

Airport Name: Rosecrans Memorial Airport  
Project No.: 21-012A-02  
County: Buchanan County

**AVIATION PROJECT CONSULTANT AGREEMENT**  
(FEDERAL ASSISTANCE)  
(Revision 04/11/2018)

THIS AGREEMENT is entered into by Aviation, A Woolpert Company (hereinafter the "Consultant"), and the City of St. Joseph, Missouri, (hereinafter the "Sponsor").

WITNESSETH:

WHEREAS, the Sponsor has selected the Consultant to perform professional services to accomplish a project at the Rosecrans Memorial Airport; and

WHEREAS, while neither the Missouri Department of Transportation (MoDOT) nor the Federal Aviation Administration (FAA) is a party to this Agreement, MoDOT and/or FAA land acquisition, environmental, planning, design and construction criteria and other requirements will be utilized unless specifically approved otherwise by MoDOT; and

WHEREAS, the Sponsor intends to accomplish a project at the Rosecrans Memorial Airport as listed in Exhibit I of this Agreement, entitled "Project Description", which is attached hereto and made a part of this Agreement.

NOW, THEREFORE, in consideration of the payments to be made and the covenants set forth in this Agreement to be performed by the Sponsor, the Consultant hereby agrees that it shall faithfully perform the professional services called for by this Agreement in the manner and under the conditions described in this Agreement.

(1) DEFINITIONS: The following definitions apply to these terms, as used in this Agreement:

(A) "SPONSOR" means the owner of the airport referenced above.

(B) "SPONSOR'S REPRESENTATIVE" means the person or persons designated in Section (23)(A) of this agreement by the Sponsor to represent the Sponsor in negotiations, communications, and various other contract administration dealings with the Consultant.

(C) "MoDOT" means the Missouri Department of Transportation, an executive branch agency of state government, which acts on behalf of the Missouri Highways and Transportation Commission.

(D) "CONSULTANT" means the firm providing professional services to the Sponsor as a party to this Agreement.

(E) "CONSULTANT'S REPRESENTATIVE" means the person or persons designated in Section (23)(B) of this agreement by the Consultant to represent that firm in negotiations, communications, and various other contract administration dealings with the Sponsor.

(F) "DELIVERABLES" means all drawings and documents prepared in performance of this Agreement, to be delivered to and become the property of the Sponsor pursuant to the terms and conditions set out in Section (12) of this Agreement.

(G) "DISADVANTAGED BUSINESS ENTERPRISE (DBE)" means an entity owned and controlled by a socially and economically disadvantaged individual as defined in 49 Code of Federal Regulations (CFR) Part 26, which is certified as a DBE firm in Missouri by MoDOT. Appropriate businesses owned and controlled by women are included in this definition.

(H) "FAA" means the Federal Aviation Administration within the United States Department of Transportation (USDOT), headquartered at Washington, D.C., which acts through its authorized representatives.

(I) "INTELLECTUAL PROPERTY" consists of copyrights, patents, and any other form of intellectual property rights covering any data bases, software, inventions, training manuals, systems design or other proprietary information in any form or medium.

(J) "SUBCONSULTANT" means any individual, partnership, corporation, or joint venture to which the Consultant, with the written consent of the Sponsor, subcontracts any part of the professional services under this Agreement but shall not include those entities which supply only materials or supplies to the Consultant.

(K) "SUSPEND" the services means that the services as contemplated herein shall be stopped on a temporary basis. This stoppage will continue until the Sponsor either decides to terminate the project or reactivate the services under the conditions then existing.

(L) "TERMINATE", in the context of this Agreement, means the cessation or quitting of this Agreement based upon the action or inaction of the Consultant, or the unilateral cancellation of this Agreement by the Sponsor.

(M) "USDOT" means the United States Department of Transportation, headquartered at Washington, D.C., which acts through its authorized representatives.

(N) "SERVICES" includes all professional engineering and related services and the furnishing of all equipment, supplies, and materials in conjunction with

such services as are required to achieve the broad purposes and general objectives of this Agreement.

(2) SCOPE OF SERVICES:

(A) The services covered by this Agreement shall include furnishing the professional, technical, and other personnel and the equipment, material and all other things necessary to accomplish the proposed project detailed in Exhibit I of this Agreement.

(B) The specific services to be provided by the Consultant are set forth in Exhibit II of this Agreement, entitled "Scope of Services," which is attached hereto and made a part of this Agreement.

(3) ADDITIONAL SERVICES: The Sponsor reserves the right to direct additional services not described in Exhibit II as changed or unforeseen conditions may require. Such direction by the Sponsor shall not be a breach of this Agreement. In this event, a Supplemental Agreement will be negotiated and executed prior to the Consultant performing the additional or changed services, or incurring any additional cost for those additional services. Any changes in the maximum compensation and fee, or time and schedule of completion, will be covered in the Supplemental Agreement. Supplemental Agreements must be approved by MoDOT to ensure additional funding is available.

(4) INFORMATION AND SERVICES PROVIDED BY THE SPONSOR:

(A) At no cost to the Consultant and in a timely manner, the Sponsor will provide available information of record which is pertinent to this project to the Consultant upon request. In addition, the Sponsor will provide the Consultant with the specific items or services set forth in Exhibit III of this Agreement, entitled "Services Provided by the Sponsor", which is attached hereto and made a part of this Agreement. The Consultant shall be entitled to rely upon the accuracy and completeness of such information, and the Consultant may use such information in performing services under this Agreement.

(B) The Consultant shall review the information provided by the Sponsor and will as expeditiously as possible advise the Sponsor of any of that information which the Consultant believes is inaccurate or inadequate or would otherwise have an effect on its design or any of its other activities under this Agreement. In such case, the Consultant shall provide new or verified data or information as necessary to meet the standards required under this Agreement. Any additional work required of the Consultant as the result of inaccurate or inadequate information provided by the Sponsor will be addressed per the provisions of Section (3) of this Agreement. The Consultant shall not be liable for any errors, omissions, or deficiencies resulting from inaccurate or inadequate information furnished by the Sponsor which inaccuracies or inadequacies are not detected by the Consultant, unless the errors should have been detected by the Consultant through reasonable diligence.

(5) RESPONSIBILITY OF THE CONSULTANT:

(A) The Consultant shall comply with applicable local, state and federal laws and regulations governing these services, as published and in effect on the date of this Agreement. The Consultant shall provide the services in accordance with the criteria and requirements established and adopted by the Sponsor; and if none are expressly established in this Agreement, published manuals and policies of MoDOT and FAA which shall be furnished by the Sponsor upon request; and, absent the foregoing, manuals and policies of the FAA, as published and in effect on the date of this Agreement.

(B) Without limiting the foregoing, land acquisition, environmental, planning, design and construction criteria will be in accordance with the information set out in Exhibit II of this Agreement.

(C) The Consultant shall be responsible for the professional quality, technical accuracy, and the coordination of designs, drawings, specifications, and other services furnished under this Agreement. At any time during construction of the Sponsor project associated with this Agreement or during any phase of work performed by others on said project that is based upon data, plans, designs, or specifications provided by the Consultant, the Consultant shall prepare any data, plans, designs, or specifications needed to correct any negligent acts, errors, or omissions of the Consultant or anyone for whom it is legally responsible in failing to comply with the foregoing standard. The services necessary to correct such negligent acts, errors, or omissions shall be performed without additional compensation, even though final payment may have been received by the Consultant. The Consultant shall provide such services as expeditiously as is consistent with professional performance. Acceptance of the services will not relieve the Consultant of the responsibility to correct such negligent acts, errors, or omissions.

(D) Completed design reports, plans and specifications, plans and specifications submitted for review by permit authorities, and plans and specifications issued for construction shall be signed, sealed, and dated by a Professional Engineer registered in the State of Missouri. Incomplete or preliminary plans or other documents, when submitted for review by others, shall not be sealed, but the name of the responsible engineer, along with the engineer's Missouri registration number, shall be indicated on the design report, plans and specifications or included in the transmittal document. In addition, the phrase "Preliminary - Not for Construction," or similar language, shall be placed on the incomplete or preliminary plan(s) in an obvious location where it can readily be found, easily read, and not obscured by other markings, as a disclosure to others that the design report, plans and specifications are incomplete or preliminary. When the design report, plans and specifications are completed, the phrase "Preliminary - Not for Construction" or similar language shall be removed and the design report, plans and specifications shall thereupon be sealed.

(E) The Consultant shall cooperate fully with the Sponsor's activities on adjacent projects as may be directed by the Sponsor. This shall include attendance at meetings, discussions, and hearings as requested by the Sponsor. The minimum number and location of meetings shall be defined in Exhibit II.

(F) In the event any lawsuit or court proceeding of any kind is brought against the Sponsor, arising out of or relating to the Consultant's activities or services performed under this Agreement or any project of construction undertaken employing the deliverables provided by the Consultant in performing this Agreement, the Consultant shall have the affirmative duty to assist the Sponsor in preparing the Sponsor's defense, including, but not limited to, production of documents, trials, depositions, or court testimony. Any assistance given to the Sponsor by the Consultant will be compensated at an amount or rate negotiated between the Sponsor and the Consultant as will be identified in a separate agreement between the Sponsor and the Consultant. To the extent the assistance given to the Sponsor by the Consultant was necessary for the Sponsor to defend claims and liability due to the Consultant's negligent acts, errors, or omissions, the compensation paid by the Sponsor to the Consultant will be reimbursed to the Sponsor.

(6) NO SOLICITATION WARRANTY: The Consultant warrants that it has not employed or retained any company or person, other than a bona fide employee working for the Consultant, to solicit or secure this Agreement, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the Sponsor will have the right to terminate this Agreement without liability, or at its discretion, to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gifts, or contingent fee, plus costs of collection including reasonable attorney's fees.

(7) DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS:

(A) DBE Goal: The following DBE goal has been established for this Agreement. The dollar value of services and related equipment, supplies, and materials used in furtherance thereof which is credited toward this goal will be based on the amount actually paid to DBE firms. The goal for the percentage of services to be awarded to DBE firms is 0% of the total Agreement dollar value.

(B) Eligibility of DBE's: Only those firms currently certified as DBE's by MoDOT, City of St. Louis/Lambert Airport Authority, Metro, City of Kansas City, and Kansas City Area Transportation Authority are eligible to participate as DBEs on this contract. A list of these firms is available on MoDOT's Office of External Civil Rights webpage at the following address under the MRCC DBE Directory:

[http://www.modot.org/business/contractor\\_resources/External\\_Civil\\_Rights/DBE\\_program.htm](http://www.modot.org/business/contractor_resources/External_Civil_Rights/DBE_program.htm)

(C) Consultant's Certification Regarding DBE Participation: The Consultant's signature on this Agreement constitutes the execution of all DBE certifications which are a part of this Agreement. The Consultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. The Consultant shall carry out applicable requirements of 49 CFR Part 26 in the award

and administration of DOT assisted contracts. Failure by the Consultant to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy as the Sponsor deems appropriate, which may include, but is not limited to: withholding monthly progress payments; assessing sanctions; liquidated damages; and/or disqualifying the Consultant from future bidding as non-responsible.

1. Policy: It is the policy of the USDOT and the Sponsor that businesses owned by socially and economically disadvantaged individuals (DBEs) as defined in 49 CFR Part 26 have the maximum opportunity to participate in the performance of contracts financed in whole or in part with federal funds. Thus, the requirements of 49 CFR Part 26 apply to this Agreement.

2. Obligation of the Consultant to DBEs: The Consultant agrees to assure that DBEs have the maximum opportunity to participate in the performance of this Agreement and any subconsultant agreement financed in whole or in part with federal funds. In this regard the Consultant shall take all necessary and reasonable steps to assure that DBEs have the maximum opportunity to compete for and perform services. The Consultant shall not discriminate on the basis of race, color, religion, creed, disability, sex, age, or national origin in the performance of this Agreement or in the award of any subsequent subconsultant agreement. The Consultant shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT assisted agreements and contracts. Failure by the Consultant to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy, as the recipient deems appropriate.

3. Geographic Area for Solicitation of DBEs: The Consultant shall seek DBEs in the same geographic area in which the solicitation for other Subconsultants is made. If the Consultant cannot meet the DBE goal using DBEs from that geographic area, the Consultant shall, as a part of the effort to meet the goal, expand the search to a reasonably wider geographic area.

4. Determination of Participation Toward Meeting the DBE Goal: DBE participation shall be counted toward meeting the goal as follows:

A. Once a firm is determined to be a certified DBE, the total dollar value of the subconsultant agreement awarded to that DBE is counted toward the DBE goal set forth above.

B. The Consultant may count toward the DBE goal a portion of the total dollar value of a subconsultant agreement with a joint venture eligible under the DBE standards equal to the percentage of the ownership and control of the DBE partner in the joint venture.

C. The Consultant may count toward the DBE goal expenditures to DBEs who perform a commercially useful function in the completion of services required in this Agreement. A DBE is considered to perform a commercially

useful function when the DBE is responsible for the execution of a distinct element of the services specified in the Agreement and the carrying out of those responsibilities by actually performing, managing and supervising the services involved and providing the desired product.

D. A Consultant may count toward the DBE goal its expenditures to DBE firms consisting of fees or commissions charged for providing a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for the performance of this Agreement, provided that the fee or commission is determined by the Sponsor to be reasonable and not excessive as compared with fees customarily allowed for similar services.

E. The Consultant is encouraged to use the services of banks owned and controlled by socially and economically disadvantaged individuals.

5. Replacement of DBE Subconsultants: The Consultant shall make good faith efforts to replace a DBE Subconsultant who is unable to perform satisfactorily with another DBE Subconsultant. Replacement firms must be approved by the Sponsor and MoDOT.

6. Verification of DBE Participation: Prior to the release of the retained percentage by the Sponsor, the Consultant shall file a list with the Sponsor showing the DBEs used and the services performed. The list shall show the actual dollar amount paid to each DBE that is applicable to the percentage participation established in this Agreement. Failure on the part of the Consultant to achieve the DBE participation specified in this Agreement may result in sanctions being imposed on the Sponsor for noncompliance with 49 CFR Part 26. If the total DBE participation is less than the goal amount stated by the Sponsor, the Sponsor may sustain damages, the exact extent of which would be difficult or impossible to ascertain. Therefore, in order to liquidate such damages, the monetary difference between the amount of the DBE goal dollar amount and the amount actually paid to the DBEs for performing a commercially useful function will be deducted from the Consultant's payments as liquidated damages. If this Agreement is awarded with less than the goal amount stated above by the Sponsor, that lesser amount shall become the goal amount and shall be used to determine liquidated damages. No such deduction will be made when, for reasons beyond the control of the Consultant, the DBE goal amount is not met.

7. Documentation of Good Faith Efforts to Meet the DBE Goal: The Agreement goal established by the Sponsor is stated above in Subsection (7)(A). The Consultant must document the good faith efforts it made to achieve that DBE goal, if the agreed percentage specified in Subsection (7)(C)(8) below is less than the percentage stated in Subsection (7)(A). Good faith efforts to meet this DBE goal amount may include such items as, but are not limited to, the following:

A. Attended a meeting scheduled by the Sponsor to inform DBEs of contracting or consulting opportunities.

B. Advertised in general circulation trade association and socially and economically disadvantaged business directed media concerning DBE subcontracting opportunities.

C. Provided written notices to a reasonable number of specific DBEs that their interest in a subconsultant agreement is solicited in sufficient time to allow the DBEs to participate effectively.

D. Followed up on initial solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested in subconsulting work for this Agreement.

E. Selected portions of the services to be performed by DBEs in order to increase the likelihood of meeting the DBE goal (including, where appropriate, breaking down subconsultant agreements into economically feasible units to facilitate DBE participation).

F. Provided interested DBEs with adequate information about plans, specifications and requirements of this Agreement.

G. Negotiated in good faith with interested DBEs, and did not reject DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities.

H. Made efforts to assist interested DBEs in obtaining any bonding, lines of credit or insurance required by the Sponsor or by the Consultant.

I. Made effective use of the services of available disadvantaged business organizations, minority contractors' groups, disadvantaged business assistance offices, and other organizations that provide assistance in the recruitment and placement of DBE firms.

8. DBE Participation Obtained by Consultant: The Consultant has obtained DBE participation and agrees to use DBE firms to complete at least 0% of the total services to be performed under this Agreement, by dollar value. All DBE firms which the Consultant intends to use, including DBE firm participation above and beyond the goal established in Subsection (7)(A), and the type and dollar value of the services each DBE will perform, is as follows:



(A) DBE NAME AND ADDRESS	(B) TYPE OF DBE SERVICE	(C) DOLLAR VALUE OF DBE SUB- CONTRACT	(D) PERCENT APPLICABL E TO DBE GOAL (100%, 60%)	(E) DOLLAR AMOUNT APPLICABLE TO DBE GOAL (C x D)	(F) PERCENT OF TOTAL CONTRACT (C / TOTAL CONTRACT AMOUNT)
N/A				\$0	0%
TOTAL DBE PARTICIPATION				\$0	0%

9. Good Faith Efforts to Obtain DBE Participation: If the Consultant's agreed DBE goal amount as specified in Subsection (7)(C)(8) is less than the Sponsor's DBE goal given in Subsection (7)(A), then the Consultant certifies good faith efforts were taken by Consultant in an attempt to obtain the level of DBE participation set by the Sponsor in Subsection (7)(A). Documentation of the Consultant's good faith efforts is to be submitted with this Agreement to the Sponsor and a copy submitted to MoDOT.

(8) SUBCONSULTANTS:

(A) The Consultant agrees that except for those firms and for those services listed below, there shall be no transfer of engineering services performed under this Agreement without the written consent of the Sponsor. Subletting, assignment, or transfer of the services or any part thereof to any other corporation, partnership, or individual is expressly prohibited. Any violation of this clause will be deemed cause for termination of this Agreement.

EXCEPTIONS (Subconsultant information):

List all Subconsultant(s) to be used for any piece of work outlined in this agreement, excluding DBE Firms listed in the DBE Participation Subsection (7)(C)(8), DBE Participation Obtained by Consultant, in this agreement. If none, write "N/A" in the first row of the first column.

FIRM NAME	COMPLETE ADDRESS	NATURE OF SERVICES	SUBCONTRACT AMOUNT

(B) The Consultant agrees and shall require the selected Subconsultants to maintain books, documents, papers, accounting records, and other evidence pertaining to direct costs and expenses incurred under the Agreement and to make such materials available at their offices at reasonable times during the Agreement period and for three (3) years from the date of final payment under the Agreement for inspection by the Sponsor or any of its authorized representatives (or any authorized representative of MoDOT or the federal government), and copies thereof shall be furnished.

(C) Unless waived or modified by the Sponsor, the Consultant agrees to require, and shall provide evidence to the Sponsor, that those Subconsultants shall maintain commercial general liability, automobile liability, professional liability and worker's compensation and employer's liability insurance, or alternatively, a comparable umbrella insurance policy submitted to and approved by MoDOT, for not less than the period of services under such subconsultant agreements, and in an amount equal to the Sponsor's sovereign immunity caps as stated in section 537.600 RSMo and subsequently adjusted by the Missouri Department of Insurance. If the statutory limit of liability for a type of liability specified in this section is repealed or does not exist, the minimum coverage shall not be less than the following amounts:

1. Commercial General Liability: \$500,000.00 per person up to \$3,000,000.00 per occurrence;
2. Automobile Liability: \$500,000.00 per person up to \$3,000,000.00 per occurrence;
3. Worker's Compensation in accordance with the statutory limits; and Employer's Liability: \$1,000,000.00; and
4. Professional Liability: \$1,000,000.00, each claim and in the annual aggregate.

(D) The subletting of the services will in no way relieve the Consultant of its primary responsibility for the quality and performance of the services to be performed hereunder, and the Consultant shall assume full liability for the services performed by its Subconsultants.

(E) The payment for the services of any Subconsultants will be reimbursed at cost by the Sponsor in accordance with the submitted invoices for such services, as set forth in Section (9), entitled "Fees and Payments".

(F) The Consultant agrees to furnish a list of any MoDOT-approved DBE Subconsultants under this Agreement upon the request of the Sponsor or MoDOT. Further, the Consultant agrees to report to the Sponsor on a monthly basis the actual payments made by the Consultant to such DBE Subconsultants.

(G) The Consultant agrees that any agreement between the Consultant and any Subconsultant shall be an actual cost plus fixed fee agreement if the amount of the agreement between the Consultant and Subconsultant exceeds Twenty-Five Thousand Dollars (\$25,000). Subconsultant agreements for amounts of \$25,000 or less may be lump sum or actual cost plus fixed fee as directed by the Sponsor.

(9) FEES AND PAYMENTS:

(A) The Consultant shall not proceed with the services described herein until the Consultant receives written authorization in the form of a Notice to Proceed from the Sponsor.

(B) The amount to be paid to the Consultant by the Sponsor as full remuneration for the performance of all services called for in this Agreement will be on the following basis, except that the lump sum fee for labor, overhead and profit plus other costs will not exceed a maximum amount payable of **\$1,624,283.70**, which is shown in Exhibit IV, "Derivation of Consultant Project Costs", and Exhibit V, "Engineering Basic and Special Services-Cost Breakdown" attached hereto and made a part of this Agreement. Payment under the provisions of this Agreement is limited to those costs incurred in accordance with generally accepted accounting principles to the extent they are considered necessary to the execution of the item of service.

(C) The Consultant's fee shall include the hourly salary of each associate and employee, salary-related expenses, general overhead, and direct non-salary costs as allowed by 48 CFR Part 31, the Federal Acquisition Regulations (FAR), and 23 CFR 172, Procurement, Management, and Administration of Engineering and Design Related Services. The hourly salary of each associate and employee is defined as the actual productive salaries expended to perform the services. The other billable costs for the project are defined as follows:

1. Salary-related expenses are additions to payroll cost for holidays, sick leave, vacation, group insurance, worker's compensation insurance, social security taxes (FICA), unemployment insurance, disability taxes, retirement benefits, and other related items.

2. General overhead cost additions are for administrative salaries (including non-productive salaries of associates and employees), equipment rental and maintenance, office rent and utilities, office maintenance, office supplies, insurance, taxes, professional development expenses, legal and audit fees, professional dues and licenses, use of electronic computer for accounting, and other related items.

3. Direct non-salary costs incurred in fulfilling the terms of this Agreement, such as but not limited to travel and subsistence, subcontract services, reproductions, computer charges, materials and supplies, and other related items, will be charged at actual cost without any override or additives.

4. The additions to productive salaries for Items in Subsections (9)(C) 1 and 2 will be established based on the latest audit.

5. The Consultant shall provide a detailed man hour/cost breakdown for each phase of the project indicating each job classification with base wage rates and the number of hours associated with each phase. The breakdown shall include work activities and be in sufficient detail to reflect the level of effort involved. This information shall be attached hereto and made a part of this Agreement as Exhibit V "Engineering Basic and Special Services -Cost Breakdown".

6. The Consultant shall provide a detailed breakdown of all Subconsultant fees, including overhead and profit, when requested by the Sponsor and/or MoDOT. Once the cumulative amount to be paid to a Subconsultant by the Consultant, as full remuneration for the performance of services, as called for in this Agreement and any supplemental agreements hereafter, equals or exceeds Twenty-Five Thousand Dollars (\$25,000), submittal of a separate Exhibit IV, "Derivation of Consultant Project Costs" and Exhibit V, "Engineering Basic and Special Services-Cost Breakdown", prepared to solely reflect the Subconsultant's fees shall be attached hereto and made a part of this Agreement, subject to the process described in Section (3) of this Agreement. These Exhibits prepared to reflect the Subconsultant's fees shall be labeled Exhibit IV-A and Exhibit V-A, respectively.

7. The Consultant shall provide a detailed breakdown of all travel expense, living expense, reproduction expense, and any other expense that may be incurred throughout the project. These expenses must be project specific and not covered in or by an overhead rate.

8. The property and equipment used on this project such as automotive vehicles, survey equipment, office equipment, etc., shall be owned, rented, or leased by the Consultant, and charges will be made to the project for the use of such property at the rate established by company policies and practices. Approval of the Sponsor and MoDOT will be required prior to acquisition of reimbursable special equipment.

9. The Consultant agrees to pay each Subconsultant under this Agreement for satisfactory performance of its contract no later than 15 days from the Consultant's receipt of each payment the Consultant receives from the Sponsor. The Consultant agrees further to return retainage payments to each Subconsultant within 15 days after the Subconsultant's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Sponsor. This clause applies to both DBE and non-DBE Subconsultants.

(D) The Consultant shall submit an invoice for services rendered to the Sponsor not more than once every month. A progress summary indicating the current status of the services shall be submitted along with each invoice. Upon receipt of the invoice and progress summary, the Sponsor will, as soon as practical, but not later than

30 days from receipt, pay the Consultant for the services rendered, including the proportion of the fixed fee earned as reflected by the estimate of the portion of the services completed as shown by the progress summary, less partial payments previously made. A late payment charge of one and one half percent (1.5%) per month shall be assessed for those invoiced amounts not paid, through no fault of the Consultant, within 30 days after the Sponsor's receipt of the Consultant's invoice. The Sponsor will not be liable for the late payment charge on any invoice which requests payment for costs which exceed the proportion of the maximum amount payable earned as reflected by the estimate of the portion of the services completed, as shown by the progress summary. The payment, other than the fixed fee, will be subject to final audit of actual expenses incurred during the period of the Agreement.

(E) The Sponsor may hold a percentage of the amount earned by the Consultant, not to exceed two percent (2%), until 100% of services as required by Section (2), "Scope of Services," of this Agreement are completed and have been received and approved by the Sponsor and MoDOT. The payment will be subject to final audit of actual expenses during the period of the Agreement. Upon completion and acceptance of all services required by Section (2), "Scope of Services," the two percent (2%) retainage will be paid to the Consultant. As an alternative to withholding two percent (2%) retainage as set forth above, the Sponsor may accept a letter of credit or the establishment of an escrow account in the amount of said retainage and upon such other terms and conditions as may be acceptable to the Sponsor and the Consultant. If a letter of credit or escrow account is not acceptable to the Sponsor, then the percent retainage will control.

(10) PERIOD OF SERVICE:

(A) The services, and if more than one, then each phase thereof, shall be completed in accordance with the schedule contained in Exhibit VI, "Performance Schedule," attached hereto and made a part of this Agreement. The Consultant and the Sponsor will be required to meet this schedule.

(B) The Consultant and Sponsor will be required to meet the schedules in this Agreement. The Sponsor will grant time extensions for delays due to unforeseeable causes beyond the control of and without fault or negligence of the Consultant and no claim for damage shall be made by either party. Requests for extensions of time shall be made in writing by the Consultant before that phase of work is scheduled to be completed, stating fully the events giving rise to the request and justification for the time extension requested. The anticipated date of completion of the work, including review time, is stated in Exhibit VI of this Agreement. An extension of time shall be the sole allowable compensation for any such delays, except as otherwise provided in Section (3) for additional/changed work and differing/unforeseen conditions. Any extensions or additional costs shall be subject to MoDOT approval.

(C) As used in this provision, the term "delays due to unforeseeable causes" include but are not limited to the following:

1. War or acts of war, declared or undeclared;
2. Flooding, earthquake, or other major natural disaster preventing the Consultant from performing necessary services at the project site, or in the Consultant's offices, at the time such services must be performed;
3. The discovery on the project of differing site conditions, hazardous substances, or other conditions which, in the sole judgment of the Sponsor, justifies a suspension of the services or necessitates modifications of the project design or plans by the Consultant;
4. Court proceedings;
5. Changes in services or extra services.

(11) TERMINATION OF AGREEMENT – 2 CFR § 200 Appendix II(B):

(A) Termination for Convenience:

1. The Sponsor may, by written notice to the Consultant, terminate this Agreement for its convenience and without cause or default on the part of the Consultant. Upon receipt of the notice of termination, except as explicitly directed by the Sponsor, the Consultant must immediately discontinue all services affected.
2. Upon termination of the Agreement, the Consultant must deliver to the Sponsor all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Consultant under this Agreement, whether complete or partially complete.
3. The Sponsor agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.
4. The Sponsor further agrees to hold the Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

(B) Termination for Default:

1. Either party may terminate this Agreement for cause if the other party fails to fulfill its obligations that are essential to the completion of the work per the terms and conditions of the Agreement. The party initiating the termination action must allow the breaching party an opportunity to dispute or cure the breach.
2. The terminating party must provide the breaching party seven days advance written notice of its intent to terminate the Agreement. The notice must

specify the nature and extent of the breach, the conditions necessary to cure the breach, and the effective date of the termination action. The rights and remedies in this clause are in addition to any other rights and remedies provided by law or under this agreement.

3. Termination by the Sponsor:

a. The Sponsor may terminate this Agreement, in whole or in part, for the failure of the Consultant to:

i. Perform the services within the time specified in this Agreement or by Sponsor-approved extension;

ii. Make adequate progress so as to endanger satisfactory performance of the Project; or

iii. Fulfill the obligations of the Agreement that are essential to the completion of the Project.

b. Upon receipt of the notice of termination, the Consultant must immediately discontinue all services affected unless the notice directs otherwise. Upon termination of the Agreement, the Consultant must deliver to the Sponsor all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Consultant under this Agreement, whether complete or partially complete.

c. The Sponsor agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

d. The Sponsor further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

e. If, after finalization of the termination action, the Sponsor determines the Consultant was not in default of the Agreement, the rights and obligations of the parties shall be the same as if the Sponsor issued the termination for the convenience of the Sponsor.

4. Termination by Consultant:

a. The Consultant may terminate this Agreement in whole or in part, if the Sponsor:

i. Defaults on its obligations under this Agreement;

ii. Fails to make payment to the Consultant in accordance with the terms of this Agreement; or

iii. Suspends the Project for more than one hundred eighty (180) days due to reasons beyond the control of the Consultant.

b. Upon receipt of a notice of termination from the Consultant, the Sponsor agrees to cooperate with the Consultant for the purpose of terminating the Agreement or a portion thereof, by mutual consent. If the Sponsor and Consultant cannot reach mutual agreement on the termination settlement, the Consultant may, without prejudice to any rights and remedies it may have, proceed with terminating all or parts of this Agreement based upon the Sponsor's breach of the Agreement.

c. In the event of termination due to Sponsor breach, the Consultant is entitled to invoice the Sponsor and to receive full payment for all services performed or furnished in accordance with this Agreement and all justified reimbursable expenses incurred by the Consultant through the effective date of termination action. The Sponsor agrees to hold the Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

(12) OWNERSHIP OF DRAWINGS AND DOCUMENTS:

(A) All drawings and documents prepared in performance of this Agreement shall be delivered to and become the property of the Sponsor upon suspension, abandonment, cancellation, termination, or completion of the Consultant's services hereunder; provided, however,

1. The Consultant shall have the right to their future use with written permission of the Sponsor;

2. The Consultant shall retain its rights in its standard drawing details, designs, specifications, CADD files, databases, computer software, and any other proprietary property; and

3. The Consultant shall retain its rights to intellectual property developed, utilized, or modified in the performance of the services subject to the following:

A. Copyrights. Sponsor, as the contracting agency, reserves a royalty-free, nonexclusive and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, for Governmental purposes:

I. The copyright in any works developed under this Agreement, or under a subgrant or contract under this Agreement; and



II. Any rights of copyright to which Sponsor, its Consultant or Subconsultant purchases ownership with payments provided by this Agreement.

B. Patents. Rights to inventions made under this Agreement shall be determined in accordance with 37 CFR Part 401. The standard patent rights clause at 37 CFR § 401.14, as modified below, is hereby incorporated by reference.

I. The terms "to be performed by a small business firm or domestic nonprofit organization" shall be deleted from paragraph (g)(1) of the clause;

II. Paragraphs(g)(2) and (g)(3) of the clause shall be deleted; and

III. Subsection (l) of the clause, entitled "communication" shall read as follows: "(l) Communication. All notifications required by this clause shall be submitted to the Sponsor".

IV. The following terms in 37 CFR 401.14 shall for the purpose of this Agreement have the following meaning:

Contractor - Consultant

Government and Federal Agency - Sponsor

Subcontractor - Subconsultant

4. Basic survey notes, design computations, and other data prepared under this Agreement shall be made available for use by the Sponsor without further compensation and without restriction or limitation on their use.

(B) Electronically Produced Documents:

1. Electronically produced documents will be submitted to the Sponsor, MoDOT, and/or FAA in data files compatible with CAD 2018 and Adobe PDF. The Consultant makes no warranty as to the compatibility of the data files beyond the above specified release or version of the stated software.

2. Because data stored on electronic media can deteriorate undetected or be modified without the Consultant's knowledge, the electronic data files submitted to the Sponsor will have an acceptance period of 60 calendar days after receipt by the Sponsor. If during that period the Sponsor finds any errors or omissions in the files, the Consultant will correct the errors or omissions as a part of this Agreement.

However, any changes requested by the Sponsor during the 60 calendar day acceptance period that constitute Additional Services under Section (3) shall be compensated in accordance with the terms of the Agreement. The Consultant will not be responsible for maintaining copies of the submitted electronic data files after the acceptance period.

3. Any changes requested after the acceptance period will be considered additional services for which the Consultant shall be reimbursed at the hourly rates established herein plus the cost of materials.

4. The data on the electronic media shall not be considered the Consultant's instrument of service. Only the submitted hard copy documents with the Consultant Engineer's seal on them will be considered the instrument of service. The Consultant's nameplate shall be removed from all electronic media provided to the Sponsor.

(C) The Sponsor may incorporate any portion of the deliverables into a project other than that for which they were performed, without further compensation to the Consultant; provided however, that (1) such deliverables shall thereupon be deemed to be the work product of the Sponsor, and the Sponsor shall use same at its sole risk and expense; and (2) the Sponsor shall remove the Consultant's name, seal, endorsement, and all other indices of authorship from the deliverables.

(13) DECISIONS UNDER THIS AGREEMENT AND DISPUTES:

(A) The Sponsor will determine the acceptability of the drawings, specifications, and estimates and all other deliverables to be furnished, and will decide the questions that may arise relative to the proper performance of this Agreement. The determination of acceptable deliverables may occur following final payment, and as late as during the construction of the project which decisions shall be conclusive, binding and incontestable, if not arbitrary, capricious or the result of fraud.

(B) The Sponsor will decide all questions which may arise as to the quality, quantity, and acceptability of services performed by Consultant and as to the rate of progress of the services; all questions which may arise as to the interpretation of the plans and specifications; all questions as to the acceptable fulfillment of the Agreement on the part of the Consultant; the proper compensation for performance or breach of the Agreement; and all claims of any character whatsoever in connection with or growing out of the services of the Consultant, whether claims under this Agreement or otherwise. The Sponsor's decisions shall be conclusive, binding and incontestable if not arbitrary, capricious or the result of fraud.

(C) If the Consultant has a claim for payment against the Sponsor which in any way arises out of the provisions of this Agreement or the performance or non-performance hereunder, written notice of such claim must be made within sixty (60) days of the Consultant's receipt of payment for the retained percentage. Notwithstanding Section (23) of this Agreement, the notice of claim shall be personally delivered or sent

by certified mail to the Sponsor. The notice of claim shall contain an itemized statement showing completely and fully the items and amounts forming the basis of the claim and the factual and legal basis of the claim.

(D) Any claim for payment or an item of any such claim not included in the notice of claim and itemized statement, or any such claim not filed within the time provided by this provision shall be forever waived, and shall neither constitute the basis of nor be included in any legal action, counterclaim, set-off, or arbitration against the Sponsor.

(E) The claims procedure in Subsections (13)(C) and (D) does not apply to any claims of the Sponsor against the Consultant. Further, any claims of the Sponsor against the Consultant under this Agreement are not waived or estopped by the claims procedure in Subsections (13)(C) and (D).

(F) Notwithstanding Subsections (13)(A) through (E) above, in the event of any material dispute hereunder, both parties agree to pursue, diligently and in good faith, a mutually acceptable resolution.

(14) SUCCESSORS AND ASSIGNS: The Sponsor and the Consultant agree that this Agreement and all agreements entered into under the provisions of this Agreement shall be binding upon the parties hereto and their successors and assigns.

(15) INDEMNIFICATION RESPONSIBILITY:

(A) The Consultant agrees to save harmless the Sponsor, MoDOT, and the FAA from all liability, losses, damages, and judgments for bodily injury, including death and property damage to the extent due to the Consultant's negligent acts, errors, or omissions in the services performed or to be performed under this Agreement, including those negligent acts, errors, or omissions of the Consultant's employees, agents, and Subconsultants.

(B) The Consultant shall be responsible for the direct damages incurred by the Sponsor as result of the negligent acts, errors, or omissions of the Consultant or anyone for whom the Consultant is legally responsible, and for any losses or costs to repair or remedy construction as a result of such negligent acts, errors or omissions; provided, however, the Consultant shall not be liable to the Sponsor for such losses, costs, repairs and/or remedies which constitute betterment of or an addition of value to the construction or the project.

(C) Neither the Sponsor's review, approval or acceptance of or payment for any services required under this Agreement, nor the termination of this Agreement prior to its completion, will be construed to operate as a waiver of any right under this Agreement or any cause of action arising out of the performance of this Agreement. This indemnification responsibility survives the completion of this Agreement, as well as the construction of the project at some later date, and remains as long as the construction contractor may file or has pending a claim or lawsuit against the Sponsor on this project

arising out of the Consultant's services hereunder.

(16) INSURANCE:

(A) The Consultant shall maintain commercial general liability, automobile liability, and worker's compensation and employer's liability insurance in full force and effect to protect the Consultant from claims under Worker's Compensation Acts, claims for damages for personal injury or death, and for damages to property from the negligent acts, errors, or omissions of the Consultant and its employees, agents, and Subconsultants in the performance of the services covered by this Agreement, including, without limitation, risks insured against in commercial general liability policies.

(B) The Consultant shall also maintain professional liability insurance to protect the Consultant against the negligent acts, errors, or omissions of the Consultant and those for whom it is legally responsible, arising out of the performance of professional services under this Agreement.

(C) The Consultant's insurance coverages shall be for not less than the following limits of liability:

1. Commercial General Liability: \$500,000.00 per person up to \$3,000,000.00 per occurrence;

2. Automobile Liability: \$500,000.00 per person up to \$3,000,000.00 per occurrence;

3. Worker's Compensation in accordance with the statutory limits; and Employer's Liability: \$1,000,000.00; and

4. Professional ("Errors and Omissions") Liability: \$1,000,000.00, each claim and in the annual aggregate.

(D) In lieu of the minimum coverage stated in Subsections (16)(C)(1) and (C)(2) above, the Consultant may obtain insurance at all times in an amount equal to the Sponsor's sovereign immunity caps as stated in section 537.600 RSMo and subsequently adjusted by the Missouri Department of Insurance. If the statutory limit of liability for a type of liability specified in this section is repealed or does not exist, the Consultant shall obtain insurance with the minimum coverage stated in Subsections (16)(C)(1) and (C)(2) above.

(E) The Consultant shall, upon request at any time, provide the Sponsor with certificates of insurance evidencing the Consultant's commercial general or professional liability ("Errors and Omissions") policies and evidencing that they and all other required insurance is in effect, as to the services under this Agreement.

(F) Any insurance policy required as specified in Section (16) shall be written by a company which is incorporated in the United States of America or is based

in the United States of America. Each insurance policy must be issued by a company authorized to issue such insurance in the State of Missouri.

(17) CONSTRUCTION PHASE OF THE PROJECT:

(A) This Agreement does not include construction phase services. Review of shop drawings and other construction phase services can be added by Supplemental Agreement after design has been completed and the construction contract period has been determined.

(B) Because the Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the construction contractor(s)' methods of determining prices, or over competitive bidding or market conditions, any of the Consultant's opinions of probable project costs and/or construction cost, if provided for herein, are to be made on the basis of the Consultant's experience and qualifications and represent the Consultant's best judgment as an experienced and qualified design professional, familiar with the construction industry, but the Consultant cannot and does not guarantee that proposals, bids, or actual total project costs and/or construction costs will not vary from opinions of probable costs prepared by the Consultant.

(C) The Consultant shall not have control over or charge of and shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the construction work, since these are solely the construction contractor(s)' responsibility under the construction contract(s). The Consultant shall not be responsible for the construction contractor(s)' schedules or failure to carry out the construction work in accordance with the construction contract(s). The Consultant shall not have control over or charge of acts of omissions of the construction contractor(s), or any of its or their subcontractors, agents, or employees, or of any other persons performing portions of the construction work.

(18) NONDISCRIMINATION ASSURANCE: During the performance of this Agreement, the Consultant, for itself, its assignees, and successors in interest (hereinafter referred to as the "Consultant") agrees as follows:

(A) Compliance With Regulations: The Consultant will comply with the "Title VI List of Pertinent Nondiscrimination Acts and Authorities", as they may be amended from time to time, which are herein incorporated by reference and made a part of this Agreement. In addition, the Consultant shall comply with all state statutes related to nondiscrimination.

(B) Nondiscrimination: The Consultant, with regard to the work performed by it during the Agreement, will not discriminate on the grounds of race, color, or national origin in the selection and retention of Subconsultants, including procurements of materials and leases of equipment. The Consultant will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the Agreement covers any activity, project, or

program set forth in Appendix B of 49 CFR Part 21.

(C) Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding or negotiation made by the Consultant for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential Subconsultant or supplier will be notified by the Consultant of the Consultant's obligations under this Agreement and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.

(D) Information and Reports: The Consultant will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor, MoDOT or the FAA to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of the Consultant is in the exclusive possession of another who fails or refuses to furnish the information, the Consultant will so certify to the Sponsor, MoDOT or the FAA, as appropriate, and will set forth what efforts it has made to obtain the information.

(E) Sanctions for Noncompliance: In the event of a Consultant's noncompliance with the nondiscrimination provisions of this Agreement, the Sponsor will impose such contract sanctions as it, MoDOT, or the FAA may determine to be appropriate, including, but not limited to:

1. Withholding payments to the Consultant under this Agreement until the Consultant complies; and/or
2. Cancelling, terminating, or suspending this Agreement, in whole or in part.

(F) Incorporation of Provisions: The Consultant will include these nondiscrimination provisions in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Consultant will take action with respect to any subcontract or procurement as the Sponsor, MoDOT or the FAA may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, that if the Consultant becomes involved in, or is threatened with litigation by a Subconsultant or supplier because of such direction, the Consultant may request the Sponsor or the United States to enter into such litigation to protect the interests of the Sponsor or United States.

(H) Title VI List of Pertinent Nondiscrimination Acts and Authorities: During the performance of this Agreement, the Consultant, for itself, its assignees, and successors in interest (hereinafter referred to as the "Consultant") agrees to comply with the following nondiscrimination statutes and authorities, including, but not limited to:

1. Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
2. 49 CFR Part 21 (Non-Discrimination in Federally-Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
3. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
4. Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
5. The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
6. Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
7. The Civil Rights Restoration Act of 1987 (PL 100-209) (Broadened the scope, coverage, and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
8. Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 USC §§ 12131-12189) as implemented by U.S. Department of Transportation regulations at 49 CFR Parts 37 and 38;
9. The FAA's nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
10. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
11. Executive Order 13166, Improving Access to Services for

Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100); and

12. Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681 *et seq.*).

(19) APPROVAL: This Agreement is made and entered into subject to the approval of MoDOT.

(20) AVIATION FEDERAL AND STATE CLAUSES:

(A) Civil Rights – 49 USC § 47123: The Consultant agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision binds the Consultant and any subconsultants from the solicitation period through the completion of the Agreement. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

(B) Trade Restriction Certification – 49 U.S.C. § 50104, 49 CFR Part 30:  
1. By execution of this Agreement, the Consultant certifies that with respect to this Agreement, the Consultant:

A. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);

B. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and

C. has not entered into any subcontract for any product to be used on the project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

2. This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

3. The Consultant must provide immediate written notice to the



Sponsor if the Consultant learns that its certification or that of a subconsultant was erroneous when submitted or has become erroneous by reason of changed circumstances. The Consultant must require subconsultants provide immediate written notice to the Consultant if at any time it learns that its certification was erroneous by reason of changed circumstances.

4. Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a Consultant or subconsultant:

A. who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR; or

B. whose subconsultants are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list; or

C. who incorporates in the public works project any product of a foreign country on such USTR list.

5. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a Consultant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

6. The Consultant agrees that it will incorporate this provision for certification without modification in all lower tier subcontracts. The Consultant may rely on the certification of a prospective subconsultant that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Consultant has knowledge that the certification is erroneous.

7. This certification is a material representation of fact upon which reliance was placed when entering into this Agreement. If it is later determined that the Consultant or subconsultant knowingly rendered an erroneous certification, MoDOT or the FAA may direct through the Sponsor cancellation of the Agreement for default at no cost to the Sponsor, MoDOT or the FAA.

(C) Eligible Employees - Executive Order 07-13:

1. The Consultant shall comply with all the provisions of Executive Order 07-13, issued by the Honorable Matt Blunt, Governor of Missouri, on the sixth (6th) day of March, 2007. This Executive Order, which promulgates the State of Missouri's position to not tolerate persons who contract with the state engaging in or supporting illegal activities of employing individuals who are not eligible to work in the United States, is incorporated herein by reference and made a part of this Agreement. By signing this Agreement, the Consultant hereby certifies that any employee of the Consultant assigned to perform services under this Agreement is eligible and authorized

to work in the United States in compliance with federal law. In the event the Consultant fails to comply with the provisions of Executive Order 07-13, or in the event the Sponsor has reasonable cause to believe that the Consultant has knowingly employed individuals who are not eligible to work in the United States in violation of federal law, the Sponsor reserves the right to impose such contract sanctions as it may determine to be appropriate, including but not limited to contract cancellation, termination or suspension in whole or in part or both.

2. The Consultant shall include the above-provision concerning said Executive Order within every subcontract. The Consultant shall take such action with respect to any subcontract as the Sponsor may direct as a means of enforcing such provisions, including sanctions for noncompliance.

(D) Texting While Driving – Executive Order 13513, DOT Order 3902.10:

1. In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving" (10/1/2009) and DOT Order 3902.10 "Text Messaging While Driving" (12/30/2009), FAA encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or sub-grant.

2. In support of this initiative, the Sponsor encourages the Consultant to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Consultant must include the substance of this clause in all sub-tier contracts exceeding Three Thousand Five Hundred Dollars (\$3,500) and involve driving a motor vehicle in performance of work activities associated with the project.

(E) Veteran's Preference – 49 USC § 47112(c): In the employment of labor (except in executive, administrative, and supervisory positions), the Consultant and all subconsultants must give preference to covered veterans as defined within Title 49 U.S.C. § 47112. Covered veterans include Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 U.S.C. § 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

(F) Federal Fair Labor Standards Act (Federal Minimum Wage) – 29 USC § 201, et seq.: All contracts and subcontracts that result from this Agreement incorporate by reference the provisions of 29 CFR Part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers. The Consultant has full responsibility to monitor compliance to the above-referenced statute and regulation. The Consultant must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

(G) Occupational Safety and Health Act of 1970 – 20 CFR Part 1910: All contracts and subcontracts that result from this Agreement incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The Consultant must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The Consultant retains full responsibility to monitor its compliance and its subconsultants' compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). The Consultant must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

(H) Energy Conservation Requirements – 2 CFR § 200, Appendix II(H): The Consultant and any subconsultants agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201 *et seq.*).

(I) Debarment and Suspension (Non-Procurement) – 2 CFR Part 180 (Subpart C), 2 CFR Part 1200, DOT Order 4200.5 DOT Suspension & Debarment Procedures & Ineligibility:

1. By executing this Agreement, the Consultant certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this Agreement.

2. The Consultant, by administering each lower tier subconsultant agreement that exceeds \$25,000 as a "covered transaction", must verify each lower tier Subconsultant participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The Consultant will accomplish this by:

A. Checking the System for Award Management at website: <https://www.sam.gov>.

B. Collecting a certification statement similar to the statement in Subsection (20)(I)1.

C. Inserting a clause or condition in the covered transaction with the lower tier Subcontractor.

3. If the Sponsor, MoDOT or the FAA later determines that a lower tier participant failed to disclose to a higher tier that it was excluded or disqualified at the time it entered the covered transaction, the Sponsor, MoDOT or the FAA may pursue any available remedy, including suspension or debarment of the non-compliant participant.

(J) Lobbying and Influencing Federal Employees – 31 U.S.C. § 1352, 2 CFR § 200, Appendix II(J), 49 CFR Part 20, Appendix A:

1. The Consultant certifies by execution of this Agreement, to the best of its knowledge and belief, that:

A. No Federal appropriated funds have been paid or will be paid, by or on behalf of the Consultant, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

B. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Consultant shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

C. The Consultant shall require that the language of this Subsection (20)(F) be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than Ten Thousand Dollars (\$10,000) and not more than One Hundred Thousand Dollars (\$100,000) for each such failure.

(K) Contract Workhours and Safety Standards Act Requirements – 2 CFR § 200 Appendix II (E):

1. Overtime Requirements: No contractor or subcontractor contracting for any part of the Agreement work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in Subsection (20)(K)1. above, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the Sponsor and/or the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in Subsection (20)(K)1. above, in the sum of Ten Dollars (\$10) for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in Subsection (20)(K)1. above.

3. Withholding for Unpaid Wages and Liquidated Damages: The FAA, MoDOT or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in Subsection (20)(K)2. above.

4. Subcontractors: The contractor or subcontractor shall insert in any subcontracts the clauses set forth in this Subsection (20) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this Subsection (20).

(L) Breach of Contract Terms Sanctions - 2 CFR §200 Appendix II(A): Any violation or breach of the terms of this Agreement on the part of the Consultant or any Subconsultant may result in the suspension or termination of this Agreement or such other action that may be necessary to enforce the rights of the parties of this Agreement. The Sponsor will provide the Consultant written notice that describes the nature of the breach and corrective actions the Consultant must undertake in order to avoid termination of this Agreement. The Sponsor reserves the right to withhold payments to the Consultant until such time the Consultant corrects the breach or the Sponsor elects to terminate this Agreement. The Sponsor's notice will identify a specific date by which the Consultant must correct the breach. The Sponsor may proceed with termination of this Agreement if the Consultant fails to correct the breach by deadline indicated in the Sponsor's notice. The duties and obligations imposed by the Agreement and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

(M) Clean Air and Water Pollution Control – 2 CFR 200 § 200, Appendix II(G): The Consultant agrees:

1. To comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 U.S.C. § 740-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. § 1251-1387); and

2. To report any violation to the Sponsor immediately upon discovery. The Sponsor assumes responsibility for notifying the Environmental Protection Agency and the FAA.

(N) Right to Inventions - 2 CFR §200 Appendix II(F), 37 CFR § 401: Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Sponsor in any resulting invention as established by 37 CFR Part 401, Rights to Inventions Made by Non-Profit Organizations and Small Business Firms Under Government Grants, Contracts, and Cooperative Agreements. This Agreement incorporates by reference the patent and inventions rights as specified within 37 CFR § 401.14. The Consultant must include this requirement in all sub-tier contracts involving experimental, developmental or research work.

(O) Certification of Consultant Regarding Tax Delinquency and Felony Convictions: The Consultant certifies that it is not a corporation that:

1. Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; or

2. Was convicted of a criminal violation under any Federal law within the preceding twenty-four (24) months.

(21) ACTIONS: No action may be brought by either party hereto concerning any matter, thing, or dispute arising out of or relating to the terms, performance, non-performance, or otherwise of this Agreement except in the Circuit Court of Buchanan County, Missouri. The parties agree that this Agreement is entered into at St. Joseph, Missouri and substantial elements of its performance will take place or be delivered at St. Joseph, Missouri, by reason of which the Consultant consents to venue of any action against it in Buchanan County, Missouri. The Consultant shall cause this provision to be incorporated into all of its agreements with, and to be binding upon, all Subconsultants of the Consultant in the performance of this Agreement.

(22) AUDIT OF RECORDS: For purpose of an audit, the Consultant shall maintain all those records relating to direct costs and expenses incurred under this Agreement, including but not limited to invoices, payrolls, bills, receipts, etc. These records must be available at all reasonable times to the Sponsor, MoDOT, the FAA, and the Comptroller General of the United States or their designees and representatives, at the Consultant's offices, at no charge, during the Agreement period and any extension thereof, and for the three (3) year period following the date of final payment made under this Agreement. If the Sponsor has notice of a potential claim against the Consultant and/or the Sponsor based on the Consultant's services under this Agreement, the

Consultant, upon written request of the Sponsor, shall retain and preserve its records until the Sponsor has advised the Consultant in writing that the disputed claim is resolved.

(23) **NOTICE TO THE PARTIES:** All notices or communications required by this Agreement shall be made in writing and shall be effective upon receipt by the Sponsor or the Consultant at their respective addresses of record. Letters or other documents which are prepared in 8.5 x 11 inch format may be delivered by telefax, provided that an original is received at the same address as that to which that telefax message was sent, within three (3) business days of the telefax transmission. Either party may change its address of record by written notice to the other party.

(A) **Notice to the Sponsor:** Notices to the Sponsor shall be addressed and delivered to the following Sponsor's representative, who is hereby designated by the Sponsor as its primary authorized representative for administration, interpretation, review, and enforcement of this Agreement and the services of the Consultant hereunder:

NAME AND TITLE OF SPONSOR'S REPRESENTATIVE	Abe Forney, Airport Manager		
SPONSOR'S NAME	City of St. Joseph (Rosecrans Memorial Airport)		
SPONSOR'S ADDRESS	100B NW Rosecrans Drive St. Joseph, MO 64503		
PHONE	816-271-5374	FAX	816-271-4887
E-MAIL ADDRESS	aforney@stjoemo.org		

The Sponsor reserves the right to substitute another person for the individual named at any time, and to designate one or more other representatives to have authority to act upon its behalf generally or in limited capacities, as the Sponsor may now or hereafter deem appropriate. Such substitution or designations shall be made by the Sponsor in a written notice to the Consultant.

(B) **Notice to the Consultant:** Notices to Consultant shall be addressed and delivered to Consultant's representative, as follows:

NAME AND TITLE OF CONSULTANT'S REPRESENTATIVE	Joe Pestka, Office Manager		
CONSULTANT'S NAME	Jviation, A Woolpert Company		
CONSULTANT'S ADDRESS	931 Wildwood Drive, Suite 101 Jefferson City, MO 65109		
PHONE	(573) 636-3200	FAX	573-636-3201
E-MAIL ADDRESS	Joe.Pestka@woolpert.com		

The Consultant reserves the right to substitute another person for the individual named at any time, and to designate one or more other representatives to have authority to act upon its behalf generally or in limited capacities, as the Consultant may now or hereafter deem appropriate. Such substitutions or designations shall be made by the Consultant's president or chief executive officer in a written notice to the Sponsor.

(24) LAW OF MISSOURI TO GOVERN: This Agreement shall be construed according to the laws of the State of Missouri. The Consultant shall comply with all local, state, and federal laws and regulations which govern the performance of this Agreement.

(25) CONFIDENTIALITY: The Consultant agrees that the Consultant's services under this Agreement are a confidential matter between the Consultant and the Sponsor. The Consultant shall not disclose any aspect of the Consultant's services under this Agreement to any other person, corporation, governmental entity, or news media, excepting only to Consultant's lawyers, accountants, insurers, and such employees, Subconsultants, and agents as may be necessary to allow them to perform services for the Consultant in the furtherance of this Agreement, without the prior approval of the Sponsor; provided, however, that any confidentiality and non-disclosure requirements set out herein shall not apply to any of the Consultant's services or to any information which (1) is already in the public domain or is already in the Consultant's possession at the time the Consultant performs the services or comes into possession of the information; (2) is received from a third party without any confidentiality obligations; or (3) is required to be disclosed by governmental or judicial order. Any disclosure pursuant to a request to the Sponsor under Chapter 610, RSMo, shall not constitute a breach of this Agreement. The content and extent of any authorized disclosure shall be coordinated fully with and under the direction of the Sponsor, in advance.

(26) SOLE BENEFICIARY: This Agreement is made for the sole benefit of the parties hereto and nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the Sponsor and the Consultant.

(27) SEVERABILITY AND SURVIVAL:

(A) Any provision or part of this Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the Sponsor and the Consultant.

(B) All express representations, indemnifications, or limitations of liability made or given in this Agreement will survive the completion of all services by the Consultant under this Agreement or the termination of this Agreement for any reason.

(28) PAYMENT BOND: In the event that any subconsultants are used to supply at least fifty thousand dollars (\$50,000) worth of materials and/or labor not within the scope of environmental assessment services or licensed professional services as defined by chapter 327, RSMo, the Consultant shall require any such subconsultants to provide laborers and materialmen with adequate bond security. Payment bonds shall be executed by any such subconsultants with the subconsultant as principal and a surety company authorized to do business in the State of Missouri as surety, and any agent executing the same on behalf of a subconsultant or surety company must attach a current Power of Attorney setting forth sufficient execution authority. Said payment bonds must be acceptable to the Sponsor to cover all materials used, all labor performed, and all



insurance premiums necessary to comply with Section 107.170, RSMo, and must be provided to the Sponsor prior to the performance of such subconsultant services under this Agreement.

(29) AMENDMENTS: Any change in this Agreement, whether by modification or supplementation, must be accomplished by a formal contract amendment signed and approved by the duly authorized representative of the Sponsor and the Consultant.

(30) ATTACHMENTS: The following Exhibits and other documents are attached to and made a part of this Agreement:

- (A) Exhibit I: Project Description.
- (B) Exhibit II: Scope of Services.
- (C) Exhibit IIA: Current FAA Advisory Circulars, Standards, Guidance and MoDOT Standards
- (D) Exhibit III: Services Provided by the Sponsor.
- (E) Exhibit IV: Derivation of Consultant Project Costs.
- (F) Exhibit V: Engineering Basic and Special Services - Cost Breakdown.
- (G) Exhibit VI: Performance Schedule

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement, executed by their respective proper officials, on the date last written below.

Executed by the **Consultant** the \_\_\_\_\_ day of \_\_\_\_\_, 2022.

Executed by the **Sponsor** the \_\_\_\_\_ day of \_\_\_\_\_, 2022.

Consultant:  
Aviation, A Woolpert Company

Sponsor:

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature

Title: Vice President

Title: \_\_\_\_\_

ATTEST:

ATTEST:

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature

Title: Project Coordinator

Title: \_\_\_\_\_

## **EXHIBIT I**

### **PROJECT DESCRIPTION**

This project shall consist of the Reconstruction of Runway 17/35 along with improved drainage, north blast pad and south blast pad and relocating the vehicle service road outside the runway object free area. Improvements to the Runway Safety Area (RSA) and drainage will be completed with the reconstruction of Runway 17/35. Runway edge lights and guidance signs will be upgraded during the project. Upgrades will be completed to the Runway 17 Runway End Identifier Lights (REIL), Runway 17 Visual Approach Slope Indicator Lights (VASI), Runway 35 Runway End Identifier Lights (REIL), Runway 35 Visual Approach Slope Indicator Lights (VASI) and Runway 35 Glide Slope (GS).

## EXHIBIT IIA CURRENT FAA ADVISORY CIRCULARS REQUIRED FOR USE IN AIP FUNDED PROJECTS

**Updated December 22, 2021**

View the most current versions of these ACs and any associated changes at  
[http://www.faa.gov/airports/resources/advisory\\_circulars/](http://www.faa.gov/airports/resources/advisory_circulars/) and  
[https://www.faa.gov/regulations\\_policies/advisory\\_circulars/](https://www.faa.gov/regulations_policies/advisory_circulars/).

NUMBER	TITLE
70/7460-1M	Obstruction Marking and Lighting
150/5000-17	Critical Aircraft and Regular Use Determination
150/5020-1	Noise Control and Compatibility Planning for Airports
150/5070-6B	Airport Master Plans
150/5070-7	The Airport System Planning Progress
150/5100-13C	Development of State Aviation Standards for Airport Pavement Construction
150/5200-28F	Notices to Airmen (NOTAMS) for Airport Operators
150/5200-30D	Airport Field Condition Assessments and Winter Operations Safety
150/5200-31C	Airport Emergency Plan
150/5210-5D	Painting, Marking and Lighting of Vehicles Used on an Airport
150/5210-7D	Aircraft Rescue and Fire Fighting Communications
150/5210-13C	Airport Water Rescue Plans and Equipment
150/5210-14B	Airport Rescue Fire Fighting Equipment, Tools and Clothing
150/5210-15A	Airport Rescue and Firefighting Station Building Design
150/5210-18A	Systems for Interactive Training of Airport Personnel
150/5210-19A	Driver's Enhanced Vision System (DEVs)
150/5220-10E	Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles
150/5220-16E Change 1	Automated Weather Observing Systems (AWOS) for Non-Federal Applications
150/5220-17B	Aircraft Rescue and Fire Fighting (ARFF) Training Facilities
150/5220-18A	Buildings for Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials

150/5220-20A	Airport Snow and Ice Control Equipment
150/5220-21C	Aircraft Boarding Equipment
150/5220-22B	Engineered Materials Arresting Systems (EMAS) for Aircraft Overruns
150/5220-23	Frangible Connections
150/5220-24	Foreign Object Debris Detection Equipment
150/5220-25	Airport Avian Radar Systems
150/5220-26	Airport Ground Vehicle Automatic Dependent Surveillance – Broadcast (ADS-B) Out Squitter Equipment
150/5300-13B	Airport Design
150/5300-14D	Design of Aircraft Deicing Facilities
150/5300-16B	General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey
150/5300-17C	Standards for Using Remote Sensing Technologies in Airport Surveys
150/5300-18B	General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards
105/5320-5D	Airport Drainage Design
150/5320-6F	Airport Pavement Design and Evaluation
150/5320-12C Changes 1-8	Measurement, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces
150/5320-15A	Management of Airport Industrial Waste
150/5325-4B	Runway Length Requirements for Airport Design
150/5335-5D	Standardized Method of Reporting Airport Pavement Strength-PCN
150/5340-1M	Standards for Airport Markings
150/5340-5D	Segmented Circle Airport Marker System
150/5340-18G	Standards for Airport Sign Systems
150/5340-26C	Maintenance of Airport Visual Aid Facilities
150/5340-30J	Design and Installation Details for Airport Visual Aids
150/5345-3G	Specification for L-821, Panels for the Control of Airport Lighting
150/5345-5B	Circuit Selector Switch

150/5345-7F	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
150/5345-10H	Specification for Constant Current Regulators and Regulator Monitors
150/5345-12F	Specification for Airport and Heliport Beacons
150/5345-13B	Specification for L-841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits
150/5345-26E	FAA Specification for L-823 Plug and Receptacle, Cable Connectors
150/5345-27F	Specification for Wind Cone Assemblies
150/5345-28H	Precision Approach Path Indicator (PAPI) Systems
150/5345-39E	Specification for L-853, Runway and Taxiway Retroreflective Markers
150/5345-42J	Specification for Airport Light Bases, Transformer Housings, Junction Boxes, and Accessories
150/5345-43J	Specification for Obstruction Lighting Equipment
150/5345-44K	Specification for Runway and Taxiway Signs
150/5345-45C	Low-Impact Resistant (LIR) Structures
150/5345-46E	Specification for Runway and Taxiway Light Fixtures
150/5345-47C	Specification for Series to Series Isolation Transformers for Airport Lighting Systems
150/5345-49D	Specification L-854, Radio Control Equipment
150/5345-50B	Specification for Portable Runway and Taxiway Lights
150/5345-51B	Specification for Discharge-Type Flasher Equipment
150/5345-52A	Generic Visual Glideslope Indicators (GVGI)
150/5345-53D	Airport Lighting Equipment Certification Program
150/5345-54B	Specification for L-884, Power and Control Unit for Land and Hold Short Lighting Systems
150/5345-55A	Specification for L-893, Lighted Visual Aid to Indicate Temporary Runway Closure
150/5345-56B	Specification for L-890 Airport Lighting Control and Monitoring System (ALCMS)
150/5360-12F	Airport Signing & Graphics
150/5360-13A	Airport Terminal Planning
150/5360-14A	Access to Airports by Individuals with Disabilities

150/5370-2G	Operational Safety on Airports During Construction
150/5370-10H	Standards for Specifying Construction of Airports
150/5370-11B	Use of Nondestructive Testing in the Evaluation of Airport Pavements
150/5370-13A	Off-Peak Construction of Airport Pavements Using Hot-Mix Asphalt
150/5370-15B	Airside Applications for Artificial Turf
150/5370-16	Rapid Construction of Rigid (Portland Cement Concrete) Airfield Pavements
150/5370-17	Airside Use of Heated Pavement Systems
150/5390-2C	Heliport Design
150/5395-1B	Seaplane Bases
150/5100-14E Change 1	Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects
150/5100-17	Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects
150/5300-15A	Use of Value Engineering for Engineering Design of Airport Grant Projects
150/5320-17A	Airfield Pavement Surface Evaluation and Rating Manuals
150-5370-12B	Quality Management for Federally Funded Airport Construction Projects
150/5380-6C	Guidelines and Procedures for Maintenance of Airport Pavements
150/5380-7B	Airport Pavement Management Program
150/5380-9	Guidelines and Procedures for Measuring Airfield Pavement Roughness
MoDOT	MoDOT DBE Program- <a href="http://www.modot.org/ecr/index.htm">http://www.modot.org/ecr/index.htm</a>

### EXHIBIT III

#### **SERVICES PROVIDED BY THE SPONSOR**

The Sponsor, as a part of this Agreement, shall provide the following:

1. Assist the Consultant in arranging to enter upon public and private property as required for the Consultant to perform his services.
2. Obtain approvals and permits from all governmental entities having jurisdiction over the project and such approvals and consents from others as may be necessary for completion of the project.
3. Prompt written notice to the Consultant whenever the Sponsor observes or knows of any development that affects the scope or timing of the Consultant's services.
4. One (1) copy of existing plans, standard drawings, bid item numbers, reports or other data the Sponsor may have on file with regard to this project.
5. Pay all publishing costs for advertisements of notices, public hearings, request for proposals and other similar items. The Sponsor shall pay for all permits and licenses that may be required by local, state or federal authorities, and shall secure the necessary land easements and/or rights-of-way required for the project.
8. Issue Notice to Airmen (NOTAM's) through the applicable FAA Flight Service Station.
9. Disadvantaged business enterprise (DBE) goals for the project based upon proposed bid items, quantities and opinions of construction costs.
10. Guidance for assembling bid package to meet Sponsor's bid letting requirements.
11. Designate contact person (see Section (23)(A)).



**EXHIBIT IV**

**DERIVATION OF CONSULTANT PROJECT COSTS**

**EXHIBIT V**

**ENGINEERING BASIC AND SPECIAL SERVICES-COST BREAKDOWN**

## EXHIBIT VI

### PERFORMANCE SCHEDULE

The Consultant agrees to proceed with services immediately upon receipt of written Notice to Proceed (NTP) by the Sponsor and to employ such personnel as required to complete the scope of services in accordance with the following time schedule:

#### BASIC SERVICES

- |    |   |   |
|----|---|---|
| A. | Preliminary Phase   | As Required   |
| B. | Design Phase  |   |
| 1. | Submittal of Preliminary Design Report  | <b>(90)</b> calendar days after receipt of NTP                                    |
| 2. | Plans & Specifications  |   |
| a. | Submittal of 100% Plans and Contract Documents/Specifications for review (allow 45 days for MoDOT review) | <b>(120)</b> calendar days after receipt of NTP                                   |
| b. | Submittal of Final Design Report and Plans and Contract Documents/Specifications for bidding              | <b>(30)</b> calendar days after receipt of review comments (MoDOT, FAA & Sponsor) |
| C. | Bidding Phase   | As Required   |

**SCOPE OF WORK  
FOR  
ROSECRANS MEMORIAL AIRPORT  
St. Joseph, Missouri  
MoDOT Project Number 21-012A-01  
Runway 17/35 Reconstruction**

This agreement is for providing professional services for the Runway 17/35 Reconstruction project between the City of St. Joseph and Jviation, a Woolpert Company for providing professional services. For the remainder of this scope the Rosecrans Memorial Airport is indicated as “Sponsor” and Jviation, a Woolpert Company is indicated as “Engineer.” The construction budget for this project is approximately \$50M. This budget does not include administrative, legal, or professional fees.

This project shall consist of preparing Construction Plans, Contract Documents, Technical Specifications and Engineer’s Design Report, along with Bidding and Topographical Survey and Review of the airfield storm water drainage infrastructure for the Runway 17/35 Reconstruction Project. This scope of work is for the consulting services provided by the Engineer for the Sponsor. See Exhibit No. 1 below for the project location.



**EXHIBIT NO. 1**

**DESCRIPTION**

This project shall consist of the Reconstruction of Runway 17/35 along with improved drainage, north blast pad and south blast pad and relocating the vehicle service road outside the runway object free area. Improvements to the Runway Safety Area (RSA) and drainage will be completed with the reconstruction of Runway 17/35. Runway edge lights and guidance signs will be upgraded during the project. Upgrades will be completed to the Runway 17 Runway End Identifier Lights (REIL), Runway 17 Visual Approach Slope Indicator Lights (VASI), Runway 35 Runway End Identifier Lights (REIL), Runway 35 Visual Approach Slope Indicator Lights (VASI) and Runway 35 Glide Slope (GS). All work on FAA owned equipment, will be completed in conjunction with a reimbursable agreement with the FAA.

A geotechnical investigation consisting of pavement cores and borings within the existing Runway 17/35 pavement section (performed in June 2020) have indicated an aging and deteriorating pavement structure that has shown significant signs of heaving due to high water tables. The geotechnical investigation recommended full reconstruction of Runway 17/35 including adding an underdrain system. The full-depth pavement section will be removed and replaced with a standard pavement section consisting of treated subgrade, crushed aggregate base course, lean concrete base course, and P-501 Portland cement concrete pavement.

The reconstruction of Runway 17/35 will consist of approximately 150,000 square yards of concrete pavement removal. A portion of this crushed concrete could be used as fill for the north portion of Browning Lake to provide a stable foundation for the vehicle service road that will be relocated outside of the runway object free area (ROFA). Due to the recent history of the runway experiencing significant heaving, subgrade material beneath Runway 17/35 will be removed and replaced with a cement treated subgrade to provide a more stable foundation for the proposed Runway 17/35.

Approximately 207 acres will be topographically surveyed to determine the existing grades and infrastructure located within the project area. Three separate areas will be surveyed for this project. The first area consists of existing Runway 17/35 limits including 1,000 feet past the end of the runway pavement to the north and south, as well as 400 feet left and right of runway centerline. The second survey area will be the area near Hotspot No. 1 and the Taxiway D relocation. The final area is on the south end of Runway 17/35 where the vehicle access road will be relocated outside the ROFA.

The engineering fees for this project will be broken into two parts. **Part A-Basic Services** includes; 1) Preliminary Design Phase, 2) Design Phase, 3) Bidding Phase, and Reimbursable Costs During Design and Bidding and **Part B-Special Services**, which includes; 4) Design Survey Phase and Reimbursable Costs During Survey. Additional design services that will be completed by subconsultants to the Engineer, including the proposed storm water investigation and topographical survey will be included under **Part B-Special Services**. Parts A and B and the four phases are described in more detail below.

**PART A - BASIC SERVICES** consists of the Preliminary Design Phase, Design Phase, and Bidding Phase, all invoiced on a lump sum basis.

### **1.0 Preliminary Design Phase**

**1.01 Coordinate and Attend Meetings with the Sponsor, MoDOT, ANG and FAA.** Meetings with the Sponsor, Air National Guard (ANG) and the FAA will take place to determine critical project dates, establish the proposed design schedule and AIP development schedule, review environmental component(s), determine the feasibility of the proposed project and to establish the need for topographical surveying, pavement investigation and/or storm water pipe scoping. Various meetings during the design phase will also be conducted to review the progress of the design, discuss construction details and proposed time frame of construction, and identify any special requirements for the project. It is anticipated that there will be up to 15 meetings with the Sponsor and/or the FAA throughout the course of the design.

**1.02 Prepare Project Scope of Work and Contract.** This task includes establishing the scope of work through meetings outlined above. Fees will be negotiated with the Sponsor and may be subject to an independent fee estimate conducted by a third party hired by the Sponsor. This task also includes drafting the contract for the work to be completed by the Engineer for the Sponsor once negotiations are complete.

**1.03 Prepare Preliminary Cost Estimating.** This task includes creating a preliminary construction rough order of magnitude (ROM) cost estimate, a preliminary working days estimate, a preliminary overall project schedule, and a preliminary overall project budget. The preliminary construction ROM cost estimate will be based upon the most current information available at the time of preparation. Work to refine these estimates is included under Task 2.14.

**1.04 Provide Project Coordination.** The Engineer shall provide project management and coordination services to ensure the completion of the design. These duties include:

- Time the Engineer spends planning, organizing, securing and scheduling resources, and providing instruction to staff to meet project objectives as defined in the approved scope of work.
- The Engineer will analyze the budget semi-monthly to ensure budget and staffing needs are on track to meet design schedules within budget.
- Additional items to be accomplished include compiling and sending additional information requested from the office to related parties, maintaining project files as necessary and other items necessary in day-to-day project coordination.
- The Engineer will prepare and submit monthly invoicing.

The Engineer will complete the following tasks:

- Provide the Sponsor with a monthly Project Status Report (PSR), in writing, reporting on Engineer's progress and any problems that may arise while performing the work. The PSR must include an update of the project schedule, as described in this section, when schedule changes are expected.
- Submit for acceptance and maintain, a design schedule detailing the scheduled performance of the work.
- Create and maintain a Quality Control Checklist (QCC) for the project. The QCC shall include personnel, project milestone checking and peer review procedures at each phase of the project.

**1.05 Review Existing Documents.** The Engineer will gather and review existing available documentation that may be relevant to the project, including, but not limited to, record drawings (as-builts), design reports, final reports, utility reports/maps and previous surveys. The Engineer may use relevant information from this review to coordinate the design and topographical survey for the project.

**1.06 Prepare State Grant Application.** This task consists of preparing the state grant application. Preparation of the application includes the following:

- Prepare state grant application on the MoDOT Aeronautics website.
- Prepare Project Financial Information.
- Prepare Project Sketch (11" x 17").

The completed grant application will be saved on the MoDOT Aeronautics website for the Sponsor to review. Once the Sponsor approves the grant application, the Sponsor will submit the grant application on the MoDOT Aeronautics website.

It should be noted that the state grant application was prepared by the Engineer and submitted by the Sponsor prior to the preparation of this scope of work.

**1.07 Prepare Federal Grant Application.** This task consists of preparing the federal grant application. The application will be submitted during the initial portion of the project. Preparation of the application includes the following:

- Prepare Federal 424 form.
- Prepare Federal Form 5100 – II thru IV.
- Prepare project funding summary.
- Prepare program narrative, discussing the purpose and need of the work and the method of accomplishment.
- Project sketch (8.5" x 11").
- Include preliminary cost estimate.
- Include the Sponsor's certifications.
- Attach the current grant assurances.
- Include DOT Title VI assurances.
- Include certification for contract, grants and cooperative agreements.
- Include Title VI pre-award checklist.
- Include current FAA advisory circulars required for use in AIP funded projects.

The Engineer shall submit the grant application to the Sponsor for approval and signatures. After obtaining the necessary signatures, the Sponsor or Engineer shall forward a copy of the signed application to the FAA for further processing.

**1.08 Prepare Environmental Documentation.** This task will revise the previously completed Environmental Assessment (EA) to include the relocation of the vehicle service road (VSR) to the south and outside of the Runway Object Free Area (ROFA), as well as the reconstruction of Runway 17-35 and the extension of Taxiway D.

The EA re-evaluation will be prepared in accordance with the current FAA guidance including FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, FAA Order 1050.1F *Desk Reference*, and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, as well as applicable environmental regulations associated with the State of Missouri.

The EA re-evaluation will coordinate compliance with Section 2(a)(4) of Executive Order 11988 and Paragraph 7 of DOT Order 5650.2 which requires agencies to provide the public review of any plan that would encroach on the base floodplain. The engineer will work with the local floodplains administrator, MoDOT and the FAA to determine the appropriate public coordination. An in-person public meeting is not included in this scope; all public coordination will be completed through newspaper and electronic means.

**1.09 Coordinate Sponsor/FAA Reimbursable Agreement.** A reimbursable agreement is a contractual agreement between the Sponsor and FAA for materials, supplies, equipment and services the FAA provides to the Sponsor. This task includes providing information to the Sponsor for the administration and completion of the reimbursable agreement between the Sponsor and FAA, including diagrams/sketches, ROM cost estimates, project schedules, etc.

The process to establish a reimbursable agreement can take on average up to 10-12 months. To avoid unnecessary delays, it is recommended the Sponsor initiate this process during the planning and project formulation phases of the project. The costs necessary to mitigate any impacts to FAA owned equipment caused by a Sponsor's AIP funded development project are eligible for reimbursement under the AIP.

**1.10 Prepare Quarterly Performance Reports – Design.** Federal Regulation 49 CFR Part 18 establishes uniform administrative requirements for grants to State and Local Governments. Sub-part 18.40 addresses monitoring and reporting requirements for the Sponsor. The Engineer will assist the Sponsor in managing grant activities to ensure compliance with applicable Federal requirements. The Engineer will submit a quarterly performance report while the grant is active. It is estimated there will be six quarterly performance reports completed during the design phase of this project.

<b>TASK 1 DELIVERABLES</b>	<b>TO FAA/MoDOT</b>	<b>TO ANG</b>	<b>TO SPONSOR</b>
1.01 Meeting Agendas, AIP Development Schedule and Meeting Minutes from Pre-Design Meeting	✓	✓	✓
1.02 Scope of Work and Draft Contract for the Sponsor	✓	✓	✓
1.03 Preliminary Cost Estimate	✓	✓	✓
1.04 Design Schedule, Project Status Report, and Monthly Invoicing		✓	✓
1.06 State Grant Application	✓		✓
1.07 Federal Grant Application	✓		✓
1.08 Amended EA	✓		✓

<b>TASK 1 MEETINGS/SITE VISITS</b>	<b>LOCATION/ATTENDEES/DURATION</b>
1.01 Full Design Project Kickoff Meeting with Sponsor and ANG	<ul style="list-style-type: none"> <li>St. Joseph, MO One (1) Senior Project Manager, one (1) Senior Consultant and one (1) Project Manager (three total) Assume two (2) hours in person (one meeting) Assume travel from Jefferson City, MO to St. Joseph, MO.</li> <li>Meeting Agenda and Minutes One (1) Project Manager, Assume two (2) hours each meeting for agenda and meeting minutes/ task assignments.</li> </ul>
1.01 Project Review Meeting with the FAA/MoDOT	<ul style="list-style-type: none"> <li>St. Joseph, MO One (1) Senior Project Manager, one (1) Senior Consultant and one (1) Project Manager (three total) Three (3) meetings total Assume two (2) hours via teleconference (one meeting) Assume two (2) hours in person (two meetings) Assume travel from Jefferson City, MO and one flight from Denver, CO</li> <li>Meeting Agenda and Minutes One (1) Project Manager, Assume two (2) hours each meeting for agenda and meeting minutes/ task assignments.</li> </ul>
1.01 Project Review Meeting with the Sponsor	<ul style="list-style-type: none"> <li>St. Joseph, MO One (1) Senior Project Manager, one (1) Senior Consultant and one (1) Project Manager (three total) Five (5) meetings total Assume two (2) hours via teleconference (one meeting) Assume two (2) hours in person (two meetings) Assume travel from Jefferson City, MO and one flight from Denver, CO</li> </ul>

	<ul style="list-style-type: none"> <li>Meeting Agenda and Minutes            One (1) Project Manager and One (1) Designer, Assume four (4) hours each meeting for agenda and meeting minutes/ task assignments</li> </ul>
1.01 Project review meeting with the ANG	<ul style="list-style-type: none"> <li>St. Joseph, MO            One (1) Senior Consultant and one (1) Project Manager (two total)            Three (3) meetings total            Assume two (2) hours via teleconference (one meeting)            Assume two (2) hours in person (two meetings)            Assume travel from Jefferson City, MO and one flight from Denver, CO</li> <li>Meeting Agenda and Minutes            One (1) Project Manager and One (1) Designer, Assume four (4) hours each meeting for agenda and meeting minutes/ task assignments</li> </ul>
1.02 Prepare Project Scope of Work and Contract	<ul style="list-style-type: none"> <li>St. Joseph, MO            One (1) Senior Project Manager, one (1) Senior Consultant and one (1) Project Manager (three total)            Three (3) meetings total            Assume two (2) hour via teleconference (two meetings)            Assume two (2) hour in person meeting (one meeting)            Assume travel from Jefferson City, MO and one flight from Denver, CO</li> </ul>
1.04 Project Coordination Meetings	<ul style="list-style-type: none"> <li>St. Joseph, MO            One (1) Senior Project Manager, one (1) Senior Consultant, one (1) Project Manager and one (1) Designer (four total)            Assume two (2) hour via teleconference (two meetings)            Assume two (2) hour in person meeting (ten meetings)            Assume travel from Jefferson City, MO and one flight from Denver, CO</li> <li>Meeting Agenda and Minutes            One (1) Project Manager, Assume two (2) hours each meeting for agenda and meeting minutes/ task assignments.</li> </ul>

## **2.0 Design Phase**

**2.01 Analyze Topographic Survey Data.** This task includes analyzing the topographical surveying data and preparing the data for use with computer modeling. This will include the following tasks:

- ➔ Generate three-dimensional contour model from TIN – surface model.
- ➔ Prepare and process data for spot elevations, grading and/or paving cross sections.

This task includes analyzing the Runway 17/35 safety area topographical survey and object inventory data. Current editions of FAA runway safety area documents (i.e., FAA Office of Airports (ARP) Standard Operating Procedure (SOP) No. 8 Runway Safety Area Determination, FAA Order 5200.8 Runway Safety Area Program, FAA Order 5200.9 Financial Feasibility and Equivalency of Runway Safety Area



Improvements and Engineered Material Arresting Systems, etc.) will be reviewed and applicable data provided to the Sponsor accordingly. This will include the following tasks:

- Conduct safety area topographical survey and object inventory.
- Prepare exhibit(s) (plan view of safety area with spot elevations/longitudinal and transverse gradients/dimensions, location/description of objects; etc.) and associated narrative with analysis (compliance with current standards vs. non-compliance with current standard(s)).
- If a non-standard determination is made by the FAA, assist Sponsor with alternative analysis preparation and presentation per the referenced FAA guidance above.

**2.02 Analyze Geotechnical Investigation Data.** This task includes analyzing the geotechnical investigation. This will include the following tasks:

- Review Geotechnical Engineer recommendations.
- Determine on-site sources and quantities of suitable material for embankment.
- Determine appropriate data for benching design.
- Determine appropriate data for the pavement design form(s).
- Input data for computer modeling with topographical survey data.
- Prepare soil information for incorporation on the construction plans.
- Coordinate with Structural Engineer on geotechnical findings.

**2.03 Prepare Pavement Design.** After receiving the geotechnical investigation data, the Engineer will analyze the data and prepare a proposed pavement section using current FAA design software (FAARFIELD). In addition to determining the proposed pavement section for the current and anticipated traffic, a pavement classification number (PCN) analysis will be performed to determine the runway PCN classification based on the expected fleet mix. The Engineer will submit the FAARFIELD computer printouts with a narrative to the FAA. The following tasks will be completed:

- Determine appropriate data for pavement design.
- Input data for computer modeling with topographical survey data.
- Prepare an exhibit showing the existing pavement and base course thickness.
- Determine areas of existing pavement to be removed and replaced.
- Prepare pavement and soils information for incorporation on the construction drawings.
- Verify elevation of water table.
- Compile the current airport fleet mix.
- Input data into FAARFIELD.
- Run pavement design scenarios.
- Analyze output from FAARFIELD.
- Select preferred pavement section.
- Compare pavement section to FAA Advisory Circular (AC) 150/5320-6 (Current Edition), *Airport Pavement Design and Evaluation*.
- Verify frost design method.
- Verify overexcavation requirements (if needed).
- Verify optimum moisture content for subgrade preparation.

**2.04 Develop On-Site Grading Plans.** This task includes developing potential on-site embankment area grading plans to place excavated material from the project site. It is anticipated two to three different grading options will be developed during this task. Aerial photography will be used to develop the grading plans and associated quantities for all potential embankment area(s).

**2.05 Prepare Existing Utility Inventory.** This task includes reviewing record drawings and consulting with local utility companies, the ANG and the Sponsor to identify all utilities within the project site. The Construction Plans will include, to the maximum extent possible, the surveyed locations of observable utility features and the locations identified by utility locates.

**2.06 Prepare Preliminary Contract Documents.** This task includes preparing the Preliminary Contract Documents, including Contract Proposal, Bid Bond, Contractor Information Sheet, Subcontractor/Material Supplier List, Disadvantaged Business Utilization Commitment, DBE Participation Form, Certification of Non-Segregated Facilities, Equal Employment Opportunity Report Statement, Buy America Certification, Buy America Waiver Request, Buy America Conformance Listing, Certification Statement Regarding Undocumented Individuals, Bid Proposal, Contract, Payment Bond, Performance Bond, Notice of Award, Notice to Proceed, Notice of Contractor’s Settlement, General Provisions, FAA AC 150/5370-2 (Current Edition), *Operational Safety on Airports During Construction*, and Wage Rates. The wage rates will be updated at the time of advertisement to reflect the most current wage rates available. Preparation will include establishing the location for the bid opening, dates for advertisement and description of the work schedule. Also included in the Preliminary Contract Documents, and covered under separate tasks below, are the Construction Safety and Phasing Plan, Technical Specifications, and Special Provisions. Preliminary Contract Documents will be prepared as early as possible during the design phase and submitted to the Sponsor for review.

**2.07 Prepare Construction Safety and Phasing Plan (CSPP).** This task includes meeting with the Sponsor to discuss the current operations of the airport to assist in determining how the proposed construction phasing of the project will affect these operations. From these meetings, a complete Construction Safety and Phasing Plan (CSPP) will be developed to ensure safety compliance when coordinating construction activities and airport operations. The CSPP will be developed in accordance with the requirements of FAA AC 150/5370-2 (Current Edition), *Operational Safety on Airports During Construction*. A construction phasing plan that meets the requirements of the AC and operational needs of the airport will be developed and included in the Contract Documents. This plan will also identify any nighttime work, continuous working times, or other unusual conditions that could affect the Contractor’s normal progress on the project. The draft CSPP will be submitted at 30% complete and at 95% complete for ADO review. Upon preliminary approval from the ADO, the CSPP will be submitted to FAA for OE/AAA coordination.

**2.08 Prepare Preliminary Construction Plans.** This task includes preparing the following list of construction plans for the project. Additional plans may be added during the design phase as needed:

Plan Name/Description	Number of Sheets
Cover Sheet	1
Index of Drawings, Summary of Approximate Quantities and General Notes	3
Survey Control Plan	1
Geotechnical Investigation Plan	4
Safety Plan	1
Construction Layout Plan	1
Construction Phasing Plan	6
Environmental Requirements and Details	1
Demolition Plan	15
Geometric Layout Plan	15
Overall Grading and Drainage Plan	1
Grading and Drainage Plan	15
Pavement Plan and Profile	20
Service Road Grading Plan	4
Service Road Plan and Profile	4

Runway Cross Sections	25
Typical Sections	3
Joint Layout Plan	15
Joint Layout Details	3
Pavement Marking Plan	15
Pavement Marking Details	2
Drainage Plan and Profile	15
Drainage Details	2
Seeding and Erosion Control Plan	4
Seeding and Erosion Control Details	2
Fencing Layout Plan	2
Fencing Details	2
Electrical Demolition Plan	15
Electrical Layout Plan	15
Electrical Details	4
<b>Total Sheet Count</b>	<b>216</b>

**2.09 Prepare Preliminary Technical Specifications.** This task includes assembling the technical specifications necessary for the project. Standard FAA specifications will be utilized where possible, with the guidance from FAA AC 150/5370-10 (Current Edition), *Standard Specifications for Construction of Airports*. Additional specifications will be prepared to address work items for materials that are not covered by the standard FAA specifications. The standard specifications to be utilized shall include, but are not limited to, the following:

- ➔ Item C-100 Contractor Quality Control Program (CQCP)
- ➔ Item C-102 Temporary Air and Water Pollution, Soil Erosion and Siltation Control
- ➔ Item C-105 Mobilization
- ➔ Item C-110 Method of Estimating Percentage of Material Within Specification Limits (PWL)
- ➔ Item P-101 Preparation/Removal of Existing Pavements
- ➔ Item P-151 Clearing and Grubbing
- ➔ Item P-152 Excavation, Subgrade and Embankment
- ➔ Item P-153 Controlled Low-Strength Material (CLSM)
- ➔ Item P-154 Subbase Course
- ➔ Item P-155 Lime-Treated Subgrade
- ➔ Item P-156 Cement Treated Subgrade
- ➔ Item P-208 Aggregate Base Course
- ➔ Item P-209 Crushed Aggregate Base Course
- ➔ Item P-306 Lean Concrete Base Course
- ➔ Item P-501 Cement Concrete Pavement
- ➔ Item P-604 Compression Joint Seals for Concrete Pavements
- ➔ Item P-605 Joint Sealants for Pavements
- ➔ Item P-610 Concrete for Miscellaneous Structures
- ➔ Item P-620 Runway and Taxiway Marking
- ➔ Item P-621 Saw-Cut Grooves
- ➔ Item D-701 Pipe for Storm Drains and Culverts
- ➔ Item D-702 Slotted Drains
- ➔ Item D-705 Pipe Underdrains for Airports
- ➔ Item D-751 Manholes, Catch Basins, Inlets and Inspection Holes
- ➔ Item D-752 Concrete Culverts, Headwalls and Miscellaneous Drainage Structures
- ➔ Item F-162 Chain Link Fences
- ➔ Item T-901 Seeding

- Item T-905 Topsoil
- Item L-107 Airport Wind Cones
- Item L-108 Underground Power Cable for Airports
- Item L-110 Airport Underground Electrical Duct Banks and Conduits
- Item L-115 Electrical Manholes and Junction Structures
- Item L-119 Airport Obstruction Lights
- Item L-125 Installation of Airport Lighting Systems

Additional Non-FAA specifications will include, but are not limited to, the following items:

- Item P-159 Watering
- Item P-222 Soil Sterilization
- Item D-710 Rock Riprap

#### Vehicle Service Road Relocation

- MO-105 Mobilization
- MO-152 Unclassified Excavation
- MO-155 Fly Ash Treated Subgrade
- MO-156 Erosion and Sediment Control
- MO-209 Crushed Aggregate Base Course
- MO-620 Runway and Taxiway Painting
- MO-701 Pipe for Storm Drains and Culverts
- MO-901 Seeding with Hydromulch

**2.10 Prepare Preliminary Special Provisions.** This task includes preparing the preliminary Special Provisions to address, or expound on, site conditions that require additional clarification. These include, but are not limited to: Haul Roads, Airport Security, Radio Communications, Work Schedule, Contractor's Quality Control Program, Sequencing of the Work, Closure of Air Operations Areas, Accident Prevention, Underground Cables/Utilities, Insurance, Indemnification, Sales and Use Taxes, Permits and Compliance with Laws, Executed Contracts, Subletting or Assigning of Contracts, Qualification of Disadvantaged Business Enterprises, Liquidated Damages, Acceptance Testing, Grade Control and Surface Tolerance, Construction Management Plan, and Instruction Manuals.

**2.11 Prepare Drainage Analysis and Storm Drainage Design.** This task includes verifying the existing storm drainage and/or subsurface drainage systems. Surface drainage will be evaluated and designed to ensure accordance with standard engineering practices, local requirements and FAA AC 150/5320-5 (Current Edition), *Airport Drainage Design*.

**2.12 Compile/Submit Permits.** This task includes identifying potential federal, state and local permits needed for the project. Permits are anticipated to be required for, but are not limited to, demolition activities, air quality, grading, Right-of-Way (ROW) access, hauling, batch plants, wetland disturbance, open burning, fencing, various building systems, construction dewatering, permanent dewatering, fueling systems and stormwater management construction plans and associated permits (SWMP). When applicable, the Engineer will assist the Sponsor to compile information and submit permits that are required to be obtained by the Sponsor.

**2.13 Compile/Submit FAA Form 7460.** This task includes preparing and submitting the required FAA Form 7460 on the Sponsor's behalf. The anticipated use of equipment during construction requires an FAA Form 7460 to be sent to the FAA a minimum of 45 days prior to the start of construction for approval. The

Engineer will prepare exhibits to illustrate the project limits and temporary construction equipment height.

**2.14 Calculate Estimated Quantities.** This task includes calculating all necessary quantities for the various work items. Quantities must be consistent with the specifications and acceptable quantity calculation practices.

**2.15 Prepare Estimate of Probable Construction Cost.** Using the final quantities calculated following the completion of the construction plans and specifications, the Engineer will prepare the construction cost estimate. The estimate will be based on information obtained from previous projects, contractors, material suppliers and other available databases.

**2.16 Prepare Engineer's Design Report and Modification of Standards.** This task includes preparation of the Engineer's Design Report in accordance with current FAA Central Region Engineer's Design Report guidelines. The Engineer's Design Report will include a detailed summary of the project, photographs and descriptions of existing site conditions, pavement life cycle cost analysis, recycling and material availability analysis, estimate of project costs, and a schedule for the completion of the design, bidding, and construction. Modifications of the FAA standards, as necessary, for the project will be prepared for preliminary review. The approved Modifications of Standards (MOS) will be included in the Engineer's Design Report and submitted on the MOS website (See Task 2.17 below) to the FAA and Sponsor. The Engineer's Design Report will also contain any alternative design concepts that were investigated and evaluated.

**2.17 Prepare and Submit Modification of Standards on MOS Website.** This task includes Modifications of Standards (MOS) website access coordination with the Sponsor and FAA. Modifications of the FAA standards, as necessary, for the project must be compiled and submitted to the MOS website for approval. Revisions will be completed as needed.

**2.18 Prepare Engineer's Recommendation for Clarification to Standards.** This task includes preparing and submitting to the FAA a recommendation for clarification to FAA standards. The Engineer's recommendation will contain a list of standards affected, the basis for each clarification as allowed by FAA Order 5300.1, a description of each proposed clarification, and the Engineer's assurance that the clarifications will provide a finished product that will meet FAA standards for acceptance.

**2.19 Review Plans at 60%, and 90% Complete.** During various stages of completion of the design, the Engineer will submit a set of Construction Plans, Specifications, and Contract Documents to the Sponsor for their review. Meetings will be scheduled for periodic reviews, including a 90% plans-in-hand review. The project will be reviewed with the FAA to obtain their concurrence with the design.

**2.20 Provide In-House Quality Control.** The Engineer has an established quality control program that will provide both experienced and thorough reviews of all project submittals and will also provide engineering guidance to the design team throughout design development from an experienced, senior-level Professional Engineer.

Prior to each review set of Construction Plans, Specifications, Contract Documents, and Engineer's Design Report being submitted to the Sponsor and FAA, a thorough, in-house quality control review of the documents will be conducted. This process will include an independent review of the Construction Plans, Specifications, Contract Documents, and Engineer's Design Report being submitted by a licensed Professional Engineer other than the Engineer who performed the design of the project. Comments will

be offered by the Engineer that performed the review, and revisions to the Construction Plans, Specifications, Contract Documents, and Engineer’s Design Report will be made accordingly.

In addition to the 60%, and 90% reviews, the Engineer’s in-house quality control program also provides engineering guidance to the design team throughout the project design in an attempt to steer the project in a manner that provides the best engineering judgment.

At the 90% design review, the independent review will re-evaluate the CATEX boundary.

**2.21 Prepare and Submit Construction Plans, Specifications, Contract Documents, and Engineer’s Design Report.** A final set of Construction Plans (11” x 17”), Specifications, Contract Documents, and the Engineer’s Design Report will be prepared and submitted to the Sponsor, MoDOT Aeronautics, and the FAA. These documents will incorporate all revisions, modifications, and corrections identified during the final review. Paper and electronic copies will be provided.

**2.22 Prepare/Conduct Tenant Information Meetings.** The Engineer will conduct two meetings with airport tenants, one after the 60% design and a second following final design to discuss construction phasing, impacts. This task will take feedback from the stakeholders and incorporate the comments into the design including any phasing updates.

**2.23 Prepare Requests for Reimbursement.** This task includes preparing the FAA Standard Form 271 for Sponsor reimbursement of eligible expenses incurred on a monthly basis. The Engineer will submit the completed form along with appropriate supporting documentation to the Sponsor for review and approval. Upon approval, the Engineer or the Sponsor will submit the completed forms and supporting documentation to the FAA for reimbursement. It is estimated there will be nine RFRs for expenses incurred during the design and bidding phase of this project.

**2.24 Prepare and Submit Design Closeout Report.** This task includes preparation of the design closeout report in accordance with current FAA Northwest Mountain Region Design Closeout Report guidelines. Paper and electronic copies will be provided.

TASK 2 DELIVERABLES	TO FAA/STATE	TO ANG	TO SPONSOR
2.03 Proposed Pavement Design	✓		✓
2.06 Preliminary Contract Documents for Sponsor’s Review		✓	✓
2.07 CSPP at 60% and 95% Complete	✓	✓	✓
2.13 FAA Form 7460	✓		✓
2.16 Engineer’s Design Report	✓	✓	✓
2.19 60%, and 90 % Construction Plans, Specifications, Contract Documents, and Engineer’s Design Report	✓	✓	✓
2.21 Final Construction Plans, Specifications and Contract Documents, and Engineer’s Design Report	✓	✓	✓
2.23 Requests for Reimbursement	✓		✓
2.24 Design Closeout Report	✓		✓

TASK 2 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
2.21 Plan Review at 60% and 90% Complete.	<ul style="list-style-type: none"> <li>• St. Joseph, MO One (1) Senior Project Manager, one (1) Senior Consultant and one (1) Project Manager, (three total) Assume four (4) hours via teleconference (six meetings)</li> <li>• Meeting agenda and minutes One (1) Project Manager, Assume two (2) hours each meeting for agenda and meeting minutes/ task assignments.</li> </ul>
2.22 Prepare/Conduct Tenant Information Meetings	<ul style="list-style-type: none"> <li>• St. Joseph, MO One (1) Senior Project Manager, one (1) Senior Consultant and one (1) Project Manager (three total) Two (2) meetings total Assume two (2) hours in person (two meetings) Assume travel from Jefferson City, MO and one flight from St. George, UT</li> <li>• Meeting Presentation and Agenda One (1) Senior Consultant, Assume sixteen (16) hours each meeting for presentation preparation.</li> </ul>

**3.0 Bidding Phase**

**3.01 Provide Bid Assistance.** The Engineer will assist the Sponsor, as needed, with the preparation of any required bidding documents. Included as part of this task, the Engineer will prepare a legal advertisement for publication in two (2) newspapers (or other form of regularly published print media) as a solicitation for bids. Additionally, the Engineer will advertise the project Invitation for Bids on their website and directly notify potential contractors and plan rooms in order to maximize project exposure and generate interest in the project. The Engineer will coordinate payment for the project advertisement(s) and request reimbursement from the Sponsor as a pass-through cost during invoicing.

**3.02 Prepare/Conduct Pre-Bid Meeting.** The Engineer will conduct the pre-bid meeting and pre-bid site visit in sequence with the Sponsor and contract document requirements. As a part of this meeting, the Engineer will also discuss the environmental plan sheet, surveyed areas, and environmental commitments.

**3.03 Prepare Addenda.** Any necessary addenda will be issued to clarify and modify the project, as required, and based on questions or comments that may arise from potential contractors during the bidding process. Any necessary addenda will be reviewed with the Sponsor and FAA prior to being issued. The addenda will meet all design and construction standards, as required.

**3.04 Consult with Prospective Bidders.** During the bidding process, the Engineer shall be available to clarify bidding issues with contractors and suppliers and for consultation with the various entities associated with the project.

**3.05 Attend Bid Opening.** The Engineer shall attend the bid opening for the project, which will be conducted by the Sponsor.

**3.06 Review Bid Proposals.** Upon the opening of submitted bid proposals by the Sponsor, the Engineer shall review all the bid proposals submitted. A cost analysis of the bid prices will be completed and

tabulated; the contractor's qualifications to perform the work will be included, including review of suspension and debarment rules on the www.Sam.gov website, verification of proposed DBE subcontractors, Buy American compliance analysis/review, and project funding review. Inclusion of bid guarantee, acknowledgement of addenda and licensure verification in Missouri shall be completed.

**3.07 Prepare Recommendation of Award.** The Engineer shall prepare a Recommendation of Award for the Sponsor to accept or reject the bids received with a summary of the items listed in Task 3.6. If rejection is recommended, the Engineer will supply an explanation for their recommendation and possible alternative actions the Sponsor can pursue to complete the project.

TASK 3 DELIVERABLES	TO FAA/STATE	TO SPONSOR
3.01 Required Bidding Documents	✓	✓
3.02 Pre-Bid Meeting Agenda and Pre-Bid Meeting Minutes	✓	✓
3.03 Addenda	✓	✓
3.06 Bid Tabulations	✓	✓
3.07 Recommendation of Award		✓

TASK 3 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
3.02 Prepare/Conduct Pre-Bid Meeting	<ul style="list-style-type: none"> <li>St. Joseph, MO One (1) Project Manager One (1) meeting total Assume two (2) hours in person Assume travel from Kansas City, MO</li> <li>Meeting agenda and minutes One (1) Project Manager and One (1) Designer, Assume two (2) hours each meeting for agenda and meeting minutes/ task assignments</li> </ul>
3.05 Attend Bid Opening	<ul style="list-style-type: none"> <li>St. Joseph, MO One (1) Senior Project Manager, one (1) Senior Consultant and one (1) Project Manager (three total) One (1) meeting total Assume two (2) hours in person (one meeting) Assume travel from Jefferson City, MO and one flight from Denver, CO</li> <li>Meeting agenda and minutes One (1) Project Manager, Assume four (4) hours each meeting for bid review and tabulation</li> </ul>

**EX Reimbursable Costs During Design and Bidding**

This section includes reimbursable items such as auto rental, mileage, lodging, per diem, and other miscellaneous expenses incurred in order to complete **Part A – Basic Services**.

**PART B - SPECIAL SERVICES** consists of topographical survey and costs associated with the storm water investigation.



#### **4.0 Design Survey Phase**

**4.01 Perform Topographical Survey.** This task includes providing design survey services within the topographic survey limits shown in Exhibit No. 1 to support the design team for this project. Work items associated with this task include the following:

- Topographical survey of approximately 210 acres.
- It is assumed that the Primary Airport Control Station (PACS) and Secondary Airport Control Stations (SACS) located on the airport are in good condition and can be verified; however, if it is found that the PACS and SACS are compromised, establishment of temporary airport control must be completed and tied to the national spatial reference system via static GPS observations. Following airport control verification/establishment, temporary project control, based upon the airport control PACS and SACS or temporary airport control, will be placed near the project area at intervals not to exceed 500 feet to control the project.
- One permanent benchmark shall be placed for each 4 acres and description and elevation to the nearest 0.01 foot. A minimum of three (3) benchmarks shall be established for the project, regardless of size.
- Ground topography of non-pavement areas will be surveyed at 50-foot stations with associated cross sections having no greater than 25-foot spacing and will include additional shots as necessary to accurately depict breaklines. These ground topography areas will be surveyed with vertical accuracies not to exceed +/- 0.10 feet.
- Hard surface pavements for the runway and connector taxiways will be surveyed at 25-foot stations as well as all vertical and horizontal points of tangent/curve with associated cross sections having no greater than 25-foot spacing. All hard surface pavement will be surveyed with vertical accuracies not to exceed +/- 0.02 feet. Concrete joints will also be surveyed if applicable.
- Coordination with design staff to determine pavement tie-in locations. These locations will be surveyed with vertical accuracies of at least +/- 0.02 feet.
- Location of structures, paving, and above ground improvements including building footprint, finished floor elevations at the openings plus five feet interior of the opening and concrete aprons associated with door openings will be surveyed at intervals of no greater than 25 feet.
- Additional airfield elements that will be located and surveyed include aircraft tie-downs, guidance signs, airfield runway, taxiway, and/or apron lighting and paint markings, NAVAIDS within the project area (if any), fuel farm, fences, gates and other airport features within the project area.
- Coordinate location and field marking of all existing utilities in the project limits with one-call services, airport operations staff, and/or private utility locators as necessary. Review of existing as-built and other construction records as necessary. All utility locates will be surveyed as marked by utility locators in the field. Points of utilities to be surveyed include, but are not limited to, all paint marks, hydrants, valves, hand holes, manholes, inlets, cleanouts, culverts, pipes, pedestals, meters, transformers, utility poles and other reasonably visible existing utility infrastructure components.
- Survey and record location, size, depth, and pressure of water and gas mains, central steam and other utilities including but not limited to buried tanks and septic fields.
- Survey and record location of fire hydrants and the size of main serving each
- Survey and record location, elevation, and characteristics of primary and secondary electrical power, cable television, communications, lighting, traffic control systems, and navigational and control systems.
- Survey and record location, size, depth, invert, and direction of flow for sanitary sewers and storm drains including manholes, catch basins, junction boxes, and diversion structures.

- Survey and record extent of watershed onto the property.
- Record description of natural features.
- During design, there may be the need to verify existing survey information or extend the limits of the existing survey.
- Reduce all field notes and pictures into a topographic survey report to be used by the Engineer.
- Create an AutoCAD drawing using the surveyed data that will include symbols, linework, breaklines, notes, details, and a surface model.

The Topographical Survey shall be completed by, or under the direct supervision of, a Professional Land Surveyor licensed in the State of Missouri.

TASK 4 DELIVERABLES	TO FAA/STATE	TO SPONSOR
4.01 Topographical Survey		✓

TASK 4 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
4.01 Coordinate and Perform Topographical Survey	<ul style="list-style-type: none"> <li>• St. Joseph, MO</li> <li>One (1) Surveyor</li> <li>Assume a four (4) day site visit</li> <li>Assume travel to/from Kansas City, MO to St. Joseph, MO</li> </ul>

**EX Reimbursable Costs During Survey** This section includes reimbursable items such as auto rental, mileage, lodging, per diem, travel, and other miscellaneous costs incurred in order to complete **Part B – Special Services**. Section 4 Reimbursables are invoiced on a not-to-exceed basis.

**Special Considerations**

**Environmental Survey and Reports:** Biological, cultural, wetlands and paleontological surveys and analysis will be completed to identify existing resources and satisfy City, State and Federal regulations. Field visits will be performed under the direct supervision of the Engineer. Final reports will be completed for each resource (biological, cultural, wetlands and paleontological) to be assessed in the Supplement to the EA.

**Assumptions**

The scope of services described previously is based on the following assumptions of responsibilities by the Engineer and Sponsor.

1. It is anticipated there will be a minimum number of trips and site visits to the airport to facilitate the completion of the various phases listed in this scope. Each trip is anticipated to be a mix of one-day trips and two-day trips and the number of trips for each phase are included at the end of each phase above.
2. The Sponsor will provide existing mapping data including as-builts available for the project areas, aerial orthoimagery, subsurface conditions information such as prior geotechnical investigations in the project area and other available information in the possession of the Sponsor.

3. The Sponsor will provide an electronic copy of the current ALP to allow for updating of the plan upon completion of the project.
4. The Engineer will provide additional base mapping of existing topography, planimetric features and underground utilities needed in the design phase of the project.
5. The Sponsor will furnish escorts as needed for the Engineer to conduct field work.
6. The Sponsor will coordinate with tenants as required to facilitate field evaluations and construction.
7. While the project has both eligible and ineligible work, this scope and fee assumes that the project will be designed as one bid package with separate federal and non-federal bid schedules. Splitting the project into two bid packages will result in additional costs.
8. All engineering work will be performed using accepted engineering principles and practices and provide quality products that meet or exceed industry standards. Dimensional criteria will be in accordance with FAA AC 150/5300-13 (Current Edition), *Airport Design* and related circulars. Construction specifications will be in accordance with FAA AC 150/5370-10 (Current Edition), *Standard Specifications for Construction of Airports* and the Central Region's Regional Updates for Specifying Construction of Airports and related circulars. Project planning, design and construction will further conform to all applicable standards, including all applicable current FAA Advisory Circulars and Orders required for use in AIP-funded projects and other national, state, or local regulations and standards, as identified and relevant to an airfield design and construction project.
9. The Engineer will utilize the following plan standards for the project:
  - Plans will be prepared using the Engineer's standards, unless the Sponsor provides its own standards upon Notice to Proceed.
  - Plan elevations will be vertical datum NAVD 88 derived from the existing control network.
  - Plan coordinates will be based on horizontal datum NAD 83/2011 State Plane Coordinates derived from the existing control network.
  - All plans will be stamped and signed by a registered Missouri Professional Engineer, or Professional Land Surveyor, as required.
  - Plans prepared by subconsultants will be prepared using the same base maps, the same coordinate systems and the same plan layout and format as plans prepared by the Engineer.
  - The guidance included in FAA Memorandum, *FAA Review of Construction Plans and Specifications for AIP Funded Projects*, will be reviewed, incorporated and will supplement the Engineer's standards.
10. The Engineer will utilize the following assumptions when preparing the project manual for bidding and construction of the project:
  - The project manual Contract Documents will be developed jointly by the Sponsor and the Engineer.
  - The Engineer is responsible for developing the contents of the document and including the Front-End documents which will be supplied by the Sponsor.

- FAA General Provisions and required contract language will be used.
- 11. The Engineer must maintain records of design analyses and calculations consistent with typical industry standards, as required by the FAA, for a period of three years after the project is closed by the FAA.
- 12. Because the Engineer has no control over the cost of construction-related labor, materials, or equipment, the Engineer's opinions of probable construction costs will be made on the basis of experience and qualifications as a practitioner of his/her profession. The Engineer does not guarantee that proposals for construction, construction bids, or actual project construction costs will not vary from Engineer's estimates of construction cost.

### **Additional Services**

The following items are not included under this agreement but will be considered as extra work:

- Redesign for the Sponsor's convenience or due to changed conditions after previous alternate direction and/or approval.
- Submittals or deliverables in addition to those listed herein.
- If a project audit occurs, the Engineer is prepared to assist the Sponsor in gathering and preparing the required materials for the audit.
- Serving as an expert witness for the Owner in any litigation, surety claim, contractor bond activation, or other proceeding involving the project.
- Additional or extended services during construction made necessary by extension of contract time, non-concurrent work, or changes in the work.
- Legal, surety, or insurance support, coordination, and representation.

Extra Work will be as directed by the Sponsor in writing for an additional fee as agreed upon by the Sponsor and the Engineer.

FEE BREAKDOWN

Labor Category	Total Hours	Billing Rate	Total Cost
<b>1.0 Preliminary Design Phase (Lump Sum)</b>			
Principal	8 hrs. x	\$ 343.59 /hr = \$	2,748.72
Senior Project Manager	176 hrs. x	\$ 278.30 /hr = \$	48,980.80
Senior Consultant II	276 hrs. x	\$ 261.12 /hr = \$	72,069.12
Project Manager III	360 hrs. x	\$ 219.89 /hr = \$	79,160.40
Project Coordinator II	228 hrs. x	\$ 130.56 /hr = \$	29,767.68
Planner III	64 hrs. x	\$ 171.79 /hr = \$	10,994.56
Electrical Phase Manager IV	120 hrs. x	\$ 247.38 /hr = \$	29,685.60
Construction Manager II	84 hrs. x	\$ 161.49 /hr = \$	13,565.16
<b>SUBTOTAL 1316 hrs. SUBTOTAL \$ 286,972.04</b>			
<b>Reimbursables</b>			
Auto Rental	15 Day x	\$ 85.00 /Day= \$	1,275.00
Mileage	1250 Mi x	\$ 0.585 /Mi= \$	731.25
Lodging + Tax & Fees	6 Day x	\$ 115.00 /Day= \$	690.00
Per Diem	7 Day x	\$ 59.00 /Day= \$	413.00
Travel & Airline Costs	2 Trip x	\$ 500.00 /Trip= \$	1,000.00
<b>SUBTOTAL \$ 4,109.25</b>			
<b>PHASE SUBTOTAL \$ 291,081.29</b>			

LABOR HOUR BREAKDOWN

TASK	LABOR CATEGORY								Phase Item Costs
	Principal	Senior Project Manager	Senior Consultant II	Project Manager III	Project Coordinator II	Planner III	Electrical Phase Manager IV	Construction Manager II	
<b>1.0 Preliminary Design Phase (Lump Sum)</b>									
1.01 Coordinate and Attend Meetings with the Sponsor, MoDOT, ANG and FAA		140	140	140	40		24		\$ 117,462.92
1.02 Prepare Project Scope of Work and Contract	8	8	8	40			24	20	\$ 25,026.60
1.03 Prepare Preliminary Cost Estimating		10	8	40			24	40	\$ 26,064.28
1.04 Provide Project Coordination			80	80	120		24	24	\$ 63,960.88
1.05 Review Existing Documents			6	20			24		\$ 11,901.64
1.06 Prepare State Grant Application		6		4	12				\$ 4,116.08
1.07 Prepare Federal Grant Application		6		4	12				\$ 4,116.08
1.08 Prepare Environmental Documentation			12	4	8	64			\$ 16,052.04
1.09 Coordinate Sponsor/FAA Reimbursable Agreement			16	16	24				\$ 10,829.60
1.10 Prepare Quarterly Performance Reports - Design		6	6	12	12				\$ 7,441.92
<b>TOTALS</b>	<b>8</b>	<b>176</b>	<b>276</b>	<b>360</b>	<b>228</b>	<b>64</b>	<b>120</b>	<b>84</b>	<b>\$ 286,972.04</b>

Labor Category	Total Hours	Billing Rate	Total Cost
<b>2.0 Design Phase (Lump Sum)</b>			
Senior Project Manager	344 hrs. x	\$ 278.30 /hr = \$	95,735.20
Senior Consultant II	302 hrs. x	\$ 261.12 /hr = \$	78,858.24
Project Manager III	1200 hrs. x	\$ 219.89 /hr = \$	263,868.00
Project Coordinator II	290 hrs. x	\$ 130.56 /hr = \$	37,862.40
Planner III	130 hrs. x	\$ 171.79 /hr = \$	22,332.70
Designer II	908 hrs. x	\$ 161.49 /hr = \$	146,632.92
CADD Tech III	876 hrs. x	\$ 134.00 /hr = \$	117,384.00
Construction Manager II	1162 hrs. x	\$ 161.49 /hr = \$	187,651.38
Electrical Phase Manager IV	684 hrs. x	\$ 247.38 /hr = \$	169,207.92
Quality Control Manager	160 hrs. x	\$ 243.95 /hr = \$	39,032.00
<b>SUBTOTAL</b>	<b>6056 hrs.</b>	<b>SUBTOTAL \$</b>	<b>1,158,564.76</b>
<b>Reimbursables</b>			
Auto Rental	10 Day x	\$ 85.00 /Day= \$	850.00
Mileage	1900 Mi x	\$ 0.585 /Mi= \$	1,111.50
Lodging + Tax & Fees	10 Day x	\$ 115.00 /Day= \$	1,150.00
Per Diem	20 Day x	\$ 59.00 /Day= \$	1,180.00
Travel & Airline Costs	4 Trip x	\$ 500.00 /Trip= \$	2,000.00
		<b>SUBTOTAL \$</b>	<b>6,291.50</b>
<b>PHASE SUBTOTAL</b>		<b>\$</b>	<b>1,164,856.26</b>

TASK	LABOR CATEGORY										Phase Item Costs	
	Senior Project Manager	Senior Consultant II	Project Manager III	Project Coordinator II	Planner III	Designer II	CADD Tech III	Construction Manager II	Electrical Phase Manager IV	Quality Control Manager		
<b>2.0 Design Phase (Lump Sum)</b>												
2.01 Analyze Topographical Survey Data	4		56			60	24					\$ 26,332.44
2.02 Analyze Geotechnical Investigation Data	16	8	56					48				\$ 26,607.12
2.03 Prepare Pavement Design	4		56					48				\$ 21,178.56
2.04 Develop On-Site Grading Plans	4		56			80	40	40				\$ 38,165.84
2.05 Prepare Existing Utility Inventory			24				20	16				\$ 10,541.20
2.06 Prepare Preliminary Contract Documents		8	40	16				24				\$ 16,849.28
2.07 Prepare Construction Safety and Phasing Plan (CSPP)	8	4	40	6	6			40				\$ 20,340.18
2.08 Prepare Preliminary Construction Plans												\$ -
Cover Sheet			2					8				\$ 1,511.78
Index of Drawings/Summary of Approximate Quantities & General Notes			4					16				\$ 3,023.56
Survey Control Plan			2					8				\$ 1,511.78
Geotechnical Investigation Plan			2					24				\$ 3,655.78
Safety Plan			4					20				\$ 3,559.56
Construction Layout Plan	12		24					40	24			\$ 17,852.72
Construction Phasing Plan	16	8	20					24	40			\$ 20,615.16
Environmental Requirements and Details		16	8			40		20	6			\$ 16,457.58
Demolition Plan			8				24	40	6			\$ 11,963.82
Geometric Layout Plan	4	4	8				48	40	8			\$ 18,320.24
Overall/Grading and Drainage Plan	8	4	30				60	24	8			\$ 24,064.90
Grading and Drainage Plan	8	8	48			24		24	12			\$ 33,836.32
Pavement Plan and Profile	6	4	24				64	24	8			\$ 22,834.92
Service Road Grading Plan	6	4	8				64	24	8			\$ 19,316.68
Service Road Plan and Profile	6	4	8				64	24	8			\$ 19,316.68
Runway Cross Sections	8	4	8				64	24	8			\$ 19,873.28
Typical Sections	6	4	16					24	8			\$ 10,740.44
Pavement Marking Plan/Details			8					24	12			\$ 6,913.00
Drainage Plan and Profile/Details	16	8	80				120	40	16			\$ 51,455.60
Seeding and Erosion Control Plan/Details			10			60		24	6			\$ 16,691.24
Fencing Layout Plan/Details			8					48	8			\$ 9,483.04
Electrical Demolition Plan/Layout Plan/Details	8	16	16				40	48		340		\$ 106,923.36
2.09 Prepare Preliminary Technical Specifications	8		48	24					160	160		\$ 81,333.76
2.10 Prepare Preliminary Special Provisions			24	40					16			\$ 13,083.60
2.11 Prepare Drainage Analysis and Storm Drainage Design	8	8	56				120	80	120			\$ 66,106.80
2.12 Compile/Submit Permits			24	24					24			\$ 12,286.56
2.13 Compile/Submit FAA Form 7460		8	16	24			40	40	40			\$ 27,019.84
2.14 Calculate Estimated Quantities	8	4	24					80	24			\$ 27,404.56
2.15 Prepare Estimate of Probable Construction Cost	8	8	8					40	40			\$ 22,429.28
2.16 Prepare Engineer's Design Report and Modification of Standards	8	4	40					80	40			\$ 34,880.88
2.17 Prepare and Submit Modification of Standards on MOS Website	8		24	24								\$ 10,637.20
2.18 Prepare Engineer's Recommendation for Clarification to Standards			24	16				40				\$ 13,825.92
2.19 Review Plans at 30%, 60%, and 90% Complete	40	42	40	40				40	40	40	80	\$ 77,347.84
2.20 Provide In-House Quality Control	30										80	\$ 27,865.00
2.21 Prepare and Submit Const. Plans, Specs., Cont. Docs., and Design Report	30	8	40	40				40	40	40		\$ 46,170.76
2.22 Prepare/Conduct Tenant Information Meetings	40	100	60	18								\$ 52,787.48
2.23 Prepare Requests for Reimbursement	16	16	18	18								\$ 14,938.82
2.24 Prepare and Submit Design Closeout Report			80									\$ 30,510.40
<b>TOTALS</b>	<b>344</b>	<b>302</b>	<b>1200</b>	<b>290</b>	<b>130</b>	<b>908</b>	<b>876</b>	<b>1162</b>	<b>684</b>	<b>160</b>		<b>\$ 1,158,564.76</b>

Labor Category	Total Hours	Billing Rate	Total Cost
<b>3.0 Bidding Phase (Lump Sum)</b>			
Senior Project Manager	106 hrs. x	\$ 278.30 /hr = \$	29,499.80
Senior Consultant II	82 hrs. x	\$ 261.12 /hr = \$	21,411.84
Project Manager III	146 hrs. x	\$ 219.89 /hr = \$	32,103.94
Project Coordinator II	46 hrs. x	\$ 130.56 /hr = \$	6,005.76
Electrical Phase Manager IV	34 hrs. x	\$ 247.38 /hr = \$	8,410.92
Construction Manager II	60 hrs. x	\$ 161.49 /hr = \$	9,689.40
<b>SUBTOTAL</b>	<b>474 hrs.</b>	<b>SUBTOTAL \$</b>	<b>107,121.66</b>
<b>Reimbursables</b>			
Auto Rental	Day x	\$ 85.00 /Day= \$	-
Mileage	1600 Mi x	\$ 0.585 /Mi= \$	936.00
Lodging + Tax & Fees	9 Day x	\$ 115.00 /Day= \$	1,035.00
Per Diem	9 Day x	\$ 59.00 /Day= \$	531.00
Travel & Airline Costs	3 Trip x	\$ 500.00 /Trip= \$	1,500.00
		<b>SUBTOTAL \$</b>	<b>4,002.00</b>
<b>PHASE SUBTOTAL</b>		<b>\$</b>	<b>111,123.66</b>

TASK	LABOR CATEGORY							Phase Item Costs
	Senior Project Manager	Senior Consultant II	Project Manager III	Project Coordinator II	Electrical Phase Manager IV	Construction Manager II		
<b>3.0 Bidding Phase (Lump Sum)</b>								
3.01 Provide Bid Assistance	40	40	40	16	16			\$ 36,419.44
3.02 Prepare/Conduct Pre-Bid Meeting		8	24	6		4		\$ 8,795.64
3.03 Prepare Addenda	10	8	24	8	18	16		\$ 18,230.48
3.04 Consult with Prospective Bidders			8			16		\$ 4,342.96
3.05 Attend Bid Opening	40	10	16					\$ 17,261.44
3.06 Review Bid Proposals	8	8	16	8		8		\$ 10,170.00
3.07 Prepare Recommendation of Award	8	8	18	8		16		\$ 11,901.70
<b>TOTALS</b>	<b>106</b>	<b>82</b>	<b>146</b>	<b>46</b>	<b>34</b>	<b>60</b>		\$ 107,121.66

Labor Category	Total Hours	Billing Rate	Total Cost
<b>4.0 Design Survey Phase (Lump Sum)</b>			
Survey Manager	8 hrs. x	\$ 223.33 /hr = \$	1,786.64
Survey Party Chief	40 hrs. x	\$ 113.38 /hr = \$	4,535.20
<b>SUBTOTAL</b>	<b>48 hrs.</b>	<b>SUBTOTAL \$</b>	<b>6,321.84</b>
<b>Reimbursables</b>			
Mileage	290 Mi x	\$ 0.585 /Mi= \$	169.65
Lodging + Tax & Fees	Day x	\$ 115.00 /Day= \$	-
Per Diem	4 Day x	\$ 59.00 /Day= \$	236.00
Travel & Airline Costs	Trip x	\$ 500.00 /Trip= \$	-
Survey Supplies & Equip.	1 Each x	\$ 155.00 /Trip= \$	155.00
Survey Field Vehicle	4 Day x	\$ 85.00 /Day= \$	340.00
		<b>SUBTOTAL \$</b>	<b>900.65</b>
<b>PHASE SUBTOTAL</b>		<b>\$</b>	<b>7,222.49</b>

TASK	LABOR CATEGORY							Phase Item Costs
	Survey Manager	Survey Party Chief						
<b>4.0 Design Survey Phase (Lump Sum)</b>								
4.01 Perform Topographical Survey	8	40						\$ 6,321.84
<b>TOTALS</b>	<b>8</b>	<b>40</b>						\$ 6,321.84

	Phase Fee	Reimbursable Costs	Total Cost
<b>PART A - BASIC SERVICES (LUMP SUM)</b>			
1.0 Preliminary Design Phase (Lump Sum)	\$ 286,972.04	\$ 4,109.25	\$ 291,081.29
2.0 Design Phase (Lump Sum)	\$ 1,158,564.76	\$ 6,291.50	\$ 1,164,856.26
3.0 Bidding Phase (Lump Sum)	\$ 107,121.66	\$ 4,002.00	\$ 111,123.66
<b>SUBTOTAL</b>	<b>\$ 1,552,658.46</b>	<b>\$ 14,402.75</b>	<b>\$ 1,567,061.21</b>
<b>PART B - SPECIAL SERVICES (LUMP SUM)</b>			
4.0 Design Survey Phase (Lump Sum)	\$ 6,321.84	\$ 900.65	\$ 7,222.49
<b>SUBTOTAL</b>	<b>\$ 6,321.84</b>	<b>\$ 900.65</b>	<b>\$ 7,222.49</b>
<b>SUBCONSULTANT 1</b>			
WOOLPERT (Storm Sewer Investigation and Storm Sewer Scope)			
		<b>SUBTOTAL \$</b>	<b>50,000.00</b>
<b>TOTAL</b>	<b>\$ 1,558,980.30</b>	<b>\$ 15,303.40</b>	<b>\$ 1,624,283.70</b>

EXHIBIT IV

**DERIVATION OF CONSULTANT PROJECT COSTS**

**ROSECRANS MEMORIAL AIRPORT  
ST. JOSEPH, MISSOURI**

**DESIGN/BIDDING SERVICES  
April 13, 2022**

**1 DIRECT SALARY COSTS:**

<u>TITLE</u>	<u>HOURS</u>	<u>RATE/HOUR</u>	<u>COST (\$)</u>
Principal	8	99.68	797.44
Senior Project Manager	626	80.74	50,543.24
Senior Consultant II	660	75.76	50,001.60
Electrical Phase Manager IV	838	71.77	60,143.26
Project Manager III	1706	63.79	108,825.74
Planner III	194	49.84	9,668.96
Construction Manager II	1306	46.85	61,186.10
Designer II	908	46.85	42,539.80
CADD Tech III	876	38.88	34,058.88
Quality Control Manager	160	70.77	11,323.20
Project Coordinator II	564	37.88	21,364.32
Survey Manager	8	64.79	518.32
Survey Party Chief	40	32.89	1,315.60
Total Direct Salary Costs			= \$452,286.46

**2 LABOR AND GENERAL ADMINISTRATIVE OVERHEAD:**

Percentage of Direct Salary Costs @ 199.73 % = \$903,351.75

**3 SUBTOTAL:**

Items 1 and 2 = \$1,355,638.21

**4 PROFIT:**

15% of Item 3 Subtotal\* = \$203,345.73

\*Note: 0-15% Typical

Subtotal \$1,558,983.94 Lump Sum

**5 OUT-OF-POCKET EXPENSES:**

a. Mileage	5040	Miles @	\$0.585	/ Mile =	\$2,948.40
b. Meals	40	Days @	\$59.00	/ Day =	\$2,360.00
c. Lodging (Taxes & Fees included)	25	Nights @	\$115.00	/ Night=	\$2,875.00
d. Travel & Airline Costs	9	Trips @	\$500.00	/ Trip =	\$4,500.00
e. Auto Rental	25	Days @	\$85.00	/ Day =	\$2,125.00
f. Survey Supplies & Equip.	1	Each @	\$155.00	/ Each :	\$155.00
g. Survey Field Vehicle	4	Days @	\$85.00	/ Day =	\$340.00

Total Out-of-Pocket Expenses = \$15,303.40 Not to exceed

**6 SUBCONTRACT COSTS:**

a. Woolpert : Storm Sewer Investigation and Scope = \$50,000.00 = \$50,000.00 Not to exceed

**7 MAXIMUM TOTAL FEE:**

Items 1, 2, 3, 4, 5 and 6 = \$1,624,287.34 Not to exceed  
**Actual - accounts for percentage rounding = \$ 1,624,283.70 Not to exceed**