ENGINEERING SERVICES AGREEMENT

THIS IS AN AGREEMENT made as of <u>11 August</u>, 2021, between the LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT (**OWNER**) and Applied Research Associates located at 4300 San Mateo Blvd., NE, Suite A220, Albuquerque, New Mexico 87110 (**CONSULTANT**). **OWNER** intends to proceed with the Pavement Management System and Data Collection as described in the attached Exhibit A, "**Proposal of Engineering Services and Related Matters**." The services are to include customary civil engineering services as related to completion and submission of reports and deliverables as described in Exhibit A, detailing the findings of all field inspections, inventory and required analysis completed by the CONSULTANT. The services are hereinafter referred to as the **PROJECT**.

OWNER and **CONSULTANT** in consideration of their mutual covenants herein agree in respect of the performance of professional engineering services by **CONSULTANT** and the payment for those services by **OWNER** as set forth below.

CONSULTANT shall provide professional consulting services for **OWNER** in all phases of the **PROJECT** to which this Agreement applies, serve as **OWNER'S** professional engineering representative for the **PROJECT** as set forth below and shall give professional consultation and advice to **OWNER** during the performance of services hereunder.

SECTION 1 - BASIC SERVICES OF CONSULTANT

1.1. General

CONSULTANT shall perform professional services as hereinafter stated that include customary civil engineering services incidental thereto.

1.2. Project Phase

After written authorization to proceed, **CONSULTANT** shall:

1.2.1. Notify the **OWNER** in writing of its authorized representative who shall act as Project Engineer and liaison representative between the **CONSULTANT** and the **OWNER**.

1.2.2. The CONSULTANT <u>must perform all duties</u> necessary to fully complete the deliverables described in attached Exhibit A "Proposal of Engineering Services and Related Matters" and amendments to the CONSULTANT'S proposal included in attached Exhibit C "Further Description of Basic Engineering Services and Related Matters."

To the extent of any conflict among the provisions of these documents and/or this Agreement, the provisions of this Agreement shall control, followed by the provisions of **EXHIBIT A**, then **EXHIBIT C**.

- **1.2.3** The **CONSULTANT** shall provide written documentation of all meetings and be responsible for incorporating all comments and changes resulting therefrom in final work product.
- **1.2.4.** The **CONSULTANT** shall post all initial draft work products on the project document management portal. If the project document management portal is not functional on the draft posting date, the **CONSULTANT** shall submit five (5) copies (hardcover) of all initial draft final work products for this **PROJECT**. The copies of the initial draft final reports are submitted for review and comment by the **OWNER**, and should be presented in person to the **OWNER**.

1.2.5. After the **OWNER'S** detailed review, the **CONSULTANT** will revise the initial draft final for all work products for this **PROJECT**, and the **CONSULTANT** shall post all draft final work products on the project document management portal. If the project document management portal is not functional on the draft posting date, the **CONSULTANT** shall submit five (5) copies (hardcover). One electronic copy of the all work products for this **PROJECT**, including all appendices, shall be provided and prepared in such a manner that it can readily be converted to a quick-link accessible form for the **OWNER'S** Website. The **OWNER** shall have ten (10) business days within which to accept or deny each such final draft. If is denied, the **OWNER** shall provide a detailed explanation in writing for the basis of such denial. Once the **OWNER** accepts the draft as final, a total of ten (10) final copies (hardcover) are required in addition to an electronic copy.

1.2.6 Immediately notify **OWNER** of any delay in the delivery of a work product or deliverable, regardless of cause. Give written notice to **OWNER** within five (5) business days whenever **CONSULTANT** observes or otherwise becomes aware of any development that affects the scope or timing of **CONSULTANT'S** services, or any defect in the work of Contractor(s).

SECTION 2 - EXTRA WORK BY CONSULTANT

- 2.1. The OWNER may desire to have the CONSULTANT perform work or render services in connection with this **PROJECT** other than provided by the expressed intent of this Agreement. Such work shall be considered as "Extra Work", subject to a change order, supplemental to this Agreement, signed by OWNER and CONSULTANT setting forth the character and scope thereof and the compensation therefore. Work under such change order shall not proceed until the **OWNER** gives written authorization. Should the **OWNER** find it desirable to have previously satisfactorily completed and accepted plans or parts thereof revised, the **CONSULTANT** shall make such revisions as directed, in writing, by the **OWNER**. This work shall be considered as "Extra Work" and shall be paid as such.
- **2.2.** All "Extra Work" is subject to prior written authorization of **OWNER** and necessary appropriations made by the Urban County Council.

SECTION 3 - OWNER'S RESPONSIBILITIES

OWNER shall:

- **3.1.** Provide criteria and information as to **OWNER'S** requirements for the **PROJECT**, including design objectives and constraints, space, known site conditions, capacity and performance requirements, flexibility and expandability, and any budgetary limitations.
- **3.2.** Assist **CONSULTANT** by placing at his disposal available information pertinent to the Project.
- **3.3.** Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by **CONSULTANT**, and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of **CONSULTANT**. Any time taken by OWNER for its reviews shall not be counted against CONSULTANT.
- **3.4.** Designate in writing a person to act as **OWNER'S** representative with respect to the services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret, and define **OWNER'S** policies and decisions with respect to materials, equipment, elements, and systems pertinent to **CONSULTANT'S** services.
- **3.5.** Give written notice to **CONSULTANT** whenever **OWNER** observes or otherwise becomes aware of any development that affects the scope or timing of **CONSULTANT'S** services, or any defect in the work of Contractor(s).
- **3.6.** Furnish or direct **CONSULTANT** to provide, necessary Extra Work as stipulated in Section Two (2) of this Agreement or other services as required.

SECTION 4 - PERIOD OF SERVICES

- **4.1.** Time is of the essence in the performance of this Agreement. See the Schedule chapter of Exhibit A " Proposal of Engineering Services and Related Matters for the PROJECT schedule.
- **4.2.** The provisions of this Section Four (4) and the various rates of compensation for **CONSULTANT'S** services provided for elsewhere in this Agreement have been agreed to in anticipation of the orderly and continuous progress of the **PROJECT** through completion.
- **4.3.** If a delay results from the acts of **OWNER** or another entity that is required to permit or approve the work or services, an extension of time for such delay will be considered by **OWNER**.
 - **4.3.1.** If the above type of delay occurs and **CONSULTANT** wants an extension of time, it must, within ten (10) days from the date of the delay, apply in writing to **OWNER**, and the OWNER will not unreasonably deny an extension of time for a reasonable period, which must be agreed upon by **OWNER**.
 - **4.3.2.** If the extension of time is approved by **OWNER**, the **PROJECT** schedule/Final Task Order shall be revised to reflect the extension. Such extension of time to the completion date shall in no way be construed to operate as a waiver on the part of **OWNER** of any of its other rights in the Agreement.
 - **4.3.3**. If the above type of delay would prevent complete performance of the **PROJECT**/Final Task Order within ninety (90) days of the time specified therein, **OWNER** shall have the option of cancelling the **PROJECT**/Final

Task Order or otherwise adjusting the scope of the services or work and any related fees.

4.3.4. If the parties cannot mutually agree to an extension of time or an adjustment, Section 6.5 under "DISPUTES" of this Agreement shall apply.

4.4. If delays result solely by reason of acts of the **CONSULTANT**, the **CONSULTANT** must immediately notify the **OWNER** in the event of such delay, and provide the **OWNER** a written action plan within five (5) business days on how it will reasonably attempt to resolve the delay. If the parties cannot mutually agree to an extension of time or an adjustment, Section 6.5 under "DISPUTES" of this Agreement shall apply. If the above type of delay would prevent complete performance of the **PROJECT**/Final Task Order within ninety (90) days of the time specified therein, **OWNER** shall have the option of cancelling the **PROJECT**/Final Task Order or otherwise adjusting the scope of the services or work and any related fees.

SECTION 5 - PAYMENTS TO CONSULTANT

5.1. Methods of Payment for Services of CONSULTANT.

5.1.1. For Basic Services

CONSULTANT shall receive prior written approval of **OWNER** prior to proceeding with work items and deliverables in **EXHIBIT A. OWNER**'s designated agent in Section 8.1.1 shall be the only person authorized to provide such written approval. For all work items and deliverables listed in **EXHIBIT A**, prices shall be as listed in the Costs section. **OWNER** will be billed on a monthly basis based for the tasks completed by the **CONSULTANT** in the previous month, in accordance with the rates in the table below:

Task No.	Task Name	Hours	Unit Cost	Quantity	Units	otal Cost
1	Management & Kickoff	72	\$ 14,500.00	EA	1	\$ 14,500.00
2	Records Review	16	\$ 1,000.00	EA	1	\$ 1,000.00
3	City Data Collection	736	\$ 107.12	per mile	1,019	\$ 109,159.37
4	City Condition Evaluation	1,223	\$ 86.96	per mile	1,019	\$ 88,616.46
5	County Data Collection	85	\$ 107.12	per mile	118	\$ 12,640.63
6	County Condition Evaluation	142	\$ 86.96	per mile	118	\$ 10,261.77
7	Data Upload	80	\$ 9,100.00	EA	1	\$ 9,100.00
8	Implementation	20	\$ 3,900.00	EA	1	\$ 3,900.00
9	Training	64	\$ 12,800.00	EA	1	\$ 12,800.00
10	Presentation	32	\$ 9,200.00	EA	1	\$ 9,200.00
	TOTAL	2,470			TOTAL	\$ 271,178.22

5.1.2. For Extra Work

Subject to the prior written authorization of **OWNER**, the execution of a change order, supplemental to this agreement, setting forth the character and scope of Extra Work to be performed and the compensation therefore, and the necessary appropriations by the Urban County Council, **OWNER** shall issue individual task orders for each work assignment performed under this Agreement by **CONSULTANT** or its sub-consultant/s that are not included in **EXHIBIT A**. Each task order shall contain scope of work, fee, and schedule for performance of the work. Individual task orders shall be of the form included in **EXHIBIT C**.

5.1.2.a Fee payable to **CONSULTANT** under individual task order shall be developed using hourly rates included in **EXHIBIT C** or as amended in accordance with provisions therein.

5.1.2.b Terms of payment to **CONSULTANT** shall be specified in each task order. For assignments with defined scope, lump sum task orders shall be issued. Otherwise, task orders shall include time and materials payment terms.

5.1.2.c Each task order issued shall receive prior written approval of **OWNER** prior to **CONSULTANT**

proceeding with said work. The **OWNER's** designated agent in Section 8.1.1. shall be the only person authorized to provide such approval.

5.2. Times of Payment

5.2.1. CONSULTANT shall submit monthly statements for Services and Extra Work rendered. The Statements will be based upon **CONSULTANT'S** estimate of the proportion of the total services actually completed at the time of billing. **OWNER** shall respond to **CONSULTANT'S** monthly statements within thirty (30) days, either denying payment or making payment.

5.3. Other Provisions Concerning Payments

5.3.1. In the event the Agreement is terminated by the **OWNER** without fault on the part of the **CONSULTANT**, the **CONSULTANT** shall be paid for the work performed or services rendered for which it has not already been paid as determined by mutual agreement between the **OWNER** and the **CONSULTANT**.

5.3.2. In the event the services of the **CONSULTANT** are terminated by the **OWNER** for fault on the part of the **CONSULTANT**, the **CONSULTANT** shall be paid reasonable value of the work performed or services rendered and delivered for which it has not already been paid, and the amount to be paid shall be determined by the **OWNER**.

SECTION 6 - GENERAL CONSIDERATIONS

6.1. Termination

6.1.1. CONSULTANT may only terminate this Agreement due to **OWNER'S** material breach of the terms hereof which breach causes **CONSULTANT** to be unable to perform its duties and responsibilities under this Agreement and upon forty-five (45) days written advance notice to **OWNER**.

6.1.2. The **OWNER** may terminate this Agreement for cause upon seven (7) business days written advance notice to the **CONSULTANT**. The **OWNER** reserves the right to terminate the Agreement for any reason whatsoever, with or without cause, at any time upon thirty (30) days written advance notice to the **CONSULTANT**.

6.2. Ownership and Reuse of Documents

All documents, including raw data, reports, Drawings and Specifications, prepared by the **CONSULTANT** pursuant to this Agreement shall be delivered to and become the property of the **OWNER**. The **OWNER** shall have the right to reuse same without restriction or limitation, but without liability or legal exposure to **CONSULTANT**.

6.3. Legal Responsibilities and Legal Relations

6.3.1. The **CONSULTANT** shall familiarize itself with and shall at all times comply with all federal, state, and local laws, ordinances, and regulations that in any manner affect the services of this Agreement.

6.3.2. In performing the services hereunder, the **CONSULTANT** and its consultants, employees, agents and representatives shall not be deemed or construed to be employees of **OWNER** in any manner whatsoever. Except as otherwise provided in this Agreement, the **CONSULTANT** shall be acting as an independent contractor. The **CONSULTANT** shall not hold itself out as, nor claim to be, an officer or employee of **OWNER** by reason hereof and shall not make any claim, demand or application to or for any right or privilege applicable to an officer or employee of **OWNER**. The **CONSULTANT** shall be solely responsible for any claims for wages or compensation by **CONSULTANT**'S employees, agents and representatives, including consultants, and shall save and hold **OWNER** harmless therefrom.

6.3.3. The parties hereto agree that causes of actions between the parties shall be governed by applicable provisions of the Kentucky Revised Statutes, and that venue of any legal action shall be a court of appropriate jurisdiction in Fayette County, Kentucky. The parties further agree that Kentucky law shall apply with respect to the interpretation of any provision of this Agreement.

6.4. Successors and Assigns

6.4.1. CONSULTANT binds itself and its, successors, executors, administrators, assigns and legal representatives to this Agreement in respect to all covenants, agreements, and obligations of this Agreement. **CONSULTANT** shall not assign any interest, obligation or benefit in this Agreement. **CONSULTANT** shall not assign any interest, obligation or benefit in this Agreement nor transfer any interest in the same, whether by assignment or novation, without prior written consent of **OWNER**. **6.4.2.** The **CONSULTANT** shall not subcontract more than fifty percent (50%) of the work, based upon dollar value of the work. The **CONSULTANT** shall obtain written approval prior to subletting or assigning any services contained in this Agreement, and consent to sublet or assign any part of this Agreement shall not be construed to relieve the **CONSULTANT** of any responsibility for compliance with the provisions of this Agreement.

6.4.3. Nothing herein shall be construed to give any rights or benefits hereunder to anyone other than **OWNER** and **CONSULTANT**.

6.5. Disputes

Except as otherwise provided in this Agreement, any dispute hereunder may be resolved by agreement of the **OWNER'S** Agent (Section 8.1.1) and the **CONSULTANT**. In the absence of such an agreement, the dispute shall be submitted to the **OWNER'S** Commissioner, Department of Environmental Quality & Public Works, whose decision shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, capricious, arbitrary, or so grossly erroneous as necessarily to imply bad faith. Pending a final decision of a dispute hereunder, the **CONSULTANT** shall proceed diligently with the performance of the Agreement in accordance with the directions of the **OWNER**.

6.6. Accuracy of CONSULTANT'S Work

The **CONSULTANT** shall be required to perform this Agreement in accordance with the degree of ordinary and reasonable skill and care usually exercised by professional engineers prevailing at the time, place and under similar conditions as the services hereunder are rendered.

The **CONSULTANT** shall be responsible for the accuracy of all work, even though raw data, reports, Drawings and Specifications have been accepted by the **OWNER**, and it shall make any necessary revisions or corrections resulting from its errors and/or omissions for no additional compensation. By submission of reports, soils and subsurface information, quantities estimates, calculations and Drawings and Specifications to the **OWNER**, the **CONSULTANT** has made an incontrovertible representation that the information is accurate within the appropriate standard of skill and care. Failure on the part of **CONSULTANT** to provide the expected level of accuracy may be grounds for the **OWNER** to terminate this Agreement.

6.7. Security Clause

The **CONSULTANT** certifies that it shall not at any time release or divulge any information concerning the services covered by this Agreement to any person or any public or private organization except the **OWNER** without prior approval of the **OWNER** unless required by law

6.8. Access to Records

The **CONSULTANT** and his sub-consultants shall maintain all books, documents, papers, and accounting records, and make such materials available at their respective offices at all reasonable times during the Agreement period and for three (3) years from the date of final payment under the Agreement for inspection by the **OWNER**, and copies thereof shall be furnished if requested. Failure to maintain such records for three (3) years after the date of final payment may be grounds for the **OWNER** to disqualify the **CONSULTANT** from consideration for future consultant engineering Agreements, unless the loss of such records was due to uncontrollable reasons, such as fire, flood or other event outside of CONSULTANT'S reasonable control.

6.9. Risk Management Provisions, Insurance and Indemnification

6.9.1. **DEFINITIONS**

The **CONSULTANT** understands and agrees that the Risk Management Provisions of this Agreement define the responsibilities of the **CONSULTANT** to the **OWNER**.

As used in these Risk Management Provisions, the terms "CONSULTANT" and "OWNER" shall be defined as follows:

- **a. CONSULTANT** means the consultant and its employees, agents, servants, owners, principals, licensees, assigns and subcontractors of any tier.
- **b. OWNER** means the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, boards, assigns, volunteers, and successors in interest.

6.9.2. INDEMNIFICATION AND HOLD HARMLESS PROVISION

(1) It is understood and agreed by the parties that Consultant hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Consultant or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "Consultant") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.

(2) Consultant shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by Consultant's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the Consultant; and (b) not caused solely by the active negligence or willful misconduct of LFUCG. (3) Notwithstanding, the foregoing, with respect to any professional services performed by Consultant hereunder (and to the fullest extent permitted by law), Consultant shall indemnify, save, hold harmless and defend LFUCG from and against any and all liability, damages and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees, for any damage due to death or injury to any person or injury to any property (including the loss of use resulting therefrom) to the extent arising out of, pertaining to or relating to the negligence, recklessness or willful misconduct of Consultant in the performance of this agreement.

(4) In the event LFUCG is alleged to be liable based upon the above, Consultant shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.

(5) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.

(6) LFUCG is a political subdivision of the Commonwealth of Kentucky. Consultant acknowledges and agrees that LFUCG is unable to provide indemnity or otherwise save, hold harmless, or defend the Consultant in any manner.

6.9.3. FINANCIAL RESPONSIBILITY

The **CONSULTANT** understands and agrees that the **CONSULTANT** shall, prior to final acceptance of the **CONSULTANT'S** proposal and the commencement of any work; demonstrate the ability to assure compliance with the Indemnity Agreement and other provisions of this Agreement.

6.9.4. INSURANCE REQUIREMENTS

6.9.4.1. Required Insurance Coverage

CONSULTANT shall procure and maintain for the duration of this Agreement the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to OWNER in order to protect OWNER against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONSULTANT. The cost of such insurance shall be included in any proposal:

Coverage	<u>Limits</u>
General Liability (Insurance Services Office Form CG 00 01)	\$1 million per occurrence, \$2 million aggregate or \$2 million combined single limit
Commercial Automobile Liability (Insurance Services Office Form CA 0001) Professional Liability	combined single, \$1 million per occurrence \$1 million per occurrence, \$2 million aggregate
Worker's Compensation	Statutory
Employer's Liability	\$500,000.00

The policies above shall contain the following conditions:

- a. OWNER shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy.
- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by OWNER.
- c. The General Liability Policy shall include Business Interruption coverage.
- d. The General Liability Policy shall have a Professional Liability endorsement (including Errors and Omissions), which shall include Business interruption coverage and this policy or endorsement shall include Environmental Casualty coverage for any services performed pursuant to the contract, and/or a separate Professional Liability Policy shall be obtained unless it is deemed not to apply by OWNER. (OWNER does not need to be named as additional insured).
- e. OWNER shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- f. The Professional Liability policy shall be maintained for a minimum of three years

beyond the completion date of the project, to the extent commercially available. If not commercially available, CONSULTANT shall notify OWNER and obtain similar insurance that is commercially available and acceptable to OWNER.

g. Said coverage shall be written by insurers acceptable to OWNER and shall be in a form acceptable to OWNER. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

6.9.4.2. Renewals

After insurance has been approved by OWNER, evidence of renewal of an expiring policy must be submitted to OWNER, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

6.9.4.3. Right to Review, Audit and Inspect

CONSULTANT understands and agrees that OWNER may review, audit and inspect any and all of CONSULTANT'S records and operations to insure compliance with these Insurance Requirements.

6.9.5. SAFETY AND LOSS CONTROL

CONSULTANT shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, and to the extent reasonably possible, the public, and **OWNER**.

6.9.6. DEFINITION OF DEFAULT

CONSULTANT understands and agrees that the failure to comply with any of these provisions shall constitute default under this Agreement. **CONSULTANT** also agrees that **OWNER** may elect as its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging **CONSULTANT** for any such insurance premiums purchased, or suspending or terminating this Agreement.

SECTION 7 - EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this Agreement, the **CONSULTANT** agrees as follows:

- 7.1. The CONSULTANT will not discriminate against any employee or application for employment because of race, color, religion, national origin, sex, age, or handicap. The CONSULTANT will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, national origin, sex, age, or handicap. Such action shall include, but not be limited to the following: employment upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeships. The CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.
- **7.2.1.** The **CONSULTANT** will, in all solicitations or advertisements for employees placed by or on behalf of the **CONSULTANT**, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, age (between forty and seventy), or handicap.

SECTION 8 - SPECIAL PROVISIONS, EXHIBITS, AND SCHEDULES

8.1. This Agreement is subject to the following provisions.

8.1.1. Pursuant to subparagraph 3.4 of this Agreement, **OWNER** has assigned Nancy Albright, Commissioner of the Department of Environmental Quality & Public Works (the "**OWNER'S** Agent"), as the authorized agent of **OWNER**, to monitor, direct and review the performance of work of the **CONSULTANT**. Documents, data, reports, and all matters associated with carrying out this Agreement shall be addressed to the **OWNER'S** Agent or his designee. Questions by the **CONSULTANT** regarding interpretations of the terms, provisions and requirements under this Agreement shall be addressed to the **OWNER'S** Agent or his designee. The **CONSULTANT** shall look only to the **OWNER'S** Agent or his designee for direction in its performance under this Agreement; no other direction shall be binding upon **OWNER**. **OWNER** shall respond to written requests by **CONSULTANT** within thirty (30) days.

- **8.2.** This Agreement, together with the Incorporated Documents (Section 1.2) constitutes the entire Agreement between **OWNER** and **CONSULTANT** and supersedes all prior written or oral understandings. This Agreement and **EXHIBITS A, B, and C** and any related schedules or documents may only be amended, supplemented, modified or canceled by a duly executed written instrument.
- **8.3. NO THIRD PARTY RIGHTS.** This agreement does not create a contractual relationship with or right of action in favor of a third party against either **OWNER** or **CONSULTANT.**

- **8.4 UNENFORCEABLE TERMS/SURVIVABILITY**. If any term or provision of this Agreement shall be found to be illegal or unenforceable, this Agreement shall remain in full force and such term or provision shall be deemed stricken. The provisions of Section 6 of this Agreement shall survive its termination.
- **8.5. NON-WAIVER.** The failure of either party to enforce any right reserved to it in this Agreement shall not be a waiver of any such right to which the party is entitled.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

OWNER:

CONSULTANT:

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT **APPLIED RESEARCH ASSOCIATES, INC.**

BY:

JENNIFER DI GREGORIO Vice President, Contracts and Procurement

BY:

LINDA GORTON, MAYOR

ATTEST:

URBAN COUNTY COUNCIL CLERK COMMONWEALTH OF KENTUCKY

COUNTY OF FAYETTE

The foregoing Agreement was subscribed, sworn to and acknowledged before me by ______, as the duly authorized representative for and on behalf of ______, on this the ____day of ______, 2018.

)

)

NOTARY PUBLIC

EXHIBIT A

PROPOSAL OF ENGINEERING SERVICES

AND RELATED MATTERS



2021 Pavement Management System Update

Quote

December 21, 2020

Prepared for: Scott Garthee Deputy Director Streets & Roads Lexington-Fayette Urban County Government

Prepared by: Applied Research Associates, Transportation Sector 3605 Hartzdale Drive Camp Hill, PA 17011

Author: Jacob Walter, P.E.

Reviewer: William Vavrik, Ph.D., P.E.



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Introduction

Applied Research Associates, Inc. (ARA presents the attached quote to update the pavement management system used by the Lexington-Fayette Urban County Government (LFUCG). In 2015, the ARA project team implemented the initial pavement management system for the Government including software, web-based hosting, a baseline data evaluation, an inventory of historical data, analysis of the baseline data, tailoring of the system to reflect the current business practices of LFUCG, training, and presentation of the results and conclusions of the system to the City Council. This was followed by a data refresh in 2018 to refine pavement performance models and keep the data that the analyses use up to date. The Government continues to actively use the results to plan and optimize their pavement maintenance plans during each fiscal year.

In any pavement management system, new data is necessary for several reasons. First, the system operates under the assumption that similar roads (i.e., local asphalt roads) will behave in the same way throughout the County. Engineers and public works professionals know that this is not necessarily the case; certain streets can deteriorate faster or slower due to both known issues (i.e., unusual traffic levels) and unknown issues (i.e., construction issues). Second, the performance models are highly dependent on the existing historical data and need to be improved with current data based on actual on-site conditions. Finally, the system may not represent changes to the LFUCG's business processes that have been made since the 2018 data collection. The following proposal provides an outline of the work plan and deliverables that ARA would provide to update the LFUCG system.

As part of this update, there are several tasks that are required:

- Update the pavement condition for each pavement segment in the LFUCG network.
- Upload work performed since the baseline survey.
- Examine the change between the baseline (2015) condition, the 2018 round of data collection, and the current condition.
- Modify the performance models to incorporate the new data.
- Update the engineering settings (treatment matrix, cost, consequence, etc.) to match the current and/or desired business processes at LFUCG (i.e., new treatment types, revised costs)
- Perform a network-level analysis of pavement condition and present the results to the City Council.

Each of these items requires a specific deliverable provided either to LFUCG or uploaded to the LFUCG pavement management system maintained by ARA. These deliverables are described at the end of each element of the proposed work plan presented below.



Work Plan

To meet the goals listed in the Introduction will require a work plan that develops deliverables that will the Government's objectives. This section describes ARA's approach to the system update and which tasks will be required to deliver specific deliverables. This approach may be modified as the project progresses to meet scheduling and unknown technical goals.

Management

A key step in any successful project is the active management of that project. As in the initial implementation, Mr. Jacob Walter will serve as Project Manager for this effort. In the management role, his principal duty will be serving as the single point of contact between the LFUCG and the project team. This does not mean the LFUCG will have no contact with the other team members though; team members will work directly with LFUCG staff as needed to assemble the deliverables required for this project. However, Mr. Walter will be involved in these conversations to address issues that a specific team member may not be aware of as they work with the LFUCG. Using a single point of contact has been a successful method for frequent, accurate communication between the project team and the client in many of our previous efforts.

The second element of management is tracking. Mr. Walter will also be responsible for this but will be assisted by various members of the team as needed. Tracking consists of two parts. First, it answers the question "How close is the team to meeting a specific milestone?" In some tasks, this may be measured quantitatively (e.g., number of mile surveyed) while others will require a more qualitative approach (e.g., expected time to update performance models). All tasks will be tracked by the project manager. A bi-weekly status update will be provided by email.

Quality management, another key element in this phase of the project, will be overseen by the Project Manager while being an integral part of each of the tasks in the project approach. The quality management plan is based on existing processes that ARA has developed over the past twenty years of data collection and system implementation experience.

Kickoff

Our efforts to ensure frequent and effective communication begin at the start of the project. At this time, the ARA project manager, an ARA Vice President, and the City stakeholders will meet on-site to determine a final implementation plan, schedule (including tasks, start and end dates, milestones, and deliverables), and desired results for the project.

In parallel to the setup and kickoff tasks required of the project manager, ARA will also perform the tasks necessary to prepare our field crews for work in Lexington. This includes basics such as scheduling and travel planning but also includes the development of a new routing plan for the DSV. ARA will start with the 2018 routing plan, update the GIS data, and then generate the new routing based on the parameters defined by the client.

Deliverables: Meeting notes from kickoff, kickoff presentation (if developed), and a routing plan.

Field Testing

In a system update, the most critical element is to maintain consistency with the work previously performed. However, this does not mean that we can only use the same tools and processes that were used previously. As in 2018, ARA will use its Laser Crack Measurement System



(LCMS) based Digital Survey Vehicle (DSV) to perform the surveys, and example of which is shown in Figure 1. Features of this equipment include:

- A road profile system conforming to a Class 1, ASTM E950 high speed profiler. Each pavement segment will have an International Roughness Index (IRI) calculated in units of inches per mile. This ride quality measurement is a key indicator of vertical displacement issues and is also one of the major conditions that road patrons notice about their roads.
- Location provided by the Global Positioning System (GPS) supplemented with an Inertial Navigation System (INS). A second, independent system measures distance traveled. Both distance and specific location (latitude, longitude, and elevation) are tagged to all data collected by the DSV.
- 360-degree right-of-way imaging from a camera mounted on a mast above the DSV. ARA can extract specific images (such as a forward image) using software provided with the camera. This helps our users keep their existing videolog systems and image viewing software although the full 360-degree image can be provided if useful.
- A three-dimensional laser scanner that measures both depth and pavement reflectivity. This system will be used directly in a human-controlled survey as in previous surveys.
- Rutting is measured based on the laser scans instead of through the bumper-mounted lasers. This produces a far more detailed and accurate transverse profile.



Figure 1. LCMS-based DSV with 360-degree ROW camera.

As in previous surveys, the DSV will survey in a single direction for two lane roads (1 survey mile per centerline mile) while surveying once in each travel direction for wider roads (2 survey miles per centerline mile). ARA will continue to use the direct, human-controlled survey technique for its evaluation efforts to maintain the consistency with the existing data. However, that effort will be supplemented with data from the LCMS for both quality control and accuracy purposes. ARA will extract the forward, right-forward side, and left-rear side images from the right-of-way camera.

Ride quality (IRI) will continue to be measured from the front bumper while raveling measurements will be taken using the LCMS.



To ensure good quality data, ARA will collect data based on these requirements:

- Start data collection an hour after sunrise
- Stop data collection an hour before sunset
- Clear and dry pavements

All of the testing performed will be done with the safety of both employees (LFUCG and ARA) and patrons in mind. If our operators feel that data collection is unsafe due to roadway conditions (short lanes, heavy traffic, etc.) they will attempt to return at a later time when conditions have improved. There may be some limited locations where it is not possible to collect data due to safety concerns, although these occur very infrequently for municipal customers.

Deliverables: Longitudinal profile data, IRI calculation, pavement sensor data (processed in the next step), and right-of-way image library.

Processing & Evaluation

Data Extraction

The LCMS system requires processing between the field and the office to extract certain items:

- Downward images
 - Reflective (standard) images
 - Depth images
 - Automated distress identification
 - LCMS sensor data
 - o Rutting
 - Raveling
 - o MTD

In the first step of this process, ARA technicians will process the LCMS data to obtain this data and upload it to the evaluation workstations. They will also fine-tune the extraction of images from the ROW camera.

Pavement Evaluation

As data extraction is completed for each survey run, the images and any automated data used in the evaluation of those images will be uploaded to a pavement evaluation workstation such as the one shown in Figure 2. ARA staff will evaluate the pavement using ASTM D6433 based on a 50% evaluation methodology using the frame sampling method. This method evaluates every other 20 foot by 13.5 foot image as opposed to working with contiguous samples and is the same methodology used in previous surveys. Once the initial survey of a given pavement area (i.e., segment) is complete, a separate technician will perform quality control checks on 10% of surveyed data in accordance with ARA's standard quality control procedures. If systematic issues are discovered, the entire pavement area will be resurveyed. Quality control will be done in parallel to the evaluation work to ensure a minimum number of systematic fixes need to be applied to the data within this project.





Figure 2. Example of a pavement evaluation workstation.

The result of this process will be a list of distresses in each surveyed pavement frame. Those pavement frames will be then be summarized by pavement segment with the distress list summarized on a segment basis. The other sensor data (rutting, raveling, MTD, and IRI) will also be summarized on the same basis at this point.

Data Upload & Consistency Check

At the conclusion of the evaluation phase of the project, ARA will upload the data into a test copy of the RoadCare database made available via a virtual machine to the LFUCG. This process is fairly automated but is also covered by standard ARA quality control processes. After the data is uploaded, the internal routines in RoadCare will calculate the PCI for each defined pavement segment. At this point, the project team can start running comparisons to prior year's data. These checks include expected decay checks for PCI (we expect a standard decrease of about 2 points per year based on the pavement family and existing pavement performance model), IRI (the readings are expected to be similar), raveling, and MTD.

ARA will summarize and visualize this data for use by the LFUCG and quality control purposes. Upon completion of this phase of the quality control process, ARA will move the data to the production version of the LFUCG pavement management system.

Deliverables: Test and final RoadCare systems, analysis of the current data relative to previous rounds of data collection.

Pavement Management Update

The final step in the process is to update the pavement management system based on new data and any insights from the kickoff or data collection phases of the project. The management side of the update concerns itself with the prediction of future conditions, updates to the RoadCare treatment matrix, and generation of Capital Improvement Plan (CIP) scenarios. The update of the pavement management functions will be performed by experienced ARA pavement



engineers. Just as data requires quality control to ensure accurate results, the management parameters require expertise to modify the entries so that are appropriate to LFUCG. Without accuracy in both of these factors, any CIPs generated by the system will also be inaccurate.

There are several items, referred to earlier in this work plan, that require updating:

Work History

ARA will upload any missing work history data into RoadCare as provided by LFUCG staff. This work history data will assist in the consistency checks as well as the revision of the performance models.

Performance Models

ARA will work on refining the pavement performance model with the new data and consistency results from earlier in the project. This may include actions such as increasing the total life span of the pavement or changing the general shape of the model to better reflect the expected OCI values given known last construction, current PCI levels, and current IRI measurements.

Modification of the Treatment Matrix

The treatment matrix in RoadCare provides three critical pieces of information to the planning module of the software.

- Feasibility Defines the circumstances where a rehabilitation treatment can be applied. For example, the "AC Reconstruction" treatment may only be applied when the Overall Condition Index is less than 30.
- Cost Tells the simulation engine how to calculate the cost for a specific treatment. It can be as simple as a unit cost (pavement area * \$2/ft²) or something more complicated.
- Consequence Defines what happens to a segment's attributes (i.e., pavement type or PCI) once a treatment is applied.

Each of these items can be defined multiple times for a specific treatment. A common example is the change in unit cost for an AC Overlay based on its functional classification (due to additional required thickness, for example).

As a part of the review each of these elements must be reviewed. Obviously, cost is the most likely to change of these three elements however checking all elements is a required part of the update. Costs will be checked against any cost data LFUCG is willing to provide. The other elements will be reviewed through interviews with LFUCG staff.

In addition to reviewing each treatment element, the update team will also answer the following questions:

- Is each overall strategy (i.e., AC Reconstruction) still being used by the LFUCG in its standard pavement maintenance practices? If a specific approach is not being used, it should be removed from the system or disabled.
- Are there new pavement rehabilitation approaches the LFUCG should take? If so, these need to be added to the treatment matrix.



Budgets

The available funding for pavement rehabilitation is typically the limiting factor in any scenario. This is one area that, based on our support for the RoadCare software, ARA knows has been actively updated by LFUCG staff. ARA will review the budget settings to ensure that they are still appropriate to LFUCG needs.

Scenario Generation

Once the engineering parameters have been updated based on interviews with LFUCG staff and the new data, the ARA team will generate a set of scenarios for quality control. These will include the "No Funding" and "Unlimited Funding" scenarios to ensure the models and treatment matrix are working properly. We will then work with LFUCG staff to create a series of scenarios that are appropriate to the agency's needs. As a reminder, these scenario's will be based on a specific limit:

- Budget Apply rehabilitation projects until the budget is expended. Work should be done optimally across the entire County OR divided between the council districts.
- Desired Condition Apply rehabilitation projects until a specific average condition level is reached.
- Deficiency Level Apply rehabilitation projects until all segments are above a specific condition.

At the conclusion of the scenario analysis, the ARA team will present visualizations of the relative results of the various scenarios such as the expected OCI level shown in Figure 3.

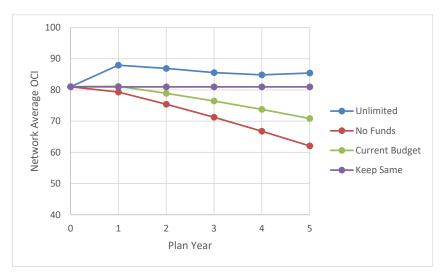


Figure 3. Example of a comparison of scenarios using average network conditions.

Deliverables: Example scenario runs loaded into the production RoadCare database, report discussing the relative results of the scenarios, revised engineering parameters, and work history not already entered into the system.

Training

At the LFUCG's option, ARA will provide a two day, classroom-style, hands-on course on the use and administration of the pavement management system. This course will include teaching by



two ARA staff and the materials required for that training such as user manuals and presentations tailored to the LFUCG.

Presentation

ARA will provide an on-site presentation to the LFUCG staff (as selected by the Government's project manager) covering the results of the pavement management system, the successes and issues encountered over the past three years since the implementation, and the current condition of the pavements maintained by the LFUCG.



Key Personnel

While we do not present the qualifications of ARA as a whole in this quote, we do feel the need to ensure the LFUCG that they are receiving the appropriate staff for the job. ARA plans to use the same project manager that implemented the system, Mr. Jacob Walter for the update. Also, oversight and technical expertise will be provided by Dr. Bill Vavrik. Brief biographies are provided below for each of these staff.

Jacob Walter, P.E. – Project Manager

Mr. Walter will reprise his role as project manager for this update. He will be responsible for overseeing progress on this project and will be involved in the details of each phase. This oversight will include maintenance of the project schedule once one has been agreed upon by LFUCG and the project team. It will also include bi-weekly status reports provided via email. Mr. Walter will also oversee the implementation of the training program which will start upon project kickoff and continue through the support phase of the project. Finally, Mr. Walter will assist LFUCG personnel in the required presentation to the City Council although Dr. Vavrik will present.

Mr. Walter has over twenty years of experience implementing and maintaining asset management systems using a wide variety of tools and data collection procedures. His experience includes both performing and managing data collection, implementing and supporting software systems, developing data collection systems, and analyzing data for engineering departments (e.g., current condition analysis, repair strategy development, and long-term capital improvement planning). His project management experience includes the implementation and updating of pavement management systems for dozens of agencies including project manager roles for Metro Nashville, Waynesboro, Virginia, Arlington, Texas, and Lee County, Florida.

William Vavrik, Ph.D., P.E. – Engineering

Dr. Vavrik is a Vice President and Principal Engineer in the Transportation Infrastructure Division of Applied Research Associates, Inc. He joined ARA in 2000 and is responsible for overseeing the execution of hundreds of consulting and research projects in transportation engineering. Dr. Vavrik has a Ph.D. in Civil Engineering from the University of Illinois at Urbana-Champaign and is a registered professional engineer. For this project, Dr. Vavrik will be using his extensive experience in pavement design, pavement management, and engineering software design to assist the LFUCG in the updating of the engineering parameters in RoadCare and finding new methods for pavement rehabilitation that may be appropriate for the Lexington area. He will also use his 20 years of experience in training and presenting technical material to work with the team on the training phase which includes presentation of the results to the LFUCG Council.



Price

Total compensation to ARA for service shall be **\$271,178.22** per the tasks below. ARA will invoice each task on a percent complete basis. The schedule will be determined upon establishing a prospective start date as this will influence productivity of the equipment (as it can only collect data during daylight hours).

Please note that City versus County prices have not been split outside of those priced at the "per mile" method. Items such as records review and engineering are typically not dependent on mileage and, for the purposes of this document, are considered fixed.

Task							
No.	Task Name	Hours	Unit Cost	Quantity	Units	٦	otal Cost
1	Management & Kickoff	72	\$ 14,500.00	EA	1	\$	14,500.00
2	Records Review	16	\$ 1,000.00	EA	1	\$	1,000.00
3	City Data Collection	736	\$ 107.12	per mile	1,019	\$	109,159.37
4	City Condition Evaluation	1,223	\$ 86.96	per mile	1,019	\$	88,616.46
5	County Data Collection	85	\$ 107.12	per mile	118	\$	12,640.63
6	County Condition Evaluation	142	\$ 86.96	per mile	118	\$	10,261.77
7	Data Upload	80	\$ 9,100.00	EA	1	\$	9,100.00
8	Implementation	20	\$ 3,900.00	EA	1	\$	3,900.00
9	Training	64	\$ 12,800.00	EA	1	\$	12,800.00
10	Presentation	32	\$ 9,200.00	EA	1	\$	9,200.00
	TOTAL	2,470			TOTAL	\$	271,178.22

Table 1. Project price by task.



EXHIBIT B

CERTIFICATE OF INSURANCE



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 07/27/2021

С В	HIS CERTIFICATE IS ISSUED AS A MAT ERTIFICATE DOES NOT AFFIRMATIVE ELOW. THIS CERTIFICATE OF INSURA EPRESENTATIVE OR PRODUCER, AND	LY O	R NE	GATIVELY AMEND, EXTER S NOT CONSTITUTE A C	ND OR	ALTER THE C	OVERAGE A	FFORDED BY THE POLIC	IES	
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We	stern Assurance Corp.				PHONE (A/C, No	(505) 2	65-8481	FAX (A/C, No):	(505) 2	66-3500
370	1 Paseo Del Norte NE				E-MAIL ADDRE	omontono	@westernass			
PO	Box 94600				ADDITE		SURER(S) AFFOR			NAIC #
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	Applied Research Associates In	5			INSURE	RC: Continer	tal Ins Co			35289
	4300 San Mateo Blvd NE #B300)			INSURE	RD: Continer	tal Casualty C	ompany		20443
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CEI	RTIFICATE HOLDER				CANC	ELLATION				
Lexington-Fayette Urban County Government Dept of Environmental Works - Government Center					SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.					
Lexington KY 40507				Alicia M. Montaño						

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DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM

BUSINESS AUTO COVERAGE FORM

MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "**insureds**" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: APPLIED RESEARCH ASSOCIATES INC

Endorsement Effective Date: 03/01/2021

SCHEDULE

Name Of Person(s) Or Organization(s):

ANY PERSON OR ORGANIZATION THAT THE NAMED INSURED IS OBLIGATED TO PROVIDE INSURANCE WHERE REQUIRED BY A WRITTEN CONTRACT OR AGREEMENT IS AN INSURED, BUT ONLY WITH RESPECT TO LEGAL RESPONSIBILITY FOR ACTS OR OMISSIONS OF A PERSON/ORGANIZATION FOR WHOM LIABILITY COVERAGE IS AFFORDED UNDER THIS POLICY

ARCADIS U.S., INC.

ARA-ARCADIS, A JOINT VENTURE

SALT LAKE CITY CORPORATION

CITY OF LOS ANGELES

LOS ANGELES WORLD AIRPORTS

JACOBS ENGINEERING GROUP, INC.

TUTOR SALIBA CORPORATION

TUTOR SALIBA CORPORATION/0&G INDUSTRIES, INC. J.V.

JACOBS/CH2M* AND USACE FAR EAST DISTRICT

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Form No: CA 20 48 10 13 Endorsement Effective Date: Endorsement Expiration Date: Endorsement No: 20; Page: 1 of 2 Underwriting Company: Valley Forge Insurance Company, 151 N Franklin St, Chicago, IL 60606 Policy No: BUA 4026349108 Policy Effective Date: 03/01/2021 Policy Page: 45 of 173

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Each person or organization shown in the Schedule is an "**insured**" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "**insured**" under the Who Is An Insured provision contained in Paragraph A.1. of Section II - Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph D.2. of Section I - Covered Autos Coverages of the Auto Dealers Coverage Form.

Form No: CA 20 48 10 13Endorsement Effective Date:Endorsement Effective Date:Endorsement Expiration Date:Endorsement No: 20; Page: 2 of 2Underwriting Company: Valley Forge Insurance Company, 151 N Franklin St, Chicago, IL 60606

Policy No: BUA 4026349108 Policy Effective Date: 03/01/2021 Policy Page: 46 of 173

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WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM

BUSINESS AUTO COVERAGE FORM

MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: APPLIED RESEARCH ASSOCIATES INC

Endorsement Effective Date: 03/01/2021

SCHEDULE

Name(s) Of Person(s) Or Organization(s):

JACOBS/CH2M* AND USACE FAR EAST DISTRICT

JACOBS ENGINEERING GROUP INC & CLIENT (GSA - REGION 8 ROCKY MOUNTAIN)

ANY PERSON OR ORGANIZATION FOR WHOM OR WHICH YOU ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT TO OBTAIN THIS WAIVER FROM US. YOU MUST AGREE TO THAT REQUIREMENT PRIOR TO LOSS.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The **Transfer Of Rights Of Recovery Against Others To Us** condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "**accident**" or the "**loss**" under a contract with that person or organization.

Policy No: BUA 4026349108 Policy Effective Date: 03/01/2021 Policy Page: 42 of 173

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Policy Endorsement

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

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.

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

Any person or organization for which the employer has agreed by written contract, executed prior to loss, may execute a waiver of subrogation. However, for purposes of work performed by the employer in Missouri, this waiver of subrogation does not apply to any construction group of classifications as designated by the waiver of right to recover from others (subrogation) rule in our manual.

Schedule

Any Person or Organization on whose behalf you are required to obtain this waiver of our right to recover from under a written contract or agreement.

The premium charge for the endorsement is reflected in the Schedule of Operations.

All other terms and conditions of the policy remain unchanged.

This endorsement, which forms a part of and is for attachment to the policy issued by the designated Insurers, takes effect on the Policy Effective Date of said policy at the hour stated in said policy, unless another effective date (the Endorsement Effective Date) is shown below, and expires concurrently with said policy unless another expiration date is shown below.

Policy No: WC 4 26390760 Policy Effective Date: 01/31/2021 Policy Page: 96 of 131



CNA PARAMOUNT

Technology General Liability Extension Endorsement

It is understood and agreed that this endorsement amends the **COMMERCIAL GENERAL LIABILITY COVERAGE PART** as follows. If any other endorsement attached to this policy amends any provision also amended by this endorsement, then that other endorsement controls with respect to such provision, and the changes made by this endorsement with respect to such provision do not apply.

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1.	Additional Insureds
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3.	Bodily Injury – Expanded Definition
4.	Broad Knowledge of Occurrence/ Notice of Occurrence
5.	Broad Named Insured
6.	Estates, Legal Representatives and Spouses
7.	Expected Or Intended Injury – Exception for Reasonable Force
8.	In Rem Actions
9.	Incidental Health Care Malpractice Coverage
10	Joint Ventures/Partnership/Limited Liability Companies
11	. Legal Liability – Damage To Premises
12	. Medical Payments
13	Non-owned Aircraft Coverage
14	Non-owned Watercraft
15	Personal And Advertising Injury – Discrimination or Humiliation
16	Personal And Advertising Injury - Limited Contractual Liability
17	Property Damage - Elevators
18	Supplementary Payments
19	Property Damage – Patterns, Molds and Dies
20	Unintentional Failure To Disclose Hazards
21	. Waiver of Subrogation – Blanket

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1. ADDITIONAL INSUREDS

- a. WHO IS AN INSURED is amended to include as an Insured any person or organization described in paragraphs A. through K. below whom a Named insured is required to add as an additional insured on this Coverage Part under a written contract or written agreement, provided such contract or agreement:
 - (1) is currently in effect or becomes effective during the term of this Coverage Part; and
 - (2) was executed prior to:
 - (a) the bodily injury or property damage; or
 - (b) the offense that caused the **personal and advertising injury**,

for which such additional insured seeks coverage.

- b. However, subject always to the terms and conditions of this policy, including the limits of insurance, the Insurer will not provide such additional insured with:
 - (1) a higher limit of insurance than required by such contract or agreement; or
 - (2) coverage broader than required by such contract or agreement, and in no event broader than that described by the applicable paragraph A. through K. below.

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

A. Controlling Interest

Any person or organization with a controlling interest in a Named Insured, but only with respect to such person or organization's liability for **bodily injury**, property damage or personal and advertising injury arising out of:

- 1. such person or organization's financial control of a Named insured; or
- 2. premises such person or organization owns, maintains or controls while a Named Insured leases or occupies such premises;

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

B. Co-owner of Insured Premises

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

C. Grantor of Franchise

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

D. Lessor of Equipment

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

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E. Lessor of Land

Any person or organization from whom a Named Insured leases land but only with respect to liability for bodily injury, property damage or personal and advertising injury arising out of the ownership, maintenance or use of such land, provided that the occurrence giving rise to such bodily injury, property damage or the offense giving rise to such personal and advertising injury takes place prior to the termination of such lease. The coverage granted by this paragraph does not apply to structural alterations, new construction or demolition operations performed by, on behalf of, or for such additional insured.

F. Lessor of Premises

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

G. Mortgagee, Assignee or Receiver

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

The coverage granted by this paragraph does not apply to structural alterations, new construction or demolition operations performed by, on behalf of, or for such additional insured.

H. State or Governmental Agency or Subdivision or Political Subdivisions – Permits

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

- 1. the following hazards in connection with premises a Named insured owns, rents, or controls and to which this insurance applies:
 - the existence, maintenance, repair, construction, erection, or removal of advertising signs, awnings, **a**. canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoistaway openings, sidewalk vaults, street banners, or decorations and similar exposures; or
 - b. the construction, erection, or removal of elevators; or
 - c. the ownership, maintenance or use of any elevators covered by this insurance; or
- the permitted or authorized operations performed by a Named Insured or on a Named Insured's behalf. 2.

The coverage granted by this paragraph does not apply to:

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

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



I. Trade Show Event Lessor

- With respect to a Named Insured's participation in a trade show event as an exhibitor, presenter or displayer, any person or organization whom the Named Insured is required to include as an additional insured, but only with respect to such person or organization's liability for bodily injury, property damage or personal and advertising injury caused by:
 - a. the Named Insured's acts or omissions; or
 - b. the acts or omissions of those acting on the Named Insured's behalf,

in the performance of the **Named Insured's** ongoing operations at the trade show event premises during the trade show event.

2. The coverage granted by this paragraph does not apply to **bodily injury** or **property damage** included within the **products-completed operations hazard**.

J. Vendor

Any person or organization but only with respect to such person or organization's liability for **bodily injury** or **property damage** arising out of **your products** which are distributed or sold in the regular course of such person or organization's business, provided that:

- 1. The coverage granted by this paragraph does not apply to:
 - a. bodily injury or property damage for which such person or organization is obligated to pay damages by reason of the assumption of liability in a contract or agreement unless such liability exists in the absence of the contract or agreement;
 - b. any express warranty unauthorized by the Named Insured;
 - c. any physical or chemical change in any product made intentionally by such person or organization;
 - **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;
 - any failure to make any inspections, adjustments, tests or servicing that such person or organization 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 such person or organization's premises in connection with the sale of a product;
 - g. products which, after distribution or sale by the **Named Insured**, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for such person or organization; or
 - h. bodily injury or property damage arising out of the sole negligence of such person or organization for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:
 - (1) the exceptions contained in Subparagraphs d. or f. above; or
 - (2) such inspections, adjustments, tests or servicing as such person or organization has agreed with the **Named Insured** 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 Paragraph J. does not apply to any insured person or organization, from whom the **Named Insured** has acquired such products, nor to any ingredient, part or container, entering into, accompanying or containing such products.

- 3. This Paragraph J. also does not apply:
 - a. to any vendor specifically scheduled as an additional insured by endorsement to this Coverage Part;
 - b. to any of your products for which coverage is excluded by endorsement to this Coverage Part; nor
 - c. if bodily injury or property damage included within the products-completed operations hazard is excluded by endorsement to this Coverage Part.

K. Other Person Or Organization / Your Work

Any person or organization who is not an additional insured under Paragraphs A. through J. above. Such additional insured is an **Insured** solely for **bodily injury**, **property damage** or **personal and advertising injury** for which such additional insured is liable because of the **Named Insured's** acts or omissions.

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

- 1. who is specifically scheduled as an additional insured on another endorsement to this Coverage Part; nor
- 2. for bodily injury or property damage included within the products-completed operations hazard except to the extent all of the following apply:
 - a. this Coverage Part provides such coverage;
 - **b.** the written contract or agreement described in the opening paragraph of this **ADDITIONAL INSUREDS** Provision requires the **Named Insured** to provide the additional insured such coverage; and
 - c. the **bodily injury** or **property damage** results from **your work** that is the subject of the written contract or agreement, and such work has not been excluded by endorsement to this **Coverage Part**.

2. ADDITIONAL INSURED - PRIMARY AND NON-CONTRIBUTORY TO ADDITIONAL INSURED'S INSURANCE

A. The Other Insurance Condition in the COMMERCIAL GENERAL LIABILITY CONDITIONS Section is amended to add the following paragraph:

If the **Named insured** has agreed in writing in a contract or agreement that this insurance is primary and noncontributory relative to an additional insured's own insurance, then this insurance is primary, and the Insurer will not seek contribution from that other insurance. For the purpose of this Provision **2**, the additional insured's own insurance means insurance on which the additional insured is a named insured.

B. With respect to persons or organizations that qualify as additional insureds pursuant to paragraph **1.K.** of this endorsement, the following sentence is added to the paragraph above:

Otherwise, and notwithstanding anything to the contrary elsewhere in this Condition, the insurance provided to such person or organization is excess of any other insurance available to such person or organization.

3. BODILY INJURY - EXPANDED DEFINITION

Under **DEFINITIONS**, the definition of **bodily injury** is deleted and replaced by the following:

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

4. BROAD KNOWLEDGE OF OCCURRENCE/ NOTICE OF OCCURRENCE

Under **CONDITIONS**, the condition entitled **Duties in The Event of Occurrence**, **Offense**, **Claim or Suit** Condition is amended to add the following provisions:

A. BROAD KNOWLEDGE OF OCCURRENCE





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Technology General Liability Extension Endorsement

The **Named Insured** must give the Insurer or the Insurer's authorized representative notice of an occurrence, offense or claim only when the occurrence, offense or claim is known to a natural person Named Insured, to a partner, executive officer, manager or member of a Named Insured, or to an employee designated by any of the above to give such notice.

B. NOTICE OF OCCURRENCE

The Named Insured's rights under this Coverage Part will not be prejudiced if the Named Insured fails to give the Insurer notice of an occurrence, offense or claim and that failure is solely due to the Named Insured's reasonable belief that the bodily injury or property damage is not covered under this Coverage Part. However, the **Named insured** shall give written notice of such occurrence, offense or claim to the Insurer as soon as the Named Insured is aware that this insurance may apply to such occurrence, offense or claim.

5. BROAD NAMED INSURED

WHO IS AN INSURED is amended to delete its Paragraph 3. in its entirety and replace it with the following:

- 3. Pursuant to the limitations described in Paragraph 4. below, any organization in which a Named Insured has management control:
 - a. on the effective date of this Coverage Part; or
 - b. by reason of a Named Insured creating or acquiring the organization during the policy period,

qualifies as a **Named Insured**, provided that there is no other similar liability insurance, whether primary, contributory, excess, contingent or otherwise, which provides coverage to such organization, or which would have provided coverage but for the exhaustion of its limit, and without regard to whether its coverage is broader or narrower than that provided by this insurance.

But this BROAD NAMED INSURED provision does not apply to:

- (a) any partnership or joint venture; or
- (b) any organization for which coverage is excluded by another endorsement attached to this Coverage Part.

For the purpose of this provision, and of this endorsement's JOINT VENTURES / PARTNERSHIP / LIMITED LIABILITY COMPANIES provision, management control means:

- A. owning interests representing more than 50% of the voting, appointment or designation power for the selection of a majority of the Board of Directors of a corporation, or the members of the management board of a limited liability company; or
- **B.** having the right, pursuant to a written trust agreement, to protect, control the use of, encumber or transfer or sell property held by a trust.
- 4. With respect to organizations which qualify as Named insureds by virtue of Paragraph 3. above, this insurance does not apply to:
 - a. bodily injury or property damage that first occurred prior to the date of management control, or that first occurs after management control ceases; nor
 - b. personal or advertising injury caused by an offense that first occurred prior to the date of management control or that first occurs after management control ceases.
- 5. The insurance provided by this Coverage Part applies to Named Insureds when trading under their own names or under such other trading names or doing-business-as names (dba) as any Named Insured should choose to employ.

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6. ESTATES, LEGAL REPRESENTATIVES, AND SPOUSES

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

7. EXPECTED OR INTENDED INJURY – EXCEPTION FOR REASONABLE FORCE

Under COVERAGES, Coverage A - Bodily Injury And Property Damage Liability, the paragraph entitled Exclusions is amended to delete the exclusion entitled Expected or Intended Injury and replace it with the following:

This insurance does not apply to:

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.

8. IN REM ACTIONS

A quasi in rem action against any vessel owned or operated by or for the **Named Insured**, or chartered by or for the Named Insured, will be treated in the same manner as though the action were in personam against the Named Insured.

9. INCIDENTAL HEALTH CARE MALPRACTICE COVERAGE

Solely with respect to **bodily injury** that arises out of a **health care incident**:

- A. Under COVERAGES, Coverage A Bodily Injury And Property Damage Liability, the Insuring Agreement is amended to replace Paragraphs 1.b.(1) and 1.b.(2) with the following:
 - b. This insurance applies to **bodily injury** provided that the professional health care services are incidental to the Named Insured's primary business purpose, and only if:
 - (1) such **bodily injury** is caused by an **occurrence** that takes place in the **coverage territory**.
 - (2) the bodily injury first occurs during the policy period. All bodily injury arising from an occurrence will be deemed to have occurred at the time of the first act, error, or omission that is part of the occurrence; and
- B. Under COVERAGES, Coverage A Bodily Injury And Property Damage Liability, the paragraph entitled Exclusions is amended to:
 - add the following to the Employers Liability exclusion: i.,

This exclusion applies only if the bodily injury arising from a health care incident is covered by other liability insurance available to the Insured (or which would have been available but for exhaustion of its limits).

ii. delete the exclusion entitled **Contractual Liability** and replace it with the following:

This insurance does not apply to:



Contractual Liability

the **Insured's** actual or alleged liability under any oral or written contract or agreement, including but not limited to express warranties or guarantees.

iii. add the following additional exclusions.

This insurance does not apply to:

Discrimination

any actual or alleged discrimination, humiliation or harassment, that includes but shall not be limited to **claims** based on an individual's race, creed, color, age, gender, national origin, religion, disability, marital status or sexual orientation.

Dishonesty or Crime

Any actual or alleged dishonest, criminal or malicious act, error or omission.

Medicare/Medicaid Fraud

any actual or alleged violation of law with respect to Medicare, Medicaid, Tricare or any similar federal, state or local governmental program.

Services Excluded by Endorsement

Any health care incident for which coverage is excluded by endorsement.

C. DEFINITIONS is amended to:

i. add the following definitions:

Health care incident means an act, error or omission by the Named Insured's employees or volunteer workers in the rendering of:

- a. professional health care services on behalf of the Named Insured or
- b. Good Samaritan services rendered in an emergency and for which no payment is demanded or received.

Professional health care services means any health care services or the related furnishing of food, beverages, medical supplies or appliances by the following providers in their capacity as such but solely to the extent they are duly licensed as required:

- a. Physician;
- b. Nurse;
- c. Nurse practitioner;
- d. Emergency medical technician;
- e. Paramedic;
- f. Dentist;
- g. Physical therapist;
- h. Psychologist;
- i. Speech therapist;
- j. Other allied health professional; or

Professional health care services does not include any services rendered in connection with human clinical trials or product testing.

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ii. delete the definition of occurrence and replace it with the following:

Occurrence means a **health care incident**. All acts, errors or omissions that are logically connected by any common fact, circumstance, situation, transaction, event, advice or decision will be considered to constitute a single **occurrence**;

- iii. amend the definition of Insured to:
 - a. add the following:
 - the Named Insured's employees are Insureds with respect to:
 - (1) bodily injury to a co-employee while in the course of the co-employee's employment by the Named insured or while performing duties related to the conduct of the Named insured's business; and
 - (2) bodily injury to a volunteer worker while performing duties related to the conduct of the Named Insured's business;

when such bodily injury arises out of a health care incident.

- the Named Insured's volunteer workers are insureds with respect to:
 - (1) **bodily injury** to a co-**volunteer worker** while performing duties related to the conduct of the **Named Insured's** business; and
 - (2) bodily injury to an employee while in the course of the employee's employment by the Named Insured or while performing duties related to the conduct of the Named Insured's business;

when such bodily injury arises out of a health care incident.

- b. delete Subparagraphs (a), (b), (c) and (d) of Paragraph 2.a.(1) of WHO IS AN INSURED.
- c. add the following:

Insured does not include any physician while acting in his or her capacity as such.

D. The **Other Insurance** condition is amended to delete Paragraph **b.(1)** in its entirety and replace it with the following:

Other Insurance

- b. Excess Insurance
 - (1) To the extent this insurance applies, it is excess over any other insurance, self insurance or risk transfer instrument, whether primary, excess, contingent or on any other basis, except for insurance purchased specifically by the **Named Insured** to be excess of this coverage.

10. JOINT VENTURES / PARTNERSHIP / LIMITED LIABILITY COMPANIES

WHO IS AN INSURED is amended to delete its last paragraph and replace it with the following:

No person or organization is an **insured** with respect to:

- the conduct of any current or past partnership or joint venture that is not shown as a Named insured in the Declarations; nor
- the conduct of a current or past limited liability company in which a **Named Insured's** interest does/did not rise to the level of management control;

except that if the **Named insured** was a joint venturer, partner, or member of such a limited liability company, and such joint venture, partnership or limited liability company terminated prior to or during the **policy period**, then such



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Named insured is an insured with respect to its interest in such joint venture, partnership or limited liability company but only to the extent that:

- a. any offense giving rise to personal and advertising injury occurred prior to such termination date, and the personal and advertising injury arising out of such offense, first occurred after such termination date;
- b. the bodily injury or property damage first occurred after such termination date; and
- c. there is no other valid and collectible insurance purchased specifically to insure the partnership, joint venture or limited liability company.

11. LEGAL LIABILITY - DAMAGE TO PREMISES

A. Under COVERAGES, Coverage A - Bodily Injury and Property Damage Liability, the paragraph entitled Exclusions is amended to delete the first paragraph immediately following subparagraph (6) of the Damage to Property exclusion and replace it with the following:

Paragraphs (1), (3) and (4) of this exclusion do not apply to property damage (other than damage by fire, lightning, explosion, smoke or leakage from automatic fire protective systems) to premises rented to the Named Insured or temporarily occupied by the Named insured with the permission of the owner, nor to the contents of premises rented to the Named Insured 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 LIMITS OF INSURANCE.

B. Under COVERAGES, Coverage A - Bodily Injury and Property Damage Liability, the paragraph entitled **Exclusions** is amended to delete its last paragraph and replace it with the following:

Exclusions c. through n. do not apply to damage by fire, lightning, explosion, smoke or leakage from automatic fire protective systems to premises while rented to a Named Insured or temporarily occupied by a Named Insured with permission of the owner, nor to damage to the contents of premises rented to a Named Insured for a period of 7 or fewer consecutive days.

A separate limit of insurance applies to this coverage as described in the LIMITS OF INSURANCE Section.

- C. LIMITS OF INSURANCE is amended to delete Paragraph 6. (the Damage To Premises Rented To You Limit) and replace it with the following:
 - 6. Subject to Paragraph 5. above, (the Each Occurrence Limit), the Damage To Premises Rented To You Limit is the most the Insurer will pay under COVERAGE A for damages because of property damage to:
 - a. any one premises while rented to a Named Insured or temporarily occupied by a Named Insured with the permission of the owner; and
 - b. contents of such premises if the premises is rented to the Named Insured for a period of 7 or fewer consecutive days.

The Damage To Premises Rented To You Limit is \$500,000. unless a higher Damage to Premises Rented to You Limit is shown in the Declarations.

- D. The Other Insurance Condition is amended to delete Paragraph b.(1)(a)(ii), and replace it with the following:
 - (ii) That is property insurance for premises rented to a **Named Insured**, for premises temporarily occupied by the Named insured with the permission of the owner; or for personal property of others in the Named insured's care, custody or control;
- E. This Provision 11. does not apply if liability for damage to premises rented to a Named Insured is excluded by another endorsement attached to this Coverage Part.

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12. MEDICAL PAYMENTS

- A. LIMITS OF INSURANCE is amended to delete Paragraph 7. (the Medical Expense Limit) and replace it with the following:
 - 7. Subject to Paragraph 5. above (the Each Occurrence Limit), the Medical Expense Limit is the most the Insurer will pay under Coverage C - Medical Payments for all medical expenses because of bodily injury sustained by any one person. The Medical Expense Limit is the greater of:
 - (1) \$15,000 unless a different amount is shown here: ; or
 - (2) the amount shown in the Declarations for Medical Expense Limit.
- B. Under COVERAGES, the Insuring Agreement of Coverage C Medical Payments is amended to replace Paragraph 1.a.(3)(b) with the following:
 - (b) The expenses are incurred and reported to the Insurer within three years of the date of the accident; and

13. NON-OWNED AIRCRAFT

Under COVERAGES, Coverage A - Bodily Injury and Property Damage Liability, the paragraph entitled Exclusions is amended as follows:

The exclusion entitled Aircraft, Auto or Watercraft is amended to add the following:

This exclusion does not apply to an aircraft not owned by any Named Insured, provided that:

- the pilot in command holds a currently effective certificate issued by the duly constituted authority of the United 1. States of America or Canada, designating that person as a commercial or airline transport pilot;
- 2. the aircraft is rented with a trained, paid crew to the **Named Insured**; and
- the aircraft is not being used to carry persons or property for a charge.

14. NON-OWNED WATERCRAFT

Under COVERAGES, Coverage A - Bodily Injury and Property Damage Liability, the paragraph entitled Exclusions is amended to delete subparagraph (2) of the exclusion entitled Aircraft, Auto or Watercraft, and replace it with the following.

This exclusion does not apply to:

- (2) a watercraft that is not owned by any **Named Insured**, provided the watercraft is:
 - (a) less than 75 feet long; and
 - (b) not being used to carry persons or property for a charge.

15. PERSONAL AND ADVERTISING INJURY –DISCRIMINATION OR HUMILIATION

- A. Under **DEFINITIONS**, the definition of personal and advertising injury is amended to add the following tort:
 - Discrimination or humiliation that results in injury to the feelings or reputation of a natural person. .
- B. Under COVERAGES, Coverage B Personal and Advertising Injury Liability, the paragraph entitled Exclusions is amended to:
 - 1. delete the Exclusion entitled Knowing Violation Of Rights Of Another and replace it with the following:

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Knowing Violation of Rights of Another

Personal and advertising injury caused by or at the direction of the **Insured** with the knowledge that the act would violate the rights of another and would inflict **personal and advertising injury**. This exclusion shall not apply to discrimination or humiliation that results in injury to the feelings or reputation of a natural person, but only if such discrimination or humiliation is not done intentionally by or at the direction of:

- (a) the Named Insured; or
- (b) any **executive officer**, director, stockholder, partner, member or manager (if the **Named Insured** is a limited liability company) of the **Named Insured**.
- 2. add the following exclusions:

This insurance does not apply to:

Employment Related Discrimination

Discrimination or humiliation directly or indirectly related to the employment, prospective employment, past employment or termination of employment of any person by any **insured**.

Premises Related Discrimination

discrimination or humiliation arising out of the sale, rental, lease or sub-lease or prospective sale, rental, lease or sub-lease of any room, dwelling or premises by or at the direction of any **Insured**.

Notwithstanding the above, there is no coverage for fines or penalties levied or imposed by a governmental entity because of discrimination.

The coverage provided by this **PERSONAL AND ADVERTISING INJURY –DISCRIMINATION OR HUMILIATION** Provision does not apply to any person or organization whose status as an **insured** derives solely from

- Provision 1. ADDITIONAL INSURED of this endorsement; or
- attachment of an additional insured endorsement to this Coverage Part.

16. PERSONAL AND ADVERTISING INJURY - LIMITED CONTRACTUAL LIABILITY

A. Under COVERAGES, Coverage B –Personal and Advertising Injury Liability, the paragraph entitled Exclusions is amended to delete the exclusion entitled Contractual Liability and replace it with the following:

This insurance does not apply to:

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:

- (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 offense that caused such personal or advertising injury first occurred subsequent to the execution of such insured contract. Solely for the purpose 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 personal and advertising injury provided:
 - (a) liability to such party for, or for the cost of, that party's defense has also been assumed in such **insured** contract; and
 - (b) such attorney fees and litigation expenses are for defense of such party against a civil or alternative dispute resolution proceeding in which covered **damages** are alleged.

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B. Solely for the purpose of the coverage provided by this paragraph, DEFINITIONS is amended to delete the definition of **insured contract** in its entirety, and replace it with the following:

Insured contract means that part of a written contract or written agreement pertaining to the Named Insured's business under which the Named insured assumes the tort liability of another party to pay for personal or advertising injury arising out of the offense of false arrest, detention or imprisonment. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

- C. Solely for the purpose of the coverage provided by this paragraph, the following changes are made to the Section entitled SUPPLEMENTARY PAYMENTS - COVERAGES A AND B:
 - Paragraph 2.d. is replaced by the following:
 - d. The allegations in the suit and the information the Insurer knows about the offense alleged in such suit are such that no conflict appears to exist between the interests of the **insured** and the interests of the indemnitee:
 - 2. The first unnumbered paragraph beneath Paragraph 2.f.(2)(b) is deleted and replaced by the following:

So long as the above conditions are met, attorneys fees incurred by the Insurer in the defense of that indemnitee, necessary litigation expenses incurred by the Insurer, and necessary litigation expenses incurred by the indemnitee at the Insurer's request will be paid as defense costs. Notwithstanding the provisions of Paragraph e.(2) of the Contractual Liability exclusion (as amended by this Endorsement), such payments will not be deemed to be damages for personal and advertising injury and will not reduce the limits of insurance.

D. This PERSONAL AND ADVERTISING INJURY - LIMITED CONTRACTUAL LIABILITY Provision does not apply if Coverage B - Personal and Advertising Injury Liability is excluded by another endorsement attached to this Coverage Part.

17. PROPERTY DAMAGE – ELEVATORS

- A. Under COVERAGES, Coverage A Bodily Injury and Property Damage Liability, the paragraph entitled Exclusions is amended such that the Damage to Your Product Exclusion and subparagraphs (3), (4) and (6) of the **Damage to Property** Exclusion do not apply to **property damage** that results from the use of elevators.
- B. Solely for the purpose of the coverage provided by this PROPERTY DAMAGE ELEVATORS Provision, the **Other Insurance** conditions is amended to add the following paragraph:

This insurance is excess over any of the other insurance, whether primary, excess, contingent or on any other basis that is Property insurance covering property of others damaged from the use of elevators.

18. SUPPLEMENTARY PAYMENTS

The section entitled SUPPLEMENTARY PAYMENTS - COVERAGES A AND B is amended as follows:

- A. Paragraph 1.b. is amended to delete the \$250 limit shown for the cost of bail bonds and replace it with a \$5,000. limit: and
- B. Paragraph 1.d. is amended to delete the limit of \$250 shown for daily loss of earnings and replace it with a \$1,000. limit.

19. PROPERTY DAMAGE - PATTERNS MOLDS AND DIES

Under COVERAGES, Coverage A - Bodily Injury and Property Damage Liability, the paragraph entitled Exclusions is amended to delete subparagraphs (3) and (4) of the Exclusion entitled Damage to Property, but only with respect to patterns, molds or dies that are in the care, custody or control of the **insured**, and only if such patterns, molds or dies are not being used to perform operations at the time of loss. A limit of insurance of \$25,000 per policy period applies to this PROPERTY DAMAGE - PATTERNS MOLDS AND DIES coverage, and this limit:



Technology General Liability Extension Endorsement

- A. is included within the General Aggregate Limit as described in LIMITS OF INSURANCE; and
- **B.** applies excess over any valid and collectible property insurance available to the **Insured**, including any deductible applicable to such insurance; the **Other Insurance** condition is changed accordingly.

20. UNINTENTIONAL FAILURE TO DISCLOSE HAZARDS

If the **Named Insured** unintentionally fails to disclose all existing hazards at the inception date of the **Named Insured's Coverage Part**, the Insurer will not deny coverage under this **Coverage Part** because of such failure.

21. WAIVER OF SUBROGATION - BLANKET

Under CONDITIONS, the condition entitled Transfer Of Rights Of Recovery Against Others To Us is amended to add the following:

The Insurer waives any right of recovery the Insurer may have against any person or organization because of payments the Insurer makes for injury or damage arising out of:

- 1. the Named Insured's ongoing operations; or
- 2. your work included in the products-completed operations hazard.

However, this waiver applies only when the **Named Insured** has agreed in writing to waive such rights of recovery in a written contract or written agreement, and only if such contract or agreement:

- 1. is in effect or becomes effective during the term of this Coverage Part; and
- 2. was executed prior to the **bodily injury**, **property damage** or **personal and advertising injury** giving rise to the **claim**.

All other terms and conditions of the Policy remain unchanged.

This endorsement, which forms a part of and is for attachment to the Policy issued by the designated Insurers, takes effect on the effective date of said Policy at the hour stated in said Policy, unless another effective date is shown below, and expires concurrently with said Policy.

EXHIBIT C

FURTHER DESCRIPTION OF BASIC

ENGINEERING SERVICES AND

RELATED MATTERS

Last Name	First Name	Job Title	Contra	ct Pay Rate
Abdualla	Hesham	Staff Civil Engineer 1	\$	102.69
Adamcewicz	Walter	Staff Civil Eng. Tech. 1	\$	51.07
Alam	Md Shahriar	Staff Civil Engineer 1	\$	93.80
Alhasan	Ahmad	Senior Civil Engineer 1	\$	123.04
Anand	Pritha	Staff Civil Engineer 2	\$	105.55
Arabali	Poura	Staff Civil Engineer 1	\$	89.78
Becker	Chadwick	Senior Software Dev. 2	\$	153.14
Becker	Rachel	Staff Engineer 2	\$	98.10
Belitsos	Vince	Senior Civil Engineer 1	\$	119.89
Bell	Philip	Prin. Subj. Matter Exp. 1	\$	211.07
Belt	Jordan	Junior Civil Eng. Tech. 2	\$	43.33
Belt	Robin	Lead Tech.	\$	134.23
Bennett	Jacob	Senior Civil Eng. Tech. 1	\$	74.30
Bhardwaj	Saransh	Staff Software Engineer 2	\$	120.16
Bierman	Karl	Staff Civil Eng. Tech. 2	\$	51.36
Bittner	Jason	Prin. Subj. Matter Exp. 1	\$	262.40
Bledsoe	James	Prin. Civil Engineer 1	\$	203.04
Borgaonkar	Amruta	Staff Software Engineer 2	\$	117.01
Brennan	Gary	Staff Proposal Analyst	\$	103.83
Brink	Wouter	Senior Civil Engineer 1	\$	128.49
Carvajal	Mateo	Staff Civil Engineer 1	\$	91.22
Chesnik	Kevin	Prin. Civil Engineer 2	\$	270.43
Chung	HungWen	Staff Civil Engineer 1	\$	89.78
Cox	Craig	Staff Software Engineer 1	\$	132.79
Dalbey	Paul	Senior Civil Engineer 1	\$	127.63
D'Angelo	Daniel	Prin. Civil Engineer 2	\$	297.67
Darter	Michael	Prin. Civil Engineer 2	\$	244.62
DeMay	Kimberly	Senior Civil Eng. Tech. 1	\$	84.05
Dib	Joseph	Staff Civil Engineer 1	\$	107.27
DiMaggio	Jerome	Prin. Civil Engineer 2	\$	300.54
Donovan	Lori	Staff Office Admin.	\$	84.62
Donovan	Phillip	Prin. Civil Engineer 1	\$	230.57
Dunkin	Samuel	Senior Civil Eng. Tech. 1	\$	80.61
Dwyer	Carmine	Senior Civil Engineer 2	\$	152.86
Eckrich	Kristi	Senior Civil Eng. Tech. 2	\$	85.48
Elbagalati	Omar	Senior Civil Engineer 1	\$	129.64
Eshleman	Michael	Lead Tech.	\$	104.39
Flack	Kenneth	Staff Civil Eng. Tech. 1	\$	62.54
Gokhale	Salil	Prin. Civil Engineer 1	\$	225.98
Gopisetti	Leela Sai Pravee	en Staff Civil Engineer 1	\$	96.95

Last Name	First Name	Job Title	Contract	Pay Rate
Hagan	Justin	Staff Civil Eng. Tech. 1	\$	57.06
Hammell	Derek	Staff Civil Eng. Tech. 1	\$	53.08
Harrell	Michael	Prin. Civil Engineer 1	\$	204.48
Iqbal	Afnan	Junior Civil Engineer	\$	66.38
Juarez-Garcia	Jose	Senior Civil Eng. Tech. 2	\$	83.47
Kelly	Ethan	Staff Proposal Analyst	\$	98.96
Kennedy	Naoko	Senior Engineering Aide 1	\$	67.98
Keoughan	Jonathon	Lead Tech.	\$	109.85
Khanal	Shila	Staff Civil Engineer 2	\$	112.23
Kiselev	Elena	Graphics Artist 3	\$	82.61
Kivi	Aleks	Staff Civil Engineer 2	\$	95.57
Larson	Gregg	Prin. Civil Engineer 1	\$	196.15
Leach	Maxx	Staff Civil Engineer 2	\$	111.57
Lee	Hyung	Senior Civil Engineer 2	\$	144.54
Lee	Joshua	Staff Civil Eng. Tech. 2	\$	76.88
Lupton	Curtis	Staff Civil Eng. Tech. 1	\$	72.00
Malmberg	John	Junior Software Engineer	\$	90.05
Mitchaner	Jennifer	Staff Proposal Analyst	\$	106.70
Mitchell	Christopher	Staff Civil Eng. Tech. 1	\$	52.22
Mitchell	Gary	Business Dev. Manager	\$	142.83
Moon	Jung Yun	Staff Programmer Tech. 2	\$	71.70
Morse	Donovan	Senior Civil Eng. Tech. 2	\$	79.46
Mundo	William	Staff Civil Eng. Tech. 2	\$	62.83
Mundra	Shobhit	Staff Software Engineer 1	\$	91.49
Muraoka	Kazuhiko	Senior Syst. Dev. Spec. 1	\$	137.08
Musunuru	Gopi	Staff Civil Engineer 1	\$	89.78
Nabizadeh Shahri	Hadi	Staff Civil Engineer 2	\$	111.29
Nations	Charles	Lead Tech.	\$	91.50
Neunaber	Brendan	Staff Software Engineer 2	\$	96.36
Offei	Edward	Senior Civil Engineer 1	\$	109.85
Olidis	Chris	Prin. Civil Engineer 1	\$	234.59
Padgett	Noah	Technical Intern 2	\$	46.77
Pinder	Julie	Staff Office Admin.	\$	81.18
Premkumar	Laxmikanth	Senior Civil Engineer 1	\$	127.06
Ramirez	Leah	Staff Civil Eng. Tech. 2	\$	69.71
Rao	Shreenath	Prin. Civil Engineer 1	\$	215.95
Ravikumar	Shrivatsa	Staff Civil Engineer 2	\$	99.24
Reiter	Joseph	Senior Civil Engineer 1	\$	115.59
Rescot	Robert	Senior Civil Engineer 1	\$	140.53
Rockwood	Heidi	Project Assistant 4	\$	62.54

Last Name	First Name	Job Title	Contra	ct Pay Rate
Rummler	William	Senior Software Eng. 2	\$	157.15
Schaus	Lori	Senior Civil Engineer 1	\$	135.09
Silber	Hannah	Staff Civil Engineer 2	\$	106.13
Sims	John	Staff Civil Eng. Tech. 1	\$	55.09
Stampley	Bryan	Prin. Civil Engineer 1	\$	157.17
Steele	Douglas	Senior Civil Engineer 2	\$	135.66
Steele-Riffo	Lenny	Junior Civil Eng. Tech. 1	\$	50.50
Stefanski	Joseph	Senior Civil Engineer 2	\$	147.12
Subedi	Yogendra	Staff Civil Engineer 1	\$	94.08
Suwal	Roshan	Staff Civil Engineer 2	\$	97.81
Tarantella	Albert	Staff Civil Eng. Tech. 1	\$	53.08
Trent Baraka	Maryka	Senior Proposal Analyst	\$	115.88
Ulloa	Alvaro	Prin. Civil Engineer 1	\$	217.38
Vavrik	William	Engineering Director	\$	277.60
Von Quintus	Harold	Prin. Civil Engineer 2	\$	260.39
Waldrup	Holly	Staff Civil Eng. Tech. 2	\$	69.67
Walter	Jacob	Prin. Civil Engineer 1	\$	173.21
Wilhoit	Torry	Junior App. Syst. Analyst	\$	86.61
Wilke	Paul	Prin. Civil Engineer 1	\$	210.21
Williams	Robert	Prin. Civil Engineer 1	\$	170.07
Wilson	Emmanuel	Staff Civil Eng. Tech. 1	\$	54.80
Wilson	Joshua	Junior Civil Eng. Tech. 2	\$	52.18
Wilson	Thomas	Senior Civil Engineer 2	\$	159.46
Zakoske	Nicholas	Staff Civil Eng. Tech. 1	\$	55.37
Zhang	Yanbin	Staff Software Engineer 2	\$	109.55

Equipment	Units	Unit Rate
Core Truck	day	\$ 660.00
Friction Testing	day	\$ 2,100.00
3D GPR	day	\$ 3,280.00
Falling Weight Deflectometer	day	\$ 1,580.00
Pavement Marking MRU	day	\$ 660.00
Standard Vehicle	mile	\$ 0.80
Digital Survey Vehicle	day	\$ 1,910.00
Travel	At Cost	
Hosting Fees	At Cost	



APPLIED RESEARCH ASSOCIATES, INC.

[Date]

[LFUCG Project Manager] [Title] Department of Environmental Quality and Public Works Lexington-Fayette Urban County Government 200 E. Main St., Suite 936 [Phone] [email]

Subject: Modification [X] to 2021 Pavement Management Update

Dear [LFUCG Project Manager]:

Applied Research Associates (ARA), Inc. appreciates the opportunity to submit to the attached proposed modification to the 2021 Pavement Management Update.

[Executive Summary]

Please indicate your acceptance of this agreement by signing Section 6 upon agreement with the enclosed scope of work and approval by all necessary LFUCG authorities. If you have any questions or need additional information, please do not hesitate to contact the ARA Project Manager, Jacob Walter at (717) 975-3550 or jwalter@ara.com.

Sincerely,

Jacob Walter, P.E. Principal Engineer, Transportation [Corporate Officer, ARA] [Corporate Officer Title]

- 1 PROJECT UNDERSTANDING
- 2 SCOPE OF SERVICES
- 2.1 TASK 1
- 2.2 TASK 2
- 2.3 TASK 3
- **3 PROJECT SCHEDULE**

4 DELIVERABLES

ARA will provide the following deliverables:

Deliverable	Due Date
	Can be calendar date or relative to other events

5 PROJECT PRICE

ARA will provide the services noted in this proposal based on the rate table provided in Exhibit C of the contract. This modification shall add **\$[X]** to the original contract. The details of this cost are provided below:

Staff/Equipment	Quantity	Cost

ARA will invoice monthly on a percent complete basis for payment to be made within 30 days of receipt of invoice (Net 30).



6 ACCEPTANCE OF PROPOSAL

Your signature below indicates your acceptance of this proposal in accordance with the scope, price, schedule, and the terms and conditions contained herein, and will create a binding agreement between you and ARA. This acceptance will act as a notice to proceed.

Acceptance and Authorization
Name (print)
Title
Signature:
Date:

