of these General Conditions during the month being billed. COUNTY will retain the remaining ten percent (10%) until the Contract is fifty percent (50%) complete, at which time COUNTY may, in its sole discretion, reduce the retainage to five percent (5%); provided that: (a) the CMAR is making satisfactory progress on the Contract; and (b) in COUNTY's sole judgment, there is no specific cause or claim requiring a greater amount than five percent (5%) to be retained. Thereafter, COUNTY will pay the CMAR ninety-five percent (95%) of the value of the Construction Work and materials on approved progress billings, unless and until COUNTY determines, in its sole discretion that satisfactory progress is not being made, at which time COUNTY may reinstate ten percent (10%) retainage. Such ten percent (10%) reinstatement is equal to ten percent (10%) of the total Contract value of Construction Work in place and materials stored. COUNTY's determinations concerning the satisfactory progress of the Work for retainage adjustment purposes is final.

- 7.4.2 Within sixty (60) days after the issuance of the Certificate of Final Completion by the DP and receipt by COUNTY of all other documents required from CMAR by the Contract Documents, COUNTY will pay all retained amounts to CMAR as part of Final Payment, provided, however, a) the Final Payment is not due from COUNTY until the CMAR delivers full and final unconditional lien releases in statutory form from all Subcontractors and major Suppliers acknowledging their having received payment in full (Any claim filed thereafter is the responsibility of the CMAR);, and b) if any claim remains unsatisfied after all payments are made by COUNTY, the CMAR will immediately, upon demand, refund to COUNTY all monies that COUNTY may be compelled to pay in discharging such unsatisfied claims including all costs, interest, and attorneys' fees.

7.5 EARLY RELEASE OF SUBCONTRACTOR RETAINAGE.

- 7.5.1 If a Subcontractor has completed its portion of the Work (including all Punch list items) pursuant to its Subcontract, the CMAR may request COUNTY to disburse the amount of Retainage allocable to such Subcontractor after delivering to COUNTY, when required by COUNTY, consent to such disbursement from such Subcontractor's surety, in a form satisfactory to COUNTY, and a final lien release from the Subcontractor. If COUNTY is satisfied that the Subcontractor's Work has been fully and finally completed in accordance with the Contract Documents, COUNTY may disburse said Retainage to CMAR for payment over to the Subcontractor. However, the two-year warranty period with respect to such Subcontractor Work will not commence until Substantial Completion of the entire Project.

7.6 PAYMENT FOR ON-SITE AND OFF-SITE MATERIALS.

- 7.6.1 COUNTY will make progress payments when due to CMAR on account of materials and equipment delivered and suitably stored at the Site for subsequent incorporation in the Work. COUNTY may similarly make payment to CMAR for materials and equipment suitably stored off the Site, conditioned upon the CMAR furnishing satisfactory evidence to COUNTY that (a) title to the materials and equipment will pass to COUNTY upon payment for same; (b) there are no claims of third parties; (c) the materials and equipment are adequately insured for full replacement value plus delivery; and (d) such other matters as COUNTY may reasonably request in order to protect its interests.

7.7 OWNERSHIP OF CONSTRUCTION WORK.

- 7.7.1 The CMAR warrants that title to all Construction Work included in an Application for Progress Payment will pass to COUNTY no later than the time of payment therefor. The CMAR further warrants and represents to COUNTY that upon submittal of an Application for Payment, all Construction Work for which Applications for Payment have been previously issued and payments received from COUNTY will, to the best of the CMAR's knowledge, information and belief, be free and clear of liens, claims, security interests, or encumbrances in favor of the CMAR, its Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work.
- 7.7.2 As a condition precedent to Final Payment from COUNTY the CMAR will provide unconditional waivers of lien in statutory form from all Subcontractors, material suppliers, and other persons or entities having provided labor, materials and equipment relating to the Work.

7.8 SUBSTANTIAL COMPLETION.

- 7.8.1 When the CMAR believes the Work, or a portion thereof which the COUNTY wants and agrees to accept separately, is Substantially Complete, the CMAR will notify COUNTY and the DP and will submit to COUNTY and DP a comprehensive list of items to be completed or corrected as to that Work or all Work. Within five (5) working days of receipt of the CMAR's notice and list, COUNTY, the DP, and CMAR will jointly inspect the Project to determine whether Substantial Completion has in fact occurred. If COUNTY determines that the Work, or the relevant portion thereof, is Substantially Complete, COUNTY will issue the Punch List and the Certificate of Substantial Completion stating the date of Substantial Completion, which certificate will be executed by COUNTY, the DP, and the CMAR. The CMAR will thereupon proceed promptly to complete or correct Punch List items. Failure to include an item on the Punch List does not alleviate or alter the responsibility of the CMAR to complete all Work in accordance with the Contract Documents.

7.9 FINAL COMPLETION AND FINAL PAYMENT

- 7.9.1 Completion of all outstanding Work items noted in the Substantial Completion "Punch List" for the entire Work, or relevant portion thereof, and other Contract requirements are necessary for COUNTY to certify Final Completion. Requirements for this certification also include, but are not limited to, completion of equipment operating training for COUNTY and the submission and approval by COUNTY of a) all Record and Close Out Documents; b) copies of all Construction General Conditions and Purchase Orders not previously provided; and c) all required reports.
- 7.9.2 Conditions Precedent to Final Payment. Neither Final Payment nor any final release of Retainage become due until such time as CMAR submits all of the following to COUNTY:
- a) An affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which COUNTY or COUNTY's property might be responsible or encumbered (less amounts withheld by COUNTY) have been paid or otherwise satisfied by CMAR;
 - b) 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 sixty (60) days' prior written notice has been given to COUNTY;
 - c) Consent of Sureties to final payment;
 - d) Unconditional waivers of lien in statutory form from all Subcontractors, material suppliers, and other persons or entities having provided labor, materials, and equipment relating to the Work;
 - e) 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 Documents;
 - f) All Project warranty documents;
 - g) Final Subcontractor List;
 - h) All approved Submittals and Shop Drawings (electronic copy);
 - i) Schedule of Required Maintenance;
 - j) Operation and Maintenance Manuals (electronic and hard copies);
 - k) As-Builts (electronic copies, hard copies and BIM Model, if any);
 - l) Any required COUNTY training provided by CMAR;

- m) State Fire Marshal and State Elevator Inspection approvals and certificates received, if applicable;
- n) Commissioning completed and reports received, if applicable; and
- o) Any other items identified by COUNTY, and agreed to by CMAR in Contract Documents, to be received by COUNTY.

7.9.3 If, after Substantial Completion of the Project has been achieved, Final Completion is materially delayed through no fault of the CMAR, or by the issuance of additional Change Orders by COUNTY, COUNTY may at its sole discretion, upon request of the CMAR, and without terminating the Contract, make payment to CMAR of the balance due for that portion of the Work fully completed. If the remaining balance for Work not fully completed is less than the Retainage, and if bonds have been furnished, the written consent of surety to payment for that portion of the Work fully completed must be delivered by the CMAR to the COUNTY, and such payment will be made under the terms and conditions governing Final Payment, except that such payment does not constitute a waiver of claims by either the CMAR or COUNTY.

7.9.4 Acceptance of Final Payment by the CMAR constitutes a waiver of all affirmative claims by the CMAR in connection with the Contract and construction of the Project. Final Payment by COUNTY constitutes a waiver of claims by COUNTY, except those arising from (a) liens, claims, security interests, and encumbrances arising out of the Work after final payment; (b) latent defects which COUNTY becomes aware of after Final Payment; or (c) the terms of warranties required by the Contract Documents and other rights provided under applicable law.

7.10 ALLOWANCES.

7.10.1 The CMAR will include in the GMP all allowances required by the COUNTY. Items covered by allowances will be supplied for such amounts and by such persons or entities as the COUNTY may direct, but the CMAR is not required to employ persons or entities against which the CMAR makes reasonable objection. Unless otherwise provided in the Contract Documents:

- a) COUNTY will select materials and equipment under an Allowance within a reasonable time frame as defined in the COUNTY-approved Project CPM Schedule;
- b) Allowances will cover the cost to the CMAR of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- c) Allowances will not include professional or construction fees, Construction General Conditions, bond and insurance premiums;
- d) Allowances will cover CMAR's costs for unloading and handling at the Site, labor, installation costs and other expenses;
- e) Whenever costs are more than or less than Allowances, the GMP may be adjusted accordingly by Change Order in accordance with provisions of Article 10. The amount of the Change Order will reflect the difference between Actual Costs and the Allowances plus Fee on such difference in accordance with Article 10 hereof if the Actual Costs are greater than the allowances.

7.11 CONTINGENCIES.

7.11.1 For Vertical Construction:

7.11.1.1 The GMP contains a line item for a "Bidding Contingency". The Bidding Contingency, upon approval of the COUNTY, is for the CMAR's use and will be increased by amounts not expended on other line item bid packages and will decrease by additional amounts required to be expended on other line item bid packages. Following completion of all contract execution by subcontractors (Project buy-out), Bidding Contingency becomes Construction (CMAR) Contingency and CMAR may use this Construction (CMAR) Contingency for legitimate unforeseen construction expenses, subject to COUNTY's review and approval. CMAR will submit detailed monthly reports to COUNTY indicating how the Construction (CMAR) Contingency was used in the reporting period, and the status of the Construction (CMAR) Contingency. COUNTY has the authority to reject any use of the Construction (CMAR) Contingency after it has been submitted if COUNTY believes, in its reasonable judgment, that some or all of the amount included in the use

of the Construction (CMAR) Contingency is not a legitimate expense for the Project. Upon COUNTY's rejection of a Construction (CMAR) Contingency use, the CMAR will thereupon credit the Construction (CMAR) Contingency amount back to the Construction (CMAR) Contingency in the next subsequent payment request. Any amounts remaining in Bidding / Construction (CMAR) Contingency at Final Completion are Savings and will be allocated to COUNTY. Should the Bidding / Construction (CMAR) Contingency be exhausted prior to award of all the bid packages, any subsequent overruns in bid package costs will be the CMAR's sole responsibility, with no additional compensation due therefor from COUNTY.

7.11.1.2 Total Bidding Contingency will be determined pending mutual agreement by COUNTY and CMAR on GMP.

7.11.1.3 Upon award of each Bid Package, the difference between the CMAR's estimated Cost of the Work contained within the Bid Package, exclusive of contingency, versus the actual award cost thereof as determined by the bidding and award of the package will be promptly calculated. If the award cost exceeds the CMAR's estimated cost in the GMP, any necessary portion of the Bidding Contingency identified in subparagraph 7.11.1.2 above will be applied, subject to COUNTY's approval, to cover any overrun, and any underrun amount will be used to increase the Bidding Contingency.

7.11.2 Non-Vertical and Horizontal Construction:

7.11.2.1 The GMP may contain a line item for "Construction Contingency" for CMAR's use as a bidding contingency and for legitimate unforeseen construction expenses, subject to COUNTY's review. The amount of Construction Contingency represents CMAR's future risk from the point at which it is established. In establishing the amount of the initial Construction Contingency, CMAR will provide a description of the risks the Construction Contingency is intended to cover, including unresolved areas of concern identified in pre-construction, in such format as COUNTY may prescribe.

7.11.2.2 The amount of the Construction Contingency is not cumulative. At any given time, even if there are multiple GMPs, there will be only one Construction Contingency for the Work. The amount of the Construction Contingency may be adjusted by any Change Order, Contract Amendment, or subsequent GMP to reflect CMAR's future risk from that point. The value of the Construction Contingency will not exceed the value stated in the most recent Change Order, Contract Amendment, or GMP.

7.11.2.3 "Legitimate unforeseen construction expenses" does not include expenses arising from factors the existence of which CMAR knew or should have known at time of establishment of the value of the Construction Contingency. As an example, the expense of relocating utilities in an intersection of which CMAR was or should have been aware as a result of prior work or Blue Staking for prior work in the intersection is not a "legitimate unforeseen expense."

7.11.2.4 CMAR will submit detailed monthly reports to COUNTY indicating how the Construction (CMAR) Contingency was used in the reporting period, and the status of the Construction (CMAR) Contingency. COUNTY may reject any use of the Construction (CMAR) Contingency after it has been submitted if COUNTY believes in its reasonable judgment that some or all of the amount included in the use of the Construction (CMAR) Contingency is not a legitimate expense for the Project. Upon COUNTY's rejection of a Construction (CMAR) Contingency use, the CMAR will thereupon credit the Construction (CMAR) Contingency amount back to the Construction (CMAR) Contingency in the next subsequent payment request. Any amounts remaining in the Construction (CMAR) Contingency at Final Completion are Savings and will be allocated to COUNTY. Should the Construction (CMAR) Contingency be exhausted prior to completion of the Work, any subsequent overruns are the CMAR's sole responsibility, with no additional compensation due therefor from COUNTY except for those items for which COUNTY is responsible under the Contract Documents.

- 7.11.3 CMAR will include in all subcontracts an explicit requirement that Change Orders between CMAR and the subcontractors will be priced consistently with the requirements of Article 10 of these General Conditions, with adequate itemized Change Order pricing regardless of whether or not there is a comparable Change Order between CMAR and COUNTY. In addition, CMAR will retain, and make available to COUNTY upon request, all bid documents including requests for proposals, requests for quotes, and bid responses from both successful and unsuccessful bidding subcontractors.

ARTICLE 8 – INDEMNIFICATION

8.1 PROPRIETARY RIGHTS, PATENT AND COPYRIGHT INFRINGEMENT

- 8.1.1 CMAR will defend any action or proceeding brought against COUNTY based on any assertion or claim that the Work, or any part thereof, or the operation thereof or use of the Work or any part thereof, constitutes infringement of any proprietary rights or United States patent or copyright, now or hereafter issued. COUNTY agrees to give prompt notice in writing to CMAR of any such action or proceeding and to provide authority, information and assistance in the defense of same. CMAR will indemnify and hold harmless COUNTY from and against all damages and costs, including attorney's fees, awarded against COUNTY or CMAR in any such action or proceeding. CMAR further agrees to keep COUNTY informed of all developments in the defense of such actions or proceedings.
- 8.1.2 In the event that COUNTY is enjoined from the operations or use of the Work, or any part thereof in connection with any proprietary rights, patent suit, claim, or proceeding, CMAR will at its sole expense take reasonable steps to procure the right or license to operate or use the Work. If CMAR cannot so procure the aforesaid right within a reasonable time, CMAR will then promptly, at CMAR's option and at CMAR's expense (a) modify the Work so to avoid infringement of any patents, or copyrights; or (b) replace said Work with Work that does not infringe or violate any such proprietary rights, patent, or copyright.
- 8.1.3 Sections 8.1.1 and 8.1.2 above do not apply to any action or proceeding based on infringement or violation of a proprietary right, patent, or copyright (a) relating solely to a particular process or the product of a particular manufacturer specified by COUNTY and such processes or products are something other than that which has been offered or recommended by CMAR to COUNTY; or (b) arising from modifications to the Work by COUNTY or its agents after acceptance of the Work.
- 8.1.4 CMAR's warranty and indemnification obligations survive expiration or termination of this Contract unless otherwise specifically stated.
- 8.1.5 The obligations set forth in this "Proprietary Rights, Patent and Copyright Infringement" section constitute the sole agreement between the parties relating to liability for infringement or violation of any proprietary rights, patent or copyright.

8.2 GENERAL INDEMNITY

CMAR will indemnify, defend, save, and hold harmless COUNTY and its officers, officials, agents, and employees (hereinafter referred to as "Indemnitees") from and against any and all claims, actions, liabilities, damages, losses, or expenses (including court costs, attorneys' fees, and costs of claim processing, investigation and litigation) (hereinafter referred to as "Claims") for bodily injury or personal injury (including death), or loss or damage to tangible or intangible property caused, or alleged to be caused, by the negligent or willful acts or omissions of CMAR or any of its owners, officers, directors, agents, employees, or subcontractors, arising out of performance of the Work or this Contract, or in connection with the Project or defects in the Work, or any materials supplied. This indemnity includes any claim or amount arising out of or recovered under the Workers' Compensation Law or arising out of the failure of such CMAR to conform to any federal, state, or local law, statute, ordinance, rule, regulation, or court decree. CMAR will be responsible for primary loss investigation, defense, and judgment costs where this indemnification is applicable. In consideration of the award of this Contract, the CMAR waives all rights of subrogation against Indemnitees for losses arising from the Work performed by the CMAR for COUNTY.

8.3 CUMULATIVE RIGHTS

The rights of indemnification in this Article 8 are cumulative and in addition to any other rights of indemnification under this Contract. Nothing in this Article 8 limits or otherwise impairs any other right of indemnification in this Contract.

ARTICLE 9 – TIME AND DELAY

- 9.1.1 All time limits set forth in the Contract Documents for performance are of the essence of this Contract. CMAR agrees that it will commence performance of the Work, achieve Substantial and Final Completion of the entire Project, and achieve any interim Milestones for Substantial and Final Completion in compliance with all contractual time requirements.
- 9.1.2 Time is of the essence of each and every part of the Contract Documents and of the Specifications wherein a definite and certain length of time is fixed for the performance of any act or activity whatsoever. Where, under the Contract Documents, additional time is allowed for the completion of any Work, the new time limit fixed by such extension is also of the essence of this Contract.
- 9.1.3 Failure of the CMAR to achieve the completion dates for Substantial or Final Completion set forth in the Contract will result in the assessment of Liquidated Damages as required by the Contract. CMAR will pay the per diem amount for Liquidated Damages provided for in the Contract for each and every calendar day that the CMAR is not in full compliance with the time(s) stipulated in the Contract for completing the Work. The Liquidated Damages per diem amount is fixed and agreed upon by and between the CMAR and COUNTY because of the impracticality and extreme difficulty of fixing and ascertaining the actual damages the COUNTY would in such event sustain. COUNTY may withhold any such sums from Final Payment due hereunder or from retainage.
- 9.1.4 If CMAR is delayed in the performance of the Work and such delay actually and directly delays a timely achievement of a critical path activity, element, or component, based upon an analysis of the current CPM Schedule due to 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 CMAR is responsible under the terms of the Contract Documents, the time for Substantial Completion of the Work, and to the extent applicable, any interim milestones or Substantial Completion dates for portions of the Work will be extended by written Change Order for the amount of time attributable to such events or circumstances. By way of example only, such acts, omissions, conditions, events, and circumstances which would entitle CMAR to an extension of the Contract Time(s), include acts or omissions of COUNTY, or anyone under COUNTY's control, including changes made by separate contractors in the Work by COUNTY, unforeseeable Project site conditions, wars, floods, labor disputes, unusual delay in transportation, and unusually adverse weather conditions.
- 9.1.5 The CMAR has included a specified number of days of weather related delays within the CPM Schedule which COUNTY has approved, and that number of days is incorporated herein by reference. If the Project experiences weather-related delays beyond the contractually specified number of weather days, the CMAR is entitled to a commensurate extension of time.
- 9.1.6 CMAR is entitled to an appropriate adjustment of its GMP for extended Construction General Conditions only for mutually determined delays directly caused by the actions, omissions, or inactions of the COUNTY and upon proof of the actual, direct additional cost to the CMAR for such delays.
- 9.1.7 CMAR will provide notice of any delay in performance of the Work that CMAR attributes to COUNTY in writing to the DP and COUNTY immediately but in no event later than twenty-four (24) hours after discovery of the event giving rise to the delay. The CMAR will then provide additional details concerning the delay in writing to the DP and COUNTY within seven (7) calendar days from the delay notice. Failure to satisfy each of these time requirements will absolutely bar any and all later delay claims. The detailed notice will indicate the cause of the delay, the anticipated length of the delay in reasonable detail, the probable effect of such delay upon the progress and Cost of the Work, and possible mitigation plans. If the cause of the delay is ongoing, the CMAR must give further detailed notice every month at the same time it submits the updated progress Narrative Report to COUNTY.

- 9.1.8 CMAR will, upon discovering an event giving rise to a delay, as promptly as possible, make all reasonable efforts to mitigate the impact of the delay.
- 9.1.9 Within fifteen (15) calendar days after elimination of any such delay, the CMAR will, unless the time is extended in a Change Order approved by COUNTY, submit further documentation concerning the delay and, if appropriate, a formal written request requesting an extension of time for such delay and any compensation sought for the delay. The written request for time extension will state the cause of the delay, the number of days of extension requested and the compensation sought and provide a fully documented analysis of the Progress Schedule, including any data demonstrating a delay in the critical path of the Work or individual milestone or the overall Project completion. If the CMAR does not timely comply with the notice and documentation requirements set forth in this Section 9.1.9, the CMAR's claim for delay is barred.
- 9.1.10 In the event the CMAR gives notice to COUNTY of compensable delay alleging that COUNTY is responsible for the delay as to which the notice was given and the delay is unreasonable under the circumstances and was not within the contemplation of COUNTY and CMAR when they entered into the Contract, COUNTY will enter into negotiations with CMAR as to CMAR's damages, if any.

ARTICLE 10 – CHANGES TO THE CONTRACT PRICE AND TIME

10.1 CHANGES

- 10.1.1 After the Contract is signed, modifications to the Contract, including any changes to GMP, the Contract Time(s) or Scope of Work, may only be made by a written Contract Amendment or written Change Order.
- 10.1.2 The CMAR will not proceed with the Work on any change involving an increase or decrease in cost or time without prior approval of the Change Order or Contract Amendment by the Board of Supervisors or the Procurement Director, as required by Section 11.16.010(C) of the Pima County Procurement Code. If the CMAR proceeds with any change involving an increase or decrease in cost or time without written authorization from COUNTY as required by this paragraph, the CMAR hereby waives all rights or claims CMAR may have in connection with or as a result of the change.
- 10.1.3 COUNTY's right to make changes in the Work will not invalidate this Contract, relieve the CMAR of any responsibility, or require the COUNTY to give notice to the Surety. Any requirement of notice to the Surety of a change in the Work is the sole responsibility of CMAR.
- 10.1.4 A Contract Amendment or Change Order is a written instrument issued after execution of the Contract signed by COUNTY and CMAR, stating their agreement upon all of the following:
- a) The scope of the change in the Work;
 - b) The amount of the adjustment, if any, to the GMP; and
 - c) The extent of the adjustment, if any, to the Contract Time(s) for performance set forth in the Contract Documents.
- 10.1.5 All changes in the Work authorized by an Contract Amendment or Change Order will be performed under the applicable terms of the Contract Documents, and COUNTY, and CMAR will negotiate in good faith and as expeditiously as possible on the appropriate adjustments, if any, in Contract Time or GMP. No GMP adjustment on account of a Change Order will include the CMAR's or Subcontractor's profit, fee, home office overhead, or a formula allocation of indirect costs except as allowed in Section 10.3.1 below unless otherwise specifically allowed under these General Conditions.

10.2 MINOR CHANGES IN THE WORK

- 10.2.1 DP may make minor changes in the Work consistent with the intent of the Contract Documents providing such changes do not involve an adjustment in the GMP or Contract Time(s) of performance and do not materially affect or alter the design, quality, or performance. The DP will promptly inform COUNTY, in writing, of any such changes, and verify that CMAR has recorded such changes on the As-Built Documents.

10.3 PRICE, TIME, OR SCOPE OF WORK ADJUSTMENT

10.3.1 The cost of or credit to COUNTY resulting from a change in the Work will be determined in one or more of the following ways:

- a) By unit prices stated in the Contract Documents;
- b) By cost, as defined below, and described in Exhibit C, properly itemized and supported by sufficient data reduced to meaningful unit prices for each assembled component of the Work in order to facilitate evaluation. Such costs will be itemized by crafts as defined within the Schedule of Values, submitted in a format approved by COUNTY, and limited to items directly allocable to the change in the Work:
 - 1) Cost of materials, including delivery;
 - 2) Cost of labor, fully-burdened, including, but not limited to, payroll taxes, social security, old age and unemployment insurance, vacation and fringe benefits required by contract or routinely paid by CMAR, and workers' compensation insurance but excluding Subcontractor's labor;
 - 3) Rental value of equipment and machinery to be established by rental receipts and not to exceed reasonable and customary rates for the locale of the Work. For owned equipment, CMAR must prove reasonable rental rate pursuant to actual ownership costs. County will not pay for equipment idle time unless the equipment is engaged in County-authorized force account or other time and materials work, and then only for the time it is engaged in such work. When the authorized force account or time and materials work is completed or the equipment ceases to be used for that work, payment for idle time stops;
 - 4) As a guideline, on a not-to-exceed ("NTE") percentage of Direct Construction Cost only basis, the following overhead, general conditions and fee percentages will be utilized, and will be fixed as a dollar amount, unless otherwise established in the Contract, or otherwise mutually agreed upon and documented in the Change Order description:

Subcontractor Fee (profit): 5%
Subcontractor Overhead & General Conditions, NTE: 10%
Total Subcontractor Markups, NTE: 15%

CMAR Fee (profit), approximately or as per CMAR Contract: 5%
CMAR Overhead & General Conditions, NTE or as per CMAR Contract: 5%
Total CMAR Markups, NTE: 10%
 - 5) The Contract may include provisions for some situations where larger amounts of Overhead and General Conditions are needed to address extenuating site-related circumstances. However, the combined total fee, Profit, Overhead and General Conditions, including the CMAR and all levels or tiers of subcontractors, will not exceed twenty-five percent (25%) of the total direct costs of materials, labor, rental equipment, and subcontractor insurance and bonds.
- c. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to facilitate evaluations; provided that such lump sum will not exceed that amount calculated under (b) above.

10.3.2 Any dispute regarding the pricing methodology or cost of a change does not relieve the CMAR of the obligation to proceed with work on the change. Any such dispute will be preserved by inclusion in the Change Order or Contract Amendment.

- 10.3.3 A COUNTY-approved written Contract Amendment or Change Order is full and final settlement of all entitlement claims for direct, indirect, delay, disruption, inefficiency, productivity, and any other consequential costs related to items covered or affected, as well as for related delays. CMAR irrevocably waives any such claim not presented for inclusion in the Contract Amendment or Change Order prior to signature.
- 10.3.4 In the event that COUNTY and the CMAR disagree upon whether CMAR is entitled to be paid for any Change Order services required of CMAR by COUNTY, or as to amount of compensation in the event of any other disagreement over the Scope of Work or proposed changes to the Work, COUNTY and CMAR will resolve all such disagreements consistent initially with Article 10 of these General Conditions and thereafter if not resolved, in accordance with the Dispute Resolution provisions of the Contract. As part of the negotiation process, CMAR will furnish COUNTY and DP with a good faith estimate of the costs to perform the disputed services or Work in accordance with COUNTY's interpretations. If the parties are unable to agree, and COUNTY expects CMAR to promptly perform the services in accordance with COUNTY's or DP's interpretations of the documents, CMAR will proceed to perform the disputed services, conditioned upon COUNTY issuing a written order to CMAR directing CMAR to proceed and specifying COUNTY's or DP's interpretation of the services that are to be performed.
- 10.3.5 The requirements set forth above as to CMAR providing detailed, itemized pricing on subcontractor Change Orders is fully applicable to Change Orders from CMAR to subcontractor where there is no comparable Change Order between COUNTY and CMAR.

10.4 EMERGENCIES

In any emergency affecting the safety of persons or property, CMAR will promptly act, at its discretion, to prevent threatened damage, injury or loss. Any increase in the Guaranteed Maximum Price or Contract Time(s) of performance or both claimed by CMAR on account of emergency work will be determined as provided in this Article.

ARTICLE 11 – STOP WORK AND TERMINATION

11.1 COUNTY'S RIGHT TO STOP WORK OR TERMINATE FOR CONVENIENCE

- 11.1.1 COUNTY at any time may, without cause and for its convenience, order CMAR in writing to stop or suspend the Work, for a period not to exceed sixty (60) calendar days. In that event, CMAR may seek an adjustment of the GMP or Contract Time(s) of performance or both under Article 10 of the General Conditions to the extent that its Work has been adversely impacted by any such suspension or stoppage of the Work by COUNTY, unless actions, omissions or inactions of the CMAR are the cause of the COUNTY stopping or suspending the Work.
- 11.1.2 Upon seven (7) days written notice to CMAR, COUNTY may, without cause and without prejudice to any other right or remedy of COUNTY, elect to terminate the Contract for convenience of the COUNTY. In such case CMAR will be paid (without duplication of any items): a) for completed and accepted Work executed in accordance with Contract Documents prior to the effective date of the termination, including fair and reasonable sums for overhead and profit on such Work; b) for expenses sustained prior to termination in performing services and furnishing labor, materials, and equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; c) for all claims, costs, losses, and damages incurred in settlement of terminated contracts with subcontractors, suppliers, and others; and d) for reasonable expenses directly attributable to termination.
- 11.1.3 Upon receiving a Notice of Termination for Convenience, the CMAR will proceed as follows: a) stop Work as specified in the Notice; b) place no further subcontracts on purchase orders; c) terminate all subcontracts to the extent they relate to the Work terminated; d) assign to COUNTY all rights of the CMAR under terminated subcontracts, in which case COUNTY has the right to settle or to pay any termination settlement proposal arising out of these terminations; and e) submit complete termination inventory schedules to COUNTY no later than one hundred twenty (120) days from date of the Notice of Termination.

11.2 COUNTY'S RIGHT TO TERMINATE FOR DEFAULT AND PERFORM

11.2.1 If CMAR persistently fails to (a) provide a sufficient number of skilled workers, the materials required by the Construction Documents, or both; (b) comply with applicable legal requirements; (c) pay, without cause, its Subcontractors or suppliers; (d) prosecute the Work with promptness and diligence to ensure that the Work is completed by the Contract Time(s) as may be from time to time adjusted; (e) maintain contractor, business, or other required licenses or authority; (f) otherwise perform the Work and its obligations in compliance with the Contract Documents; or (g) if, for any reason, CMAR curtails or ceases business or business operations to a degree that would substantially impair or preclude CMAR's performance of this Contract, COUNTY has the right, in addition to any other rights and remedies provided in the Contract Documents or by law, after seven (7) days' written notice of default to CMAR and its surety and CMAR's (or its surety's) failure to cure within that seven day period, to (i) perform and furnish through itself or through others it selects any such labor, materials, or Work, and to deduct the cost thereof from any monies due or to become due to CMAR under the Contract Documents; or (ii) terminate the Contract with CMAR for all or any portion of the Work, enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment scaffolds, tools, appliances, and other items thereon, all of which CMAR hereby transfers, assigns, and sets over to COUNTY for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment, and other items; or (iii) both (i) and (ii) above. Upon exercising its right to Terminate for Default for any reason set forth above, COUNTY, at its discretion, may also exercise the right to have each or any of CMAR's subcontractor and supply contracts assigned to COUNTY, or COUNTY's nominee, provided however, COUNTY will have no responsibility or liability for acts or omission of CMAR under such Contracts and the sole recourse of subcontractors on pre-termination events will be against CMAR. CMAR will ensure that a clause providing for this conditional assignment on the foregoing terms is included in each subcontract.

11.2.2 In the event of such termination for default:

11.2.2.1 CMAR is not entitled to recover any further payment until the Work is completed and will then only be entitled to be paid for all acceptable Work performed prior to its date of default minus costs incurred by COUNTY to complete the Project exceeding the GMP as described below. In the event COUNTY's cost and expense of completing CMAR's Work exceeds the GMP, then CMAR or its surety will promptly pay the difference to COUNTY. Such costs and expense will include not only the cost of completing the Work to the satisfaction of COUNTY and of performing and furnishing all labor, services, tools, equipment and other items required in the Contract Documents, but also losses, damages, costs and expense, including consultant and attorney's fees and expenses incurred in connection with any additional procurement and the defending of claims, if any, arising from or related to CMAR's default.

11.2.2.2 All finished and unfinished As-Built, shop drawings, documents, data, studies, surveys, drawings, photographs, reports, and other information in whatever form, including electronic, acquired, or prepared by CMAR for this project become COUNTY's property and will be delivered to COUNTY not later than five (5) business days after the effective date of the termination.

11.2.2.3 COUNTY may withhold payments to CMAR arising under this or any other Contract for the purpose of set-off until such time as the exact amount of damage due COUNTY from CMAR is determined

11.2.3 In the event that COUNTY terminates the Contract for default and such termination is ultimately determined to be improper or wrongful, the termination for default will be automatically converted to a termination for convenience and the provisions of 11.1 of these General Conditions will apply.

11.2.4 If CMAR institutes or has instituted against it a proceeding under the United States Bankruptcy Code, such event is a default that may impair or frustrate CMAR's performance of its obligations under the Contract Documents. Accordingly, if such event of default occurs, COUNTY is entitled to request CMAR, its trustee, or other successor, to provide adequate assurance of future

performance. If CMAR or CMAR's trustee, or other successor fails to comply with such request within ten (10) days after receiving notice of the request, COUNTY, in addition to any other rights and remedies provided by the Contract Documents, or by law, is entitled to terminate the Contract. COUNTY will thereupon be entitled to perform and furnish through itself or through others any such labor, materials, or equipment necessary for the completion of the Work and necessary to maintain the Contract Time(s) of performance, and to deduct the costs from any monies due or to become due CMAR under the Contract Documents pending receipt of adequate assurances of performance and actual performance in accordance herewith. In the event of any such bankruptcy proceedings, the Contract will terminate if CMAR rejects the Contract or if there has been a default under the Contract Documents, and CMAR is unable to give adequate assurances that it will perform as provided in the Contract Documents or otherwise is unable to comply with the requirements for assuming the Contract under the applicable provisions of the Bankruptcy Code.

11.3 CMAR'S RIGHT TO STOP WORK AND TERMINATE FOR CAUSE

- 11.3.1 CMAR may, in addition to any other rights afforded it under the Contract Documents or by applicable law, either stop Work or terminate the Contract for cause upon COUNTY's failure to timely pay an amount in excess of one hundred thousand dollars (\$100,000.00) properly due to CMAR under any CMAR Application for Payment. In this regard CMAR will provide COUNTY with written notice indicating that such non-payment condition has occurred, and that it is CMAR's intention to stop Work or terminate the Contract only if the non-payment condition is not cured within seven (7) days from COUNTY's receipt of CMAR's notice. In the event that CMAR elects to only stop Work, it may nonetheless later indicate its intention to terminate the Contract by providing COUNTY with written notice that CMAR will terminate the Contract within seven (7) days from receipt of CMAR's notice; unless the alleged cause of termination is cured in the interim.
 - 11.3.2 In the event CMAR properly and lawfully elects to stop Work under section 11.3.1 for non-payment and then resumes Work, CMAR will be entitled to make a claim for adjustment to the GMP and Contract Time(s) of performance to the extent CMAR has been adversely impacted by the stoppage of Work. In the event that CMAR elects to terminate the Contract on the basis permitted under Section 11.3.1, CMAR will be entitled to recover the same costs it would be permitted to recover had COUNTY terminated this Contract for convenience under Section 11.1 of these General Conditions.
- 11.4 If the Contract is terminated for any of the reasons set forth above, CMAR's contracts with its subcontractors and suppliers, at COUNTY's option and without further action by CMAR, will be assigned to COUNTY; provided however, that COUNTY will have no liability for any pre-existing acts or omissions or default by CMAR under such contracts and the sole recourse of such subcontractors and suppliers for any such events will be against CMAR.

End of Appendix 'C' – General Conditions

ACORD™

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

4/13/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER USI Kibble & Prentice PR 601 Union Street, Suite 1000 Seattle, WA 98101		CONTACT NAME: PHONE (A/C, No, Ext): 206 441-6300 FAX (A/C, No): 610-362-8528 E-MAIL ADDRESS: PL.CertRequest@usi.com	
		INSURER(S) AFFORDING COVERAGE INSURER A: Hartford Casualty Insurance Com	NAIC # 29424
INSURED Kittelson & Associates, Inc. 610 SW Alder Street, Suite 700 Portland, OR 97205		INSURER B: XL Specialty Insurance Company	37885
		INSURER C:	
		INSURER D:	
		INSURER E:	
		INSURER F:	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

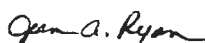
INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			52UUNPT3504	01/01/2017	01/01/2018	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			52UUNPT3504	01/01/2017	01/01/2018	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						OCCUR CLAIMS-MADE \$ \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	52WEGB9736	01/01/2017	01/01/2018	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.I. EACH ACCIDENT \$1,000,000 E.I. DISEASE - EA EMPLOYEE \$1,000,000 E.I. DISEASE - POLICY LIMIT \$1,000,000
B	Professional Liability			DPR9909525	01/01/2017	01/01/2018	\$2,000,000 per claim \$4,000,000 annl aggr.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: KAI PN 20894 -Aerospace Parkway Phase II, Engineering Design Services For Aerospace Parkway Widening
 The General Liability and Automobile Liability policies include an automatic Additional Insured endorsement that provides Additional Insured status to the Certificate Holder, its departments, districts, boards, commissions, officers, officials, agents, and employees, only when there is a written contract that requires such status, and only with regard to work performed on behalf of the named insured. The General (See Attached Descriptions)

CERTIFICATE HOLDER

CANCELLATION

Pima County 201 North Stone, 2nd Floor Tucson, AZ 85701	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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DESCRIPTIONS (Continued from Page 1)

Liability and Automobile Liability policies contain a special endorsement with Primary and Noncontributory wording, when required by written contract. The General Liability, Automobile Liability and Workers Compensation policies include a Waiver of Subrogation endorsement in favor of the Certificate Holder as referenced above.



COMMERCIAL GENERAL LIABILITY COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations, and any other person or organization qualifying as a Named Insured under this policy. The words "we", "us" and "our" refer to the stock insurance company member of The Hartford providing this insurance.

The word "insured" means any person or organization qualifying as such under Section II – Who Is An Insured.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section V – Definitions.

SECTION I – COVERAGES

COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY

1. Insuring Agreement

- a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "bodily injury" or "property damage" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "bodily injury" or "property damage" to which this insurance does not apply. We may, at our discretion, investigate any "occurrence" and settle any claim or "suit" that may result. But:

- (1) The amount we will pay for damages is limited as described in Section III – Limits Of Insurance; and
- (2) Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of judgments or settlements under Coverages A or B or medical expenses under Coverage C.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments – Coverages A and B.

- b. This insurance applies to "bodily injury" and "property damage" only if:
 - (1) The "bodily injury" or "property damage" is caused by an "occurrence" that takes place in the "coverage territory";

- (2) The "bodily injury" or "property damage" occurs during the policy period; and

- (3) Prior to the policy period, no insured listed under Paragraph 1. of Section II – Who Is An Insured and no "employee" authorized by you to give or receive notice of an "occurrence" or claim, knew that the "bodily injury" or "property damage" had occurred, in whole or in part. If such a listed insured or authorized "employee" knew, prior to the policy period, that the "bodily injury" or "property damage" occurred, then any continuation, change or resumption of such "bodily injury" or "property damage" during or after the policy period will be deemed to have been known prior to the policy period.

- c. "Bodily injury" or "property damage" will be deemed to have been known to have occurred at the earliest time when any insured listed under Paragraph 1. of Section II – Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim:

- (1) Reports all, or any part, of the "bodily injury" or "property damage" to us or any other insurer;
- (2) Receives a written or verbal demand or claim for damages because of the "bodily injury" or "property damage"; or
- (3) Becomes aware by any other means that "bodily injury" or "property damage" has occurred or has begun to occur.

- d. Damages because of "bodily injury" include damages claimed by any person or organization for care, loss of services or death resulting at any time from the "bodily injury".

e. Incidental Medical Malpractice

- (1) "Bodily injury" arising out of the rendering of or failure to render professional health care services as a physician, dentist, nurse, emergency medical technician or paramedic shall be deemed to be caused by an "occurrence", but only if:

- (a) The physician, dentist, nurse, emergency medical technician or paramedic is employed by you to provide such services; and
- (b) You are not engaged in the business or occupation of providing such services.

- (2) For the purpose of determining the limits of insurance for incidental medical malpractice, any act or omission together with all related acts or omissions in the furnishing of these services to any one person will be considered one "occurrence".

2. Exclusions

This insurance does not apply to:

a. Expected Or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property.

b. Contractual Liability

"Bodily injury" or "property damage" for which the insured is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages:

- (1) That the insured would have in the absence of the contract or agreement; or
- (2) Assumed in a contract or agreement that is an "insured contract", provided the "bodily injury" or "property damage" occurs subsequent to the execution of the contract or agreement. Solely for the purposes of liability assumed in an "insured contract", reasonable attorney fees and necessary litigation expenses incurred by or for a party other than an insured are deemed to be damages because of "bodily injury" or "property damage", provided:
 - (a) Liability to such party for, or for the cost of, that party's defense has also been assumed in the same "insured contract"; and
 - (b) Such attorney fees and litigation expenses are for defense of that party against a civil or alternative dispute resolution proceeding in which damages to which this insurance applies are alleged.

c. Liquor Liability

"Bodily injury" or "property damage" for which any insured may be held liable by reason of:

- (1) Causing or contributing to the intoxication of any person;
- (2) The furnishing of alcoholic beverages to a person under the legal drinking age or under the influence of alcohol; or
- (3) Any statute, ordinance or regulation relating to the sale, gift, distribution or use of alcoholic beverages.

This exclusion applies only if you are in the business of manufacturing, distributing, selling, serving or furnishing alcoholic beverages.

d. Workers' Compensation And Similar Laws

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law or any similar law.

e. Employer's Liability

"Bodily injury" to:

- (1) An "employee" of the insured arising out of and in the course of:
 - (a) Employment by the insured; or
 - (b) Performing duties related to the conduct of the insured's business; or
- (2) The spouse, child, parent, brother or sister of that "employee" as a consequence of Paragraph (1) above.

This exclusion applies:

- (1) Whether the insured may be liable as an employer or in any other capacity; and
- (2) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

This exclusion does not apply to liability assumed by the insured under an "insured contract".

f. Pollution

- (1) "Bodily injury" or "property damage" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":
 - (a) At or from any premises, site or location which is or was at any time owned or occupied by, or rented or loaned to, any insured. However, this subparagraph does not apply to:
 - (i) "Bodily injury" if sustained within a building and caused by smoke, fumes, vapor or soot produced by or originating from equipment that is used to heat, cool or dehumidify the building, or equipment that is used to heat water for personal use, by the building's occupants or their guests;
 - (ii) "Bodily injury" or "property damage" for which you may be held liable, if you are a contractor and the owner or lessee of such premises, site or location has been added to your policy as an additional insured with respect to your ongoing operations performed for that additional insured at that premises, site or location and such premises, site or location is not and never was owned or occupied by, or rented or loaned to, any insured, other than that additional insured; or

- (iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire";
 - (b) At or from any premises, site or location which is or was at any time used by or for any insured or others for the handling, storage, disposal, processing or treatment of waste;
 - (c) Which are or were at any time transported, handled, stored, treated, disposed of, or processed as waste by or for:
 - (i) Any insured; or
 - (ii) Any person or organization for whom you may be legally responsible;
 - (d) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the "pollutants" are brought on or to the premises, site or location in connection with such operations by such insured, contractor or subcontractor. However, this subparagraph does not apply to:
 - (i) "Bodily injury" or "property damage" arising out of the escape of fuels, lubricants or other operating fluids which are needed to perform the normal electrical, hydraulic or mechanical functions necessary for the operation of "mobile equipment" or its parts, if such fuels, lubricants or other operating fluids escape from a vehicle part designed to hold, store or receive them. This exception does not apply if the "bodily injury" or "property damage" arises out of the intentional discharge, dispersal or release of the fuels, lubricants or other operating fluids, or if such fuels, lubricants or other operating fluids are brought on or to the premises, site or location with the intent that they be discharged, dispersed or released as part of the operations being performed by such insured, contractor or subcontractor;
 - (ii) "Bodily injury" or "property damage" sustained within a building and caused by the release of gases, fumes or vapors from materials brought into that building in connection with operations being performed by you or on your behalf by a contractor or subcontractor; or
 - (iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire"; or
 - (e) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the operations are to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants".
- (2) Any loss, cost or expense arising out of any:
- (a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or
 - (b) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".
- However, this paragraph does not apply to liability for damages because of "property damage" that the insured would have in the absence of such request, demand, order or statutory or regulatory requirement, or such claim or "suit" by or on behalf of a governmental authority.
- g. Aircraft, Auto Or Watercraft**
- "Bodily injury" or "property damage" arising out of the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft owned or operated by or rented or loaned to any insured. Use includes operation and "loading or unloading".
- This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft that is owned or operated by or rented or loaned to any insured.
- This exclusion does not apply to:
- (1) A watercraft while ashore on premises you own or rent;
 - (2) A watercraft you do not own that is:
 - (a) Less than 51 feet long; and
 - (b) Not being used to carry persons for a charge;
 - (3) Parking an "auto" on, or on the ways next to, premises you own or rent, provided the "auto" is not owned by or rented or loaned to you or the insured;

- (4) Liability assumed under any "insured contract" for the ownership, maintenance or use of aircraft or watercraft;
- (5) "Bodily injury" or "property damage" arising out of the operation of any of the equipment listed in Paragraph f.(2) or f.(3) of the definition of "mobile equipment"; or
- (6) An aircraft that is not owned by any insured and is hired, chartered or loaned with a paid crew. However, this exception does not apply if the insured has any other insurance for such "bodily injury" or "property damage", whether the other insurance is primary, excess, contingent or on any other basis.

h. Mobile Equipment

"Bodily injury" or "property damage" arising out of:

- (1) The transportation of "mobile equipment" by an "auto" owned or operated by or rented or loaned to any insured; or
- (2) The use of "mobile equipment" in, or while in practice for, or while being prepared for, any prearranged racing, speed, demolition, or stunting activity.

i. War

"Bodily injury" or "property damage", however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war;
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

j. Damage To Property

"Property damage" to:

- (1) Property you own, rent, or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property;
- (2) Premises you sell, give away or abandon, if the "property damage" arises out of any part of those premises;
- (3) Property loaned to you;
- (4) Personal property in the care, custody or control of the insured;
- (5) That particular part of real property on which you or any contractors or subcontractors

working directly or indirectly on your behalf are performing operations, if the "property damage" arises out of those operations; or

- (6) That particular part of any property that must be restored, repaired or replaced because "your work" was incorrectly performed on it.

Paragraphs (1), (3) and (4) of this exclusion do not apply to "property damage" (other than damage by fire) to premises, including the contents of such premises, rented to you for a period of 7 or fewer consecutive days. A separate limit of insurance applies to Damage To Premises Rented To You as described in Section III – Limits Of Insurance.

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

Paragraphs (3) and (4) of this exclusion do not apply to "property damage" arising from the use of elevators.

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

Paragraphs (3) and (4) of this exclusion do not apply to "property damage" to borrowed equipment while not being used to perform operations at the job site.

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

k. Damage To Your Product

"Property damage" to "your product" arising out of it or any part of it.

l. Damage To Your Work

"Property damage" to "your work" arising out of it or any part of it and included in the "products-completed operations hazard".

This exclusion does not apply if the damaged work or the work out of which the damage arises was performed on your behalf by a subcontractor.

m. Damage To Impaired Property Or Property Not Physically Injured

"Property damage" to "impaired property" or property that has not been physically injured, arising out of:

- (1) A defect, deficiency, inadequacy or dangerous condition in "your product" or "your work"; or
- (2) A delay or failure by you or anyone acting on your behalf to perform a contract or agreement in accordance with its terms.

This exclusion does not apply to the loss of use of other property arising out of sudden and accidental physical injury to "your product" or "your work" after it has been put to its intended use.

n. Recall Of Products, Work Or Impaired Property

Damages claimed for any loss, cost or expense incurred by you or others for the loss of use, withdrawal, recall, inspection, repair, replacement, adjustment, removal or disposal of:

- (1) "Your product";
- (2) "Your work"; or
- (3) "Impaired property";

if such product, work, or property is withdrawn or recalled from the market or from use by any person or organization because of a known or suspected defect, deficiency, inadequacy or dangerous condition in it.

o. Personal And Advertising Injury

"Bodily injury" arising out of "personal and advertising injury".

p. Electronic Data

Damages arising out of the loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate electronic data.

As used in this exclusion, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMS, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

q. Employment-Related Practices

"Bodily injury" to:

- (1) A person arising out of any "employment-related practices"; or
- (2) The spouse, child, parent, brother or sister of that person as a consequence of "bodily injury" to that person at whom any "employment-related practices" are directed.

This exclusion applies:

- (1) Whether the insured may be liable as an employer or in any other capacity; and
- (2) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

r. Asbestos

- (1) "Bodily injury" or "property damage" arising out of the "asbestos hazard".
- (2) Any damages, judgments, settlements, loss, costs or expenses that:
 - (a) May be awarded or incurred by reason of any claim or suit alleging actual or threatened injury or damage of any nature or

kind to persons or property which would not have occurred in whole or in part but for the "asbestos hazard";

- (b) Arise out of any request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, encapsulate, contain, treat, detoxify or neutralize or in any way respond to or assess the effects of an "asbestos hazard"; or
- (c) Arise out of any claim or suit for damages because of testing for, monitoring, cleaning up, removing, encapsulating, containing, treating, detoxifying or neutralizing or in any way responding to or assessing the effects of an "asbestos hazard".

Damage To Premises Rented To You – Exception For Damage By Fire, Lightning Or Explosion

Exclusions c. through h. and j. through n. do not apply to damage by fire, lightning or explosion to premises while rented to you or temporarily occupied by you with permission of the owner. A separate limit of insurance applies to this coverage as described in Section III – Limits Of Insurance.

COVERAGE B PERSONAL AND ADVERTISING INJURY LIABILITY

1. Insuring Agreement

- a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "personal and advertising injury" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "personal and advertising injury" to which this insurance does not apply. We may, at our discretion, investigate any offense and settle any claim or "suit" that may result. But:

- (1) The amount we will pay for damages is limited as described in Section III – Limits Of Insurance; and
- (2) Our right and duty to defend end when we have used up the applicable limit of insurance in the payment of judgments or settlements under Coverages A or B or medical expenses under Coverage C.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments – Coverages A and B.

- b. This insurance applies to "personal and advertising injury" caused by an offense arising out of your business but only if the offense was committed in the "coverage territory" during the policy period.

2. Exclusions

This insurance does not apply to:

a. Knowing Violation Of Rights Of Another

"Personal and advertising injury" arising out of an offense committed by, at the direction or with the consent or acquiescence of the insured with the expectation of inflicting "personal and advertising injury".

b. Material Published With Knowledge Of Falsity

"Personal and advertising injury" arising out of oral, written or electronic publication of material, if done by or at the direction of the insured with knowledge of its falsity.

c. Material Published Prior To Policy Period

"Personal and advertising injury" arising out of oral, written or electronic publication of material whose first publication took place before the beginning of the policy period.

d. Criminal Acts

"Personal and advertising injury" arising out of a criminal act committed by or at the direction of the insured.

e. Contractual Liability

"Personal and advertising injury" for which the insured has assumed liability in a contract or agreement. This exclusion does not apply to liability for damages that the insured would have in the absence of the contract or agreement.

f. Breach Of Contract

"Personal and advertising injury" arising out of a breach of contract, except an implied contract to use another's "advertising idea" in your "advertisement".

g. Quality Or Performance Of Goods – Failure To Conform To Statements

"Personal and advertising injury" arising out of the failure of goods, products or services to conform with any statement of quality or performance made in your "advertisement".

h. Wrong Description Of Prices

"Personal and advertising injury" arising out of the wrong description of the price of goods, products or services.

i. Infringement Of Intellectual Property Rights

"Personal and advertising injury" arising out of any violation of any intellectual property rights such as copyright, patent, trademark, trade name, trade secret, service mark or other designation of origin or authenticity.

However, this exclusion does not apply to infringement, in your "advertisement", of:

- (1) Copyright;

- (2) Slogan, unless the slogan is also a trademark, trade name, service mark or other designation of origin or authenticity; or

- (3) Title of any literary or artistic work.

j. Insureds In Media And Internet Type Businesses

"Personal and advertising injury" committed by an insured whose business is:

- (1) Advertising, broadcasting, publishing or telecasting;
- (2) Designing or determining content of web sites for others; or
- (3) An Internet search, access, content or service provider.

However, this exclusion does not apply to Paragraphs 17.a., b. and c. of "personal and advertising injury" under the Definitions Section.

For the purposes of this exclusion, placing an "advertisement" for or linking to others on your web site, by itself, is not considered the business of advertising, broadcasting, publishing or telecasting.

k. Electronic Chatrooms Or Bulletin Boards

"Personal and advertising injury" arising out of an electronic chatroom or bulletin board the insured hosts, owns, or over which the insured exercises control.

l. Unauthorized Use Of Another's Name Or Product

"Personal and advertising injury" arising out of the unauthorized use of another's name or product in your e-mail address, domain name or metatags, or any other similar tactics to mislead another's potential customers.

m. Pollution

"Personal and advertising injury" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants" at any time.

n. Pollution-Related

Any loss, cost or expense arising out of any:

- (1) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or
- (2) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".

o. War

"Personal and advertising injury", however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war;
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

p. Internet Advertisements And Content Of Others

"Personal and advertising injury" arising out of:

- (1) An "advertisement" for others on your web site;
- (2) Placing a link to a web site of others on your web site;
- (3) Content, including information, sounds, text, graphics, or images from a web site of others displayed within a frame or border on your web site; or
- (4) Computer code, software or programming used to enable:
 - (a) Your web site; or
 - (b) The presentation or functionality of an "advertisement" or other content on your web site.

q. Right Of Privacy Created By Statute

"Personal and advertising injury" arising out of the violation of a person's right of privacy created by any state or federal act.

However, this exclusion does not apply to liability for damages that the insured would have in the absence of such state or federal act.

r. Violation Of Anti-Trust law

"Personal and advertising injury" arising out of a violation of any anti-trust law.

s. Securities

"Personal and advertising injury" arising out of the fluctuation in price or value of any stocks, bonds or other securities.

t. Discrimination Or Humiliation

"Personal and advertising injury" arising out of discrimination or humiliation committed by or at the direction of any "executive officer", director, stockholder, partner or member of the insured.

u. Employment-Related Practices

"Personal and advertising injury" to:

- (1) A person arising out of any "employment-related practices"; or

- (2) The spouse, child, parent, brother or sister of that person as a consequence of "personal and advertising injury" to that person at whom any "employment-related practices" are directed.

This exclusion applies:

- (1) Whether the insured may be liable as an employer or in any other capacity; and
- (2) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

v. Asbestos

- (1) "Personal and advertising injury" arising out of the "asbestos hazard".
- (2) Any damages, judgments, settlements, loss, costs or expenses that:
 - (a) May be awarded or incurred by reason of any claim or suit alleging actual or threatened injury or damage of any nature or kind to persons or property which would not have occurred in whole or in part but for the "asbestos hazard";
 - (b) Arise out of any request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, encapsulate, contain, treat, detoxify or neutralize or in any way respond to or assess the effects of an "asbestos hazard"; or
 - (c) Arise out of any claim or suit for damages because of testing for, monitoring, cleaning up, removing, encapsulating, containing, treating, detoxifying or neutralizing or in any way responding to or assessing the effects of an "asbestos hazard".

COVERAGE C MEDICAL PAYMENTS

1. Insuring Agreement

- a. We will pay medical expenses as described below for "bodily injury" caused by an accident:
 - (1) On premises you own or rent;
 - (2) On ways next to premises you own or rent; or
 - (3) Because of your operations;provided that:
 - (1) The accident takes place in the "coverage territory" and during the policy period;
 - (2) The expenses are incurred and reported to us within three years of the date of the accident; and
 - (3) The injured person submits to examination, at our expense, by physicians of our choice as often as we reasonably require.

- b. We will make these payments regardless of fault. These payments will not exceed the applicable limit of insurance. We will pay reasonable expenses for:
 - (1) First aid administered at the time of an accident;
 - (2) Necessary medical, surgical, x-ray and dental services, including prosthetic devices; and
 - (3) Necessary ambulance, hospital, professional nursing and funeral services.

2. Exclusions

We will not pay expenses for "bodily injury":

a. Any Insured

To any insured, except "volunteer workers".

b. Hired Person

To a person hired to do work for or on behalf of any insured or a tenant of any insured.

c. Injury On Normally Occupied Premises

To a person injured on that part of premises you own or rent that the person normally occupies.

d. Workers Compensation And Similar Laws

To a person, whether or not an "employee" of any insured, if benefits for the "bodily injury" are payable or must be provided under a workers' compensation or disability benefits law or a similar law.

e. Athletics Activities

To a person injured while practicing, instructing or participating in any physical exercises or games, sports, or athletic contests.

f. Products-Completed Operations Hazard

Included within the "products-completed operations hazard".

g. Coverage A Exclusions

Excluded under Coverage A.

SUPPLEMENTARY PAYMENTS - COVERAGES A AND B

1. We will pay, with respect to any claim we investigate or settle, or any "suit" against an insured we defend:
 - a. All expenses we incur.
 - b. Up to \$1,000 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.
 - c. The cost of appeal bonds or bonds to release attachments, but only for bond amounts within the applicable limit of insurance. We do not have to furnish these bonds.
 - d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$500 a day because of time off from work.

- e. All costs taxed against the insured in the "suit".
- f. Prejudgment interest awarded against the insured on that part of the judgment we pay. If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.
- g. All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable limit of insurance.

These payments will not reduce the limits of insurance.

2. If we defend an insured against a "suit" and an indemnitee of the insured is also named as a party to the "suit", we will defend that indemnitee if all of the following conditions are met:

- a. The "suit" against the indemnitee seeks damages for which the insured has assumed the liability of the indemnitee in a contract or agreement that is an "insured contract";
- b. This insurance applies to such liability assumed by the insured;
- c. The obligation to defend, or the cost of the defense of, that indemnitee, has also been assumed by the insured in the same "insured contract";
- d. The allegations in the "suit" and the information we know about the "occurrence" are such that no conflict appears to exist between the interests of the insured and the interests of the indemnitee;
- e. The indemnitee and the insured ask us to conduct and control the defense of that indemnitee against such "suit" and agree that we can assign the same counsel to defend the insured and the indemnitee; and
- f. The indemnitee:

- (1) Agrees in writing to:

- (a) Cooperate with us in the investigation, settlement or defense of the "suit";
- (b) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the "suit";
- (c) Notify any other insurer whose coverage is available to the indemnitee; and
- (d) Cooperate with us with respect to coordinating other applicable insurance available to the indemnitee; and

- (2) Provides us with written authorization to:

- (a) Obtain records and other information related to the "suit"; and
- (b) Conduct and control the defense of the indemnitee in such "suit".

So long as the above conditions are met, attorneys' fees incurred by us in the defense of that indemnitee,

necessary litigation expenses incurred by us and necessary litigation expenses incurred by the indemnitee at our request will be paid as Supplementary Payments. Notwithstanding the provisions of Paragraph 2.b.(2) of Section I – Coverage A – Bodily Injury And Property Damage Liability, such payments will not be deemed to be damages for "bodily injury" and "property damage" and will not reduce the limits of insurance.

Our obligation to defend an insured's indemnitee and to pay for attorneys' fees and necessary litigation expenses as Supplementary Payments ends when:

- a. We have used up the applicable limit of insurance in the payment of judgments or settlements; or
- b. The conditions set forth above, or the terms of the agreement described in Paragraph f. above, are no longer met.

SECTION II – WHO IS AN INSURED

1. If you are designated in the Declarations as:

- a. An individual, you and your spouse are insureds, but only with respect to the conduct of a business of which you are the sole owner.
- b. A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business.
- c. A limited liability company, you are an insured. Your members are also insureds, but only with respect to the conduct of your business. Your managers are insureds, but only with respect to their duties as your managers.
- d. An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.
- e. A trust, you are an insured. Your trustees are also insureds, but only with respect to their duties as trustees.

2. Each of the following is also an insured:

a. Employees and Volunteer workers

Your "volunteer workers" only while performing duties related to the conduct of your business, or your "employees", other than either your "executive officers" (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your business.

However, none of these "employees" or "volunteer workers" are insureds for:

(1) "Bodily injury" or "personal and advertising injury":

- (a) To you, to your partners or members (if you are a partnership or joint venture), to your members (if you are a limited liability company), to a co-"employee" while in the course of his or her employment or performing duties related to the conduct of your business, or to your other "volunteer workers" while performing duties related to the conduct of your business;
- (b) To the spouse, child, parent, brother or sister of that co-"employee" or that "volunteer worker" as a consequence of Paragraph (1)(a) above;
- (c) For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in Paragraphs (1)(a) or (b) above; or

(d) Arising out of his or her providing or failing to provide professional health care services.

If you are not in the business of providing professional health care services, Paragraph (d) does not apply to any nurse, emergency medical technician or paramedic employed by you to provide such services.

(2) "Property damage" to property:

- (a) Owned, occupied or used by,
- (b) Rented to, in the care, custody or control of, or over which physical control is being exercised for any purpose by you, any of your "employees", "volunteer workers", any partner or member (if you are a partnership or joint venture), or any member (if you are a limited liability company).

b. Real Estate Manager

Any person (other than your "employee" or "volunteer worker"), or any organization while acting as your real estate manager.

c. Temporary Custodians of Your Property

Any person or organization having proper temporary custody of your property if you die, but only:

- (1) With respect to liability arising out of the maintenance or use of that property; and
- (2) Until your legal representative has been appointed.

d. Legal Representative If You Die

Your legal representative if you die, but only with respect to duties as such. That representative will

have all your rights and duties under this Coverage Part.

e. Unnamed Subsidiary

Any subsidiary, and subsidiary thereof, of yours which is a legally incorporated entity of which you own a financial interest of more than 50% of the voting stock on the effective date of the Coverage Part.

The insurance afforded herein for any subsidiary not named in this Coverage Part as a named insured does not apply to injury or damage with respect to which an insured under this Coverage Part is also an insured under another policy or would be an insured under such policy but for its termination or the exhaustion of its limits of insurance.

3. Newly Acquired or Formed Organization

Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company, and over which you maintain financial interest of more than 50% of the voting stock, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:

- a. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier;
- b. Coverage A does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and
- c. Coverage B does not apply to "personal and advertising injury" arising out of an offense committed before you acquired or formed the organization.

4. Mobile Equipment

With respect to "mobile equipment" registered in your name under any motor vehicle registration law, any person is an insured while driving such equipment along a public highway with your permission. Any other person or organization responsible for the conduct of such person is also an insured, but only with respect to liability arising out of the operation of the equipment, and only if no other insurance of any kind is available to that person or organization for this liability. However, no person or organization is an insured with respect to:

- a. "Bodily injury" to a co-"employee" of the person driving the equipment; or
- b. "Property damage" to property owned by, rented to, in the charge of or occupied by you or the employer of any person who is an insured under this provision.

5. Nonowned Watercraft

With respect to watercraft you do not own that is less than 51 feet long and is not being used to carry persons for a charge, any person is an insured while operating such watercraft with your permission. Any other person or organization responsible for the conduct of such person is also an insured, but only with respect to liability arising out of the operation of the watercraft, and only if no other insurance of any kind is available to that person or organization for this liability.

However, no person or organization is an insured with respect to:

- a. "Bodily injury" to a co-"employee" of the person operating the watercraft; or
- b. "Property damage" to property owned by, rented to, in the charge of or occupied by you or the employer of any person who is an insured under this provision.

6. Additional Insureds When Required By Written Contract, Written Agreement Or Permit

The following person(s) or organization(s) are an additional insured when you have agreed, in a written contract, written agreement or because of a permit issued by a state or political subdivision, that such person or organization be added as an additional insured on your policy, provided the injury or damage occurs subsequent to the execution of the contract or agreement.

A person or organization is an additional insured under this provision only for that period of time required by the contract or agreement.

However, no such person or organization is an insured under this provision if such person or organization is included as an insured by an endorsement issued by us and made a part of this Coverage Part.

a. Vendors

Any person(s) or organization(s) (referred to below as vendor), but only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business and only if this Coverage Part provides coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard".

- (1) The insurance afforded the vendor is subject to the following additional exclusions:

This insurance does not apply to:

- (a) "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;

- (b) Any express warranty unauthorized by you;
- (c) Any physical or chemical change in the product made intentionally by the vendor;
- (d) Repackaging, except when unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;
- (e) Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;
- (f) Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;
- (g) Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or
- (h) "Bodily injury" or "property damage" arising out of the sole negligence of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:
 - (i) The exceptions contained in Sub-paragraphs (d) or (f); or
 - (ii) Such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products.
- (2) This insurance does not apply to any insured person or organization, from whom you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.

b. Lessors of Equipment

- (1) Any person or organization from whom you lease equipment; but only with respect to their liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your maintenance, operation or use of equipment leased to you by such person or organization.
- (2) With respect to the insurance afforded to these additional insureds this insurance does not apply to any "occurrence" which takes place after the equipment lease expires.

c. Lessors of Land or Premises

Any person or organization from whom you lease land or premises, but only with respect to liability arising out of the ownership, maintenance or use of that part of the land or premises leased to you.

With respect to the insurance afforded these additional insureds the following additional exclusions apply:

This insurance does not apply to:

- 1. Any "occurrence" which takes place after you cease to lease that land; or
- 2. Structural alterations, new construction or demolition operations performed by or on behalf of such person or organization.

d. Architects, Engineers or Surveyors

Any architect, engineer, or surveyor, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

- (1) In connection with your premises; or
- (2) In the performance of your ongoing operations performed by you or on your behalf.

With respect to the insurance afforded these additional insureds, the following additional exclusion applies:

This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of or the failure to render any professional services by or for you, including:

- 1. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- 2. Supervisory, inspection, architectural or engineering activities.

e. Permits Issued By State Or Political Subdivisions

Any state or political subdivision, but only with respect to operations performed by you or on your behalf for which the state or political subdivision has issued a permit.

With respect to the insurance afforded these additional insureds, this insurance does not apply to:

- (1) "Bodily injury", "property damage" or "personal and advertising injury" arising out of operations performed for the state or municipality; or
- (2) "Bodily injury" or "property damage" included within the "products-completed operations hazard".

f. Any Other Party

Any other person or organization who is not an insured under Paragraphs a. through e. above, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

- (1) In the performance of your ongoing operations;
- (2) In connection with your premises owned by or rented to you; or
- (3) In connection with "your work" and included within the "products-completed operations hazard", but only if
 - (a) The written contract or agreement requires you to provide such coverage to such additional insured; and
 - (b) This Coverage Part provides coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard".

With respect to the insurance afforded to these additional insureds, this insurance does not apply to:

"Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

- (1) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- (2) Supervisory, inspection, architectural or engineering activities.

The limits of insurance that apply to additional insureds under this provision is described in Section III – Limits Of Insurance.

How this insurance applies when other insurance is available to the additional insured is described in the Other Insurance Condition in Section IV – Commercial General Liability Conditions.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

SECTION III – LIMITS OF INSURANCE

1. The Most We will Pay

The Limits of Insurance shown in the Declarations and the rules below fix the most we will pay regardless of the number of:

- a. Insureds;
- b. Claims made or "suits" brought; or

- c. Persons or organizations making claims or bringing "suits".

2. General Aggregate Limit

The General Aggregate Limit is the most we will pay for the sum of:

- a. Medical expenses under Coverage C;
- b. Damages under Coverage A, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard"; and
- c. Damages under Coverage B.

3. Products-Completed Operations Aggregate Limit

The Products-Completed Operations Aggregate Limit is the most we will pay under Coverage A for damages because of "bodily injury" and "property damage" included in the "products-completed operations hazard".

4. Personal and Advertising Injury Limit

Subject to 2. above, the Personal and Advertising Injury Limit is the most we will pay under Coverage B for the sum of all damages because of all "personal and advertising injury" sustained by any one person or organization.

5. Each Occurrence Limit

Subject to 2. or 3. above, whichever applies, the Each Occurrence Limit is the most we will pay for the sum of:

- a. Damages under Coverage A; and
- b. Medical expenses under Coverage C because of all "bodily injury" and "property damage" arising out of any one "occurrence".

6. Damage To Premises Rented To You Limit

Subject to 5. above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage A for damages because of "property damage" to any one premises, while rented to you, or in the case of damage by fire, lightning or explosion, while rented to you or temporarily occupied by you with permission of the owner.

In the case of damage by fire, lightning or explosion, the Damage to Premises Rented To You Limit applies to all damage proximately caused by the same event, whether such damage results from fire, lightning or explosion or any combination of these.

7. Medical Expense Limit

Subject to 5. above, the Medical Expense Limit is the most we will pay under Coverage C for all medical expenses because of "bodily injury" sustained by any one person.

8. How Limits Apply To Additional Insureds

If you have agreed in a written contract or written agreement that another person or organization be

added as an additional insured on your policy, the most we will pay on behalf of such additional insured is the lesser of:

- a. The limits of insurance specified in the written contract or written agreement; or
- b. The Limits of Insurance shown in the Declarations.

Such amount shall be a part of and not in addition to Limits of Insurance shown in the Declarations and described in this Section.

The Limits of Insurance of this Coverage Part apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.

SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS

1. Bankruptcy

Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Part.

2. Duties In The Event Of Occurrence, Offense, Claim Or Suit

a. Notice Of Occurrence Or Offense

You or any additional insured must see to it that we are notified as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, notice should include:

- (1) How, when and where the "occurrence" or offense took place;
- (2) The names and addresses of any injured persons and witnesses; and
- (3) The nature and location of any injury or damage arising out of the "occurrence" or offense.

b. Notice Of Claim

If a claim is made or "suit" is brought against any insured, you or any additional insured must:

- (1) Immediately record the specifics of the claim or "suit" and the date received; and
- (2) Notify us as soon as practicable.

You or any additional insured must see to it that we receive written notice of the claim or "suit" as soon as practicable.

c. Assistance And Cooperation Of The Insured

You and any other involved insured must:

- (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the claim or "suit";
- (2) Authorize us to obtain records and other information;

- (3) Cooperate with us in the investigation or settlement of the claim or defense against the "suit"; and

- (4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of injury or damage to which this insurance may also apply.

d. Obligations At The Insureds Own Cost

No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation, or incur any expense, other than for first aid, without our consent.

e. Additional Insureds Other Insurance

If we cover a claim or "suit" under this Coverage Part that may also be covered by other insurance available to an additional insured, such additional insured must submit such claim or "suit" to the other insurer for defense and indemnity.

However, this provision does not apply to the extent that you have agreed in a written contract or written agreement that this insurance is primary and non-contributory with the additional insured's own insurance.

f. Knowledge Of An Occurrence, Offense, Claim Or Suit

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

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

This duty applies separately to you and any additional insured.

3. Legal Action Against Us

No person or organization has a right under this Coverage Part:

- a. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or
- b. To sue us on this Coverage Part unless all of its terms have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured; but we will not be liable for damages that are not payable under the terms of this Coverage Part or

that are in excess of the applicable limit of insurance. An agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

4. Other Insurance

If other valid and collectible insurance is available to the insured for a loss we cover under Coverages A or B of this Coverage Part, our obligations are limited as follows:

a. Primary Insurance

This insurance is primary except when b. below applies. If other insurance is also primary, we will share with all that other insurance by the method described in c. below.

b. Excess Insurance

This insurance is excess over any of the other insurance, whether primary, excess, contingent or on any other basis:

(1) Your Work

That is Fire, Extended Coverage, Builder's Risk, Installation Risk or similar coverage for "your work";

(2) Premises Rented To You

That is fire, lightning or explosion insurance for premises rented to you or temporarily occupied by you with permission of the owner;

(3) Tenant Liability

That is insurance purchased by you to cover your liability as a tenant for "property damage" to premises rented to you or temporarily occupied by you with permission of the owner;

(4) Aircraft, Auto Or Watercraft

If the loss arises out of the maintenance or use of aircraft, "autos" or watercraft to the extent not subject to Exclusion g. of Section I – Coverage A – Bodily Injury And Property Damage Liability;

(5) Property Damage to Borrowed Equipment Or Use Of Elevators

If the loss arises out of "property damage" to borrowed equipment or the use of elevators to the extent not subject to Exclusion j. of Section I – Coverage A – Bodily Injury And Property Damage Liability;

(6) When You Are Added As An Additional Insured To Other Insurance

Any other insurance available to you covering liability for damages arising out of the premises or operations, or products and completed operations, for which you have been added as an additional insured by that insurance; or

(7) When You Add Others As An Additional Insured To This Insurance

Any other insurance available to an additional insured.

However, the following provisions apply to other insurance available to any person or organization who is an additional insured under this coverage part.

(a) Primary Insurance When Required By Contract

This insurance is primary if you have agreed in a written contract or written agreement that this insurance be primary. If other insurance is also primary, we will share with all that other insurance by the method described in c. below.

(b) Primary And Non-Contributory To Other Insurance When Required By Contract

If you have agreed in a written contract, written agreement, or permit that this insurance is primary and non-contributory with the additional insured's own insurance, this insurance is primary and we will not seek contribution from that other insurance.

Paragraphs (a) and (b) do not apply to other insurance to which the additional insured has been added as an additional insured.

When this insurance is excess, we will have no duty under Coverages A or B to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

(1) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and

(2) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

c. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

5. Premium Audit

- a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.
- b. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the first Named Insured. The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the first Named Insured.
- c. The first Named Insured must keep records of the information we need for premium computation, and send us copies at such times as we may request.

6. Representations

a. When You Accept This Policy

By accepting this policy, you agree:

- (1) The statements in the Declarations are accurate and complete;
- (2) Those statements are based upon representations you made to us; and
- (3) We have issued this policy in reliance upon your representations.

b. Unintentional Failure To Disclose Hazards

If unintentionally you should fail to disclose all hazards relating to the conduct of your business that exist at the inception date of this Coverage Part, we shall not deny coverage under this Coverage Part because of such failure.

7. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

- a. As if each Named Insured were the only Named Insured; and
- b. Separately to each insured against whom claim is made or "suit" is brought.

8. Transfer Of Rights Of Recovery Against Others To Us

a. Transfer of Rights Of Recovery

If the insured has rights to recover all or part of any payment, including Supplementary Payments, we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the

insured will bring "suit" or transfer those rights to us and help us enforce them.

b. Waiver Of Rights Of Recovery (Waiver Of Subrogation)

If the insured has waived any rights of recovery against any person or organization for all or part of any payment, including Supplementary Payments, we have made under this Coverage Part, we also waive that right, provided the insured waived their rights of recovery against such person or organization in a contract, agreement or permit that was executed prior to the injury or damage.

9. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V – DEFINITIONS

1. "Advertisement" means the widespread public dissemination of information or images that has the purpose of inducing the sale of goods, products or services through:

- a. (1) Radio;
- (2) Television;
- (3) Billboard;
- (4) Magazine;
- (5) Newspaper; or

- b. Any other publication that is given widespread public distribution.

However, "advertisement" does not include:

- a. The design, printed material, information or images contained in, on or upon the packaging or labeling of any goods or products; or
- b. An interactive conversation between or among persons through a computer network.

2. "Advertising idea" means any idea for an "advertisement".

3. "Asbestos hazard" means an exposure or threat of exposure to the actual or alleged properties of asbestos and includes the mere presence of asbestos in any form.

4. "Auto" means a land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment. But "auto" does not include "mobile equipment".

5. "Bodily injury" means physical:

- a. Injury;
- b. Sickness; or
- c. Disease

sustained by a person and, if arising out of the above, mental anguish or death at any time.

6. "Coverage territory" means:

- a. The United States of America (including its territories and possessions), Puerto Rico and Canada;
- b. International waters or airspace, but only if the injury or damage occurs in the course of travel or transportation between any places included in a. above; or
- c. All other parts of the world if the injury or damage arises out of:
 - (1) Goods or products made or sold by you in the territory described in a. above;
 - (2) The activities of a person whose home is in the territory described in a. above, but is away for a short time on your business; or
 - (3) "Personal and advertising injury" offenses that take place through the Internet or similar electronic means of communication

provided the insured's responsibility to pay damages is determined in the United States of America (including its territories and possessions), Puerto Rico or Canada, in a "suit" on the merits according to the substantive law in such territory or in a settlement we agree to.

7. "Employee" includes a "leased worker". "Employee" does not include a "temporary worker".

8. "Employment-Related Practices" means:

- a. Refusal to employ a person;
- b. Termination of a person's employment; or
- c. Employment-related practices, policies, acts or omissions, such as coercion, demotion, evaluation, reassignment, discipline, defamation, harassment, humiliation or discrimination directed at a person.

9. "Executive officer" means a person holding any of the officer positions created by your charter, constitution, by-laws or any other similar governing document.

10. "Hostile fire" means one which becomes uncontrollable or breaks out from where it was intended to be.

11. "Impaired property" means tangible property, other than "your product" or "your work", that cannot be used or is less useful because:

- a. It incorporates "your product" or "your work" that is known or thought to be defective, deficient, inadequate or dangerous; or
- b. You have failed to fulfill the terms of a contract or agreement;

if such property can be restored to use by:

- a. The repair, replacement, adjustment or removal of "your product" or "your work"; or
- b. Your fulfilling the terms of the contract or agreement.

12. "Insured contract" means:

- a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning or explosion to premises while

rented to you or temporarily occupied by you with permission of the owner is subject to the Damage to Premises Rented To You Limit described in Section III – Limits of Insurance;

b. A sidetrack agreement;

c. Any easement or license agreement, including an easement or license agreement in connection with construction or demolition operations on or within 50 feet of a railroad;

d. An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;

e. An elevator maintenance agreement;

f. That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization, provided the "bodily injury" or "property damage" is caused, in whole or in part, by you or by those acting on your behalf. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Paragraph f. includes that part of any contract or agreement that indemnifies a railroad for "bodily injury" or "property damage" arising out of construction or demolition operations, within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing.

However, Paragraph f. does not include that part of any contract or agreement:

(1) That indemnifies an architect, engineer or surveyor for injury or damage arising out of:

(a) Preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or

(b) Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage; or

(2) Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failure to render professional services, including those listed in (1) above and supervisory, inspection, architectural or engineering activities.

13. "Leased worker" means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your business. "Leased worker" does not include a "temporary worker".

14. "Loading or unloading" means the handling of property:

- a. After it is moved from the place where it is accepted for movement into or onto an aircraft, watercraft or "auto";

b. While it is in or on an aircraft, watercraft or "auto"; or

c. While it is being moved from an aircraft, watercraft or "auto" to the place where it is finally delivered;

but "loading or unloading" does not include the movement of property by means of a mechanical device, other than a hand truck, that is not attached to the aircraft, watercraft or "auto".

15. "Mobile equipment" means any of the following types of land vehicles, including any attached machinery or equipment:

a. Bulldozers, farm machinery, forklifts and other vehicles designed for use principally off public roads;

b. Vehicles maintained for use solely on or next to premises you own or rent;

c. Vehicles that travel on crawler treads;

d. Vehicles, whether self-propelled or not, maintained primarily to provide mobility to permanently mounted:

(1) Power cranes, shovels, loaders, diggers or drills; or

(2) Road construction or resurfacing equipment such as graders, scrapers or rollers;

e. Vehicles not described in a., b., c. or d. above that are not self-propelled and are maintained primarily to provide mobility to permanently attached equipment of the following types:

(1) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment; or

(2) Cherry pickers and similar devices used to raise or lower workers;

f. Vehicles not described in a., b., c. or d. above maintained primarily for purposes other than the transportation of persons or cargo.

However, self-propelled vehicles with the following types of permanently attached equipment are not "mobile equipment" but will be considered "autos":

(1) Equipment, of at least 1,000 pounds gross vehicle weight, designed primarily for:

(a) Snow removal;

(b) Road maintenance, but not construction or resurfacing; or

(c) Street cleaning;

(2) Cherry pickers and similar devices mounted on automobile or truck chassis and used to raise or lower workers; and

(3) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment.

16. "Occurrence" means an accident, including continuous or repeated exposure to substantially the same general harmful conditions.

17. "Personal and advertising injury" means injury, including consequential "bodily injury", arising out of one or more of the following offenses:

a. False arrest, detention or imprisonment;

b. Malicious prosecution;

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

d. Oral, written or electronic publication of material that slanders or libels a person or organization or disparages a person's or organization's goods, products or services;

e. Oral, written or electronic publication of material that violates a person's right of privacy;

f. Copying, in your "advertisement", a person's or organization's "advertising idea" or style of "advertisement";

g. Infringement of copyright, slogan, or title of any literary or artistic work, in your "advertisement"; or

h. Discrimination or humiliation that results in injury to the feelings or reputation of a natural person.

18. "Pollutants" mean any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

19. "Products-completed operations hazard":

a. Includes all "bodily injury" and "property damage" occurring away from premises you own or rent and arising out of "your product" or "your work" except:

(1) Products that are still in your physical possession; or

(2) Work that has not yet been completed or abandoned. However, "your work" will be deemed completed at the earliest of the following times:

(a) When all of the work called for in your contract has been completed.

(b) When all of the work to be done at the job site has been completed if your contract calls for work at more than one job site.

(c) When that part of the work done at a job site has been put to its intended use by any person or organization other than another contractor or subcontractor working on the same project.

Work that may need service, maintenance, correction, repair or replacement, but which is otherwise complete, will be treated as completed.

b. Does not include "bodily injury" or "property damage" arising out of:

- (1) The transportation of property, unless the injury or damage arises out of a condition in or on a vehicle not owned or operated by you, and that condition was created by the "loading or unloading" of that vehicle by any insured;
- (2) The existence of tools, uninstalled equipment or abandoned or unused materials; or
- (3) Products or operations for which the classification, listed in the Declarations or in a policy schedule, states that products-completed operations are subject to the General Aggregate Limit.

20. "Property damage" means:

- a. Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or
- b. Loss of use of tangible property that is not physically injured. All such loss of use shall be deemed to occur at the time of the "occurrence" that caused it.

As used in this definition, computerized or electronically stored data, programs or software are not tangible property. Electronic data means information, facts or programs:

- a. Stored as or on;
- b. Created or used on; or
- c. Transmitted to or from;

computer software, including systems and applications software, hard or floppy disks, CD-ROMS, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

21. "Suit" means a civil proceeding in which damages because of "bodily injury", "property damage" or "personal and advertising injury" to which this insurance applies are alleged. "Suit" includes:

- a. An arbitration proceeding in which such damages are claimed and to which the insured must submit or does submit with our consent; or
- b. Any other alternative dispute resolution proceeding in which such damages are claimed and to which the insured submits with our consent.

22. "Temporary worker" means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions.

23. "Volunteer worker" means a person who

- a. Is not your "employee";
- b. Donates his or her work;
- c. Acts at the direction of and within the scope of duties determined by you; and
- d. Is not paid a fee, salary or other compensation by you or anyone else for their work performed for you.

24. "Your product":

a. Means:

- (1) Any goods or products, other than real property, manufactured, sold, handled, distributed or disposed of by:

(a) You;

(b) Others trading under your name; or

(c) A person or organization whose business or assets you have acquired; and

- (2) Containers (other than vehicles), materials, parts or equipment furnished in connection with such goods or products.

b. Includes

- (1) Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your product"; and

- (2) The providing of or failure to provide warnings or instructions.

c. Does not include vending machines or other property rented to or located for the use of others but not sold.

25. "Your work":

a. Means:

- (1) Work or operations performed by you or on your behalf; and

- (2) Materials, parts or equipment furnished in connection with such work or operations.

b. Includes

- (1) Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your work", and

- (2) The providing of or failure to provide warnings or instructions.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

COMMERCIAL AUTOMOBILE BROAD FORM ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

To the extent that the provisions of this endorsement provide broader benefits to the "insured" than other provisions of the Coverage Form, the provisions of this endorsement apply.

1. BROAD FORM INSURED

A. Subsidiaries and Newly Acquired or Formed Organizations

The Named Insured shown in the Declarations is amended to include:

- (1) Any legal business entity other than a partnership or joint venture, formed as a subsidiary in which you have an ownership interest of more than 50% on the effective date of the Coverage Form. However, the Named Insured does not include any subsidiary that is an "insured" under any other automobile policy or would be an "insured" under such a policy but for its termination or the exhaustion of its Limit of Insurance.
- (2) Any organization that is acquired or formed by you and over which you maintain majority ownership. However, the Named Insured does not include any newly formed or acquired organization:
 - (a) That is a partnership or joint venture,
 - (b) That is an "insured" under any other policy,
 - (c) That has exhausted its Limit of Insurance under any other policy, or
 - (d) 180 days or more after its acquisition or formation by you, unless you have given us notice of the acquisition or formation.

Coverage does not apply to "bodily injury" or "property damage" that results from an "accident" that occurred before you formed or acquired the organization.

B. Employees as Insureds

Paragraph A.1. - WHO IS AN INSURED - of SECTION II - LIABILITY COVERAGE is amended to add:

- d. Any "employee" of yours while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

C. Lessors as Insureds

Paragraph A.1. - WHO IS AN INSURED - of Section II - Liability Coverage is amended to add:

- e. The lessor of a covered "auto" while the "auto" is leased to you under a written agreement if:
 - (1) The agreement requires you to provide direct primary insurance for the lessor and
 - (2) The "auto" is leased without a driver.

Such a leased "auto" will be considered a covered "auto" you own and not a covered "auto" you hire.

D. Additional Insured if Required by Contract

(1) Paragraph A.1. - WHO IS AN INSURED - of Section II - Liability Coverage is amended to add:

- f. When you have agreed, in a written contract or written agreement, that a person or organization be added as an additional insured on your business auto policy, such person or organization is an "insured", but only to the extent such person or organization is liable for "bodily injury" or "property damage" caused by the conduct of an "insured" under paragraphs a. or b. of Who Is An Insured with regard to the ownership, maintenance or use of a covered "auto."

The insurance afforded to any such additional insured applies only if the "bodily injury" or "property damage" occurs:

- (1) During the policy period, and
- (2) Subsequent to the execution of such written contract, and
- (3) Prior to the expiration of the period of time that the written contract requires such insurance be provided to the additional insured.

(2) How Limits Apply

If you have agreed in a written contract or written agreement that another person or organization be added as an additional insured on your policy, the most we will pay on behalf of such additional insured is the lesser of:

- (a) The limits of insurance specified in the written contract or written agreement; or
- (b) The Limits of Insurance shown in the Declarations.

Such amount shall be a part of and not in addition to Limits of Insurance shown in the Declarations and described in this Section.

(3) Additional Insureds Other Insurance

If we cover a claim or "suit" under this Coverage Part that may also be covered by other insurance available to an additional insured, such additional insured must submit such claim or "suit" to the other insurer for defense and indemnity.

However, this provision does not apply to the extent that you have agreed in a written contract or written agreement that this insurance is primary and non-contributory with the additional insured's own insurance.

(4) Duties in The Event Of Accident, Claim, Suit or Loss

If you have agreed in a written contract or written agreement that another person or organization be added as an additional insured on your policy, the additional insured shall be required to comply with the provisions in LOSS CONDITIONS 2. - DUTIES IN THE EVENT OF ACCIDENT, CLAIM, SUIT OR LOSS - OF SECTION IV - BUSINESS AUTO CONDITIONS, in the same manner as the Named Insured.

E. Primary and Non-Contributory if Required by Contract

Only with respect to insurance provided to an additional insured in 1.D. - Additional Insured If Required by Contract, the following provisions apply:

(3) Primary Insurance When Required By Contract

This insurance is primary if you have agreed in a written contract or written agreement that this insurance be primary. If other insurance is also primary, we will share with all that other insurance by the method described in Other Insurance 5.d.

(4) Primary And Non-Contributory To Other Insurance When Required By Contract

If you have agreed in a written contract or written agreement that this insurance is primary and non-contributory with the additional insured's own insurance, this insurance is primary and we will not seek contribution from that other insurance.

Paragraphs (3) and (4) do not apply to other insurance to which the additional insured has been added as an additional insured.

When this insurance is excess, we will have no duty to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

- (1) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and
- (2) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, by the method described in Other Insurance 5.d.

2. AUTOS RENTED BY EMPLOYEES

Any "auto" hired or rented by your "employee" on your behalf and at your direction will be considered an "auto" you hire.

The OTHER INSURANCE Condition is amended by adding the following:

If an "employee's" personal insurance also applies on an excess basis to a covered "auto" hired or rented by your "employee" on your behalf and at your direction, this insurance will be primary to the "employee's" personal insurance.

3. AMENDED FELLOW EMPLOYEE EXCLUSION

EXCLUSION 5. - FELLOW EMPLOYEE - of SECTION II - LIABILITY COVERAGE does not apply if you have workers' compensation insurance in-force covering all of your "employees".

Coverage is excess over any other collectible insurance.

4. HIRED AUTO PHYSICAL DAMAGE COVERAGE

If hired "autos" are covered "autos" for Liability Coverage and if Comprehensive, Specified Causes of Loss, or Collision coverages are provided under this Coverage Form for any "auto" you own, then the Physical Damage Coverages provided are extended to "autos" you hire or borrow, subject to the following limit.

The most we will pay for "loss" to any hired "auto" is:

- (1) \$100,000;
- (2) The actual cash value of the damaged or stolen property at the time of the "loss"; or
- (3) The cost of repairing or replacing the damaged or stolen property,

whichever is smallest, minus a deductible. The deductible will be equal to the largest deductible applicable to any owned "auto" for that coverage. No deductible applies to "loss" caused by fire or lightning. Hired Auto Physical Damage coverage is excess over any other collectible insurance. Subject to the above limit, deductible and excess provisions, we will provide coverage equal to the broadest coverage applicable to any covered "auto" you own.

We will also cover loss of use of the hired "auto" if it results from an "accident", you are legally liable and the lessor incurs an actual financial loss, subject to a maximum of \$1000 per "accident".

This extension of coverage does not apply to any "auto" you hire or borrow from any of your "employees", partners (if you are a partnership), members (if you are a limited liability company), or members of their households.

5. PHYSICAL DAMAGE - ADDITIONAL TEMPORARY TRANSPORTATION EXPENSE COVERAGE

Paragraph A.4.a. of SECTION III - PHYSICAL DAMAGE COVERAGE is amended to provide a limit of \$50 per day and a maximum limit of \$1,000.

6. LOAN/LEASE GAP COVERAGE

Under SECTION III - PHYSICAL DAMAGE COVERAGE, in the event of a total "loss" to a covered "auto", we will pay your additional legal obligation for any difference between the actual cash value of the "auto" at the time of the "loss" and the "outstanding balance" of the loan/lease.

"Outstanding balance" means the amount you owe on the loan/lease at the time of "loss" less any amounts representing taxes; overdue payments; penalties, interest or charges resulting from overdue payments; additional mileage charges; excess wear and tear charges; lease termination fees; security deposits not returned by the lessor; costs for extended warranties, credit life insurance, health, accident or disability insurance purchased with the loan or lease; and carry-over balances from previous loans or leases.

7. AIRBAG COVERAGE

Under Paragraph B. EXCLUSIONS - of SECTION III - PHYSICAL DAMAGE COVERAGE, the following is added:

The exclusion relating to mechanical breakdown does not apply to the accidental discharge of an airbag.

8. ELECTRONIC EQUIPMENT - BROADENED COVERAGE

a. The exceptions to Paragraphs B.4 - EXCLUSIONS - of SECTION III - PHYSICAL DAMAGE COVERAGE are replaced by the following:

Exclusions 4.c. and 4.d. do not apply to equipment designed to be operated solely by use of the power from the "auto's" electrical system that, at the time of "loss", is:

- (1) Permanently installed in or upon the covered "auto";
- (2) Removable from a housing unit which is permanently installed in or upon the covered "auto";
- (3) An integral part of the same unit housing any electronic equipment described in Paragraphs (1) and (2) above; or

- (4) Necessary for the normal operation of the covered "auto" or the monitoring of the covered "auto's" operating system.

b. Section III - Version CA 00 01 03 10 of the Business Auto Coverage Form, Physical Damage Coverage, Limit of Insurance, Paragraph C.2 and Version CA 00 01 10 01 of the Business Auto Coverage Form, Physical Damage Coverage, Limit of Insurance, Paragraph C are each amended to add the following:

\$1,500 is the most we will pay for "loss" in any one "accident" to all electronic equipment (other than equipment designed solely for the reproduction of sound, and accessories used with such equipment) that reproduces, receives or transmits audio, visual or data signals which, at the time of "loss", is:

- (1) Permanently installed in or upon the covered "auto" in a housing, opening or other location that is not normally used by the "auto" manufacturer for the installation of such equipment;
- (2) Removable from a permanently installed housing unit as described in Paragraph 2.a. above or is an integral part of that equipment; or
- (3) An integral part of such equipment.

c. For each covered "auto", should loss be limited to electronic equipment only, our obligation to pay for, repair, return or replace damaged or stolen electronic equipment will be reduced by the applicable deductible shown in the Declarations, or \$250, whichever deductible is less.

9. EXTRA EXPENSE - BROADENED COVERAGE

Under Paragraph A. - COVERAGE - of SECTION III - PHYSICAL DAMAGE COVERAGE, we will pay for the expense of returning a stolen covered "auto" to you.

10. GLASS REPAIR - WAIVER OF DEDUCTIBLE

Under Paragraph D. - DEDUCTIBLE - of SECTION III - PHYSICAL DAMAGE COVERAGE, the following is added:

No deductible applies to glass damage if the glass is repaired rather than replaced.

11. TWO OR MORE DEDUCTIBLES

Under Paragraph D. - DEDUCTIBLE - of SECTION III - PHYSICAL DAMAGE COVERAGE, the following is added:

If another Hartford Financial Services Group, Inc. company policy or coverage form that is not an automobile policy or coverage form applies to the same "accident", the following applies:

- (1) If the deductible under this Business Auto Coverage Form is the smaller (or smallest) deductible, it will be waived;
- (2) If the deductible under this Business Auto Coverage Form is not the smaller (or smallest) deductible, it will be reduced by the amount of the smaller (or smallest) deductible.

12. AMENDED DUTIES IN THE EVENT OF ACCIDENT, CLAIM, SUIT OR LOSS

The requirement in LOSS CONDITIONS 2.a. - DUTIES IN THE EVENT OF ACCIDENT, CLAIM, SUIT OR LOSS - of SECTION IV - BUSINESS AUTO CONDITIONS that you must notify us of an "accident" applies only when the "accident" is known to:

- (1) You, if you are an individual;
- (2) A partner, if you are a partnership;
- (3) A member, if you are a limited liability company; or
- (4) An executive officer or insurance manager, if you are a corporation.

13. UNINTENTIONAL FAILURE TO DISCLOSE HAZARDS

If you unintentionally fail to disclose any hazards existing at the inception date of your policy, we will not deny coverage under this Coverage Form because of such failure.

14. HIRED AUTO - COVERAGE TERRITORY

Paragraph e. of GENERAL CONDITIONS 7. - POLICY PERIOD, COVERAGE TERRITORY - of SECTION IV - BUSINESS AUTO CONDITIONS is replaced by the following:

- e. For short-term hired "autos", the coverage territory with respect to Liability Coverage is anywhere in the world provided that if the "insured's" responsibility to pay damages for "bodily injury" or "property damage" is determined in a "suit," the "suit" is brought in the United States of America, the territories and possessions of the United States of America, Puerto Rico or Canada or in a settlement we agree to.

15. WAIVER OF SUBROGATION

TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US - of SECTION IV - BUSINESS AUTO CONDITIONS is amended by adding the following:

We waive any right of recovery we may have against any person or organization with whom you have a written contract that requires such waiver because of payments we make for damages under this Coverage Form.

16. RESULTANT MENTAL ANGUISH COVERAGE

The definition of "bodily injury" in SECTION V-DEFINITIONS is replaced by the following:

"Bodily injury" means bodily injury, sickness or disease sustained by any person, including mental anguish or death resulting from any of these.

17. EXTENDED CANCELLATION CONDITION

Paragraph 2. of the COMMON POLICY CONDITIONS - CANCELLATION - applies except as follows:

If we cancel for any reason other than nonpayment of premium, we will mail or deliver to the first Named Insured written notice of cancellation at least 60 days before the effective date of cancellation.

18. HYBRID, ELECTRIC, OR NATURAL GAS VEHICLE PAYMENT COVERAGE

In the event of a total loss to a "non-hybrid" auto for which Comprehensive, Specified Causes of Loss, or Collision coverages are provided under this Coverage Form, then such Physical Damage Coverages are amended as follows:

a. If the auto is replaced with a "hybrid" auto or an auto powered solely by electricity or natural gas, we will pay an additional 10%, to a maximum of \$2,500, of the "non-hybrid" auto's actual cash value or replacement cost, whichever is less,

b. The auto must be replaced and a copy of a bill of sale or new lease agreement received by us within 60 calendar days of the date of "loss,"

c. Regardless of the number of autos deemed a total loss, the most we will pay under this Hybrid, Electric, or Natural Gas Vehicle Payment Coverage provision for any one "loss" is \$10,000.

For the purposes of the coverage provision,

a.A "non-hybrid" auto is defined as an auto that uses only an internal combustion engine to move the auto but does not include autos powered solely by electricity or natural gas.

b.A "hybrid" auto is defined as an auto with an internal combustion engine and one or more electric motors; and that uses the internal combustion engine and one or more electric motors to move the auto, or the internal combustion engine to charge one or more electric motors, which move the auto.

19. VEHICLE WRAP COVERAGE

In the event of a total loss to an "auto" for which Comprehensive, Specified Causes of Loss, or Collision coverages are provided under this Coverage Form, then such Physical Damage Coverages are amended to add the following:

In addition to the actual cash value of the "auto", we will pay up to \$1,000 for vinyl vehicle wraps which are displayed on the covered "auto" at the time of total loss. Regardless of the number of autos deemed a total loss, the most we will pay under this Vehicle Wrap Coverage provision for any one "loss" is \$5,000. For purposes of this coverage provision, signs or other graphics painted or magnetically affixed to the vehicle are not considered vehicle wraps.



THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

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

Policy Number: 52 WE GB9736

Endorsement Number:

Effective Date: 01/01/17 Effective hour is the same as stated on the Information Page of the policy.

Named Insured and Address: KITTELSON & ASSOCIATES, INC.

610 SW ALDER ST STE 700
PORTLAND, OR 97205

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

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

SCHEDULE

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

IF ANY

(APPLICABLE TO ALL STATE
EXCEPT CA, TX, UT)

Countersigned by _____

Authorized Representative

Form WC 00 03 13 Printed in U.S.A.

Process Date:

Policy Expiration Date: 01/01/18



THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT - CALIFORNIA

Policy Number: 52 WE GB9736

Endorsement Number:

Effective Date: 01/01/17 Effective hour is the same as stated on the Information Page of the policy.

Named Insured and Address: KITTELSON & ASSOCIATES, INC.

610 SW ALDER ST STE 700
PORTLAND, OR 97205

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be 2 % of the California workers' compensation premium otherwise due on such remuneration.

SCHEDULE

Person or Organization

Job Description

BLANKET WAIVER FOR ALL
WRITTEN CONTRACT

ENTITIES AS REQUIRED BY

Countersigned by _____

Authorized Representative

Form WC 04 03 06
Process Date:

(1) Printed in U.S.A.

Policy Expiration Date: 01/01/18



THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

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

Policy Number: 52 WE GB9736

Endorsement Number:

Effective Date: 01/01/17 Effective hour is the same as stated on the Information Page of the policy.

Named Insured and Address: KITTELSON & ASSOCIATES, INC.

610 SW ALDER ST STE 700
PORTLAND, OR 97205

This endorsement applies only to the insurance provided by the policy because Texas is shown in Item 3.A. of the Information Page.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule, but this waiver applies only with respect to bodily injury arising out

of the operations described in the Schedule where you are required by a written contract to obtain this waiver from us.

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

The premium for this endorsement is shown in the Schedule.

Schedule

1. ☐ Special Waiver
 Name of person or organization

 ☒ Blanket Waiver
 Any person or organization for whom the Named Insured has agreed by written contract to furnish this waiver.
2. Operations:
 ALL TX OPERATIONS
3. Premium: INCL
 The premium charge for this endorsement shall be 2.0 percent of the premium developed on payroll in connection with work performed for the above person(s) or organization(s) arising out of the operations described.
4. Advance Premium: INCL