AGENDA ITEM or FINAL CONTRACT REVIEW SUBMITTAL FORM

Agenda Item: Amendment No. Five (5) to Contract Dated April 23,

Action Requested: Board of County Commissioners' Signature

Parties to the Agreement: Gunnison County and Jviation, Inc.

Term Begins: **Term Ends:** **Grant Contract #:**

Summary:

Amendment No. 5 to Contract between Jviation and Gunnison County to include fees for engineering services for AIP 51 - Runway 06/24 Rehabilitation.

Fiscal Impact: Approximately $78,650 county portion, balance covered by FAA and CDOT

Submitted by: Stephanie Williams **Submitter's Email Address:** swilliams@gunnisoncounty.org

Finance Review: (●) Required ( ) Not Required

Comments:
No Concerns, part of total grant package already approved by FAA.ln

Reviewed by: GUNCOUNTY1\lNienhueser Discharge Date: 6/29/2016

County Attorney Review: (●) Required ( ) Not Required

Comments:
ok db 6/29/16

Reveiwed by: GUNCOUNTY1\gstuhr Discharge Date: 6/30/2016 Certificate of Insurance Required Yes ( ) No (●)

County Manager Review:

Comments:

Reveiwed by: GUNCOUNTY1\mbirnie Discharge Date: 6/30/2016

(●) Consent Agenda ( ) Regular Agenda ( ) Worksession Time Allotted: 0

Agenda Date: 7/5/2016

Revised April 2015

AMENDMENT NO. FIVE (5) TO CONTRACT
DATED APRIL 23, 2013
BETWEEN
JVIATION, INC.
AND
GUNNISON COUNTY AND THE
CRESTED BUTTE REGIONAL AIRPORT
GUNNISON, COLORADO

The Sponsor and the Engineer agree to amend their contract for improvements to the Gunnison-Crested Butte Regional Airport, Gunnison, Colorado to include fees for engineering services. The improvement Item is included in the Scope of Work of the original contract. The item covered by this amendment is described as follows:

Rehabilitate Runway 6/24

The Sponsor agrees to pay the Engineer for the services listed under Section 2 of the original contract in the following manner:

PART A - BASIC SERVICES

DESIGN

Preliminary Design.....Lump sum of $79,292.00
Design ..... Lump sum of $401,820.00

BIDDING

Bidding.....Lump sum of $31,598.00

TOTAL BASIC SERVICES ..... Lump sum of $512,710.00

Method of payment shall be as follows:

Interim payments based on work performed by the Engineer and detailed in a report submitted to the Sponsor with the request for payment. A retainer of ten percent of the total contract amount to be paid upon Notice to Proceed for construction, or, in the event the Sponsor does not elect to proceed with construction, the remaining ten percent to be paid upon receipt of request for payment from the Engineer.

PART B - SPECIAL SERVICES (SOILS AND PAVEMENT INVESTIGATIONS/TOPOGRAPHIC SURVEYS/HYDROLOGIC STUDIES/CONSTRUCTION ADMINISTRATION AND FIELD ENGINEERING)

The maximum estimated SPECIAL SERVICES engineering is as follows:

CULTURAL RESOURCES SURVEY (FOR DESIGN)

Cultural Resources Survey.....Lump sum of $1,500.00

GEOTECHNICAL INVESTIGATIONS (FOR DESIGN)

Geotechnical Investigations .....Lump sum of $38,000.00

TOPOGRAPHIC SURVEYS (FOR DESIGN)

Topographic Surveys ..... Lump sum of $60,000.00

WETLANDS SURVEY, SEEDING, 404 PERMITTING (FOR DESIGN)

Wetlands Survey, Seeding, 404 Permitting .....Lump sum of $21,945.00

ACCEPTANCE TESTING (FOR CONSTRUCTION)

Acceptance Testing..... Lump sum of $120,000.00

AIRPORT GIS DATA SUBMISSION

Airport GIS Data Submission .....Lump sum of $20,000.00

If work is abandoned, or terminated, after obtaining approval by the Sponsor and the FAA of the final construction plans and specifications, the Sponsor shall reimburse up to 100 percent of the total lump sum as listed under PART A, and 100 percent of the invoiced costs for soils and pavement investigations, topographic surveys, and hydrological studies, or other studies as listed under PART B.

CONSTRUCTION ADMINISTRATION AND FIELD ENGINEERING

The estimated maximum for CONSTRUCTION ADMINISTRATION and FIELD ENGINEERING is:

Construction Administration .....Cost Plus a Fixed Fee of $36,712.00
Pre-Construction Coordination .....Cost Plus a Fixed Fee of $16,561.00
Construction Coordination.....Cost Plus a Fixed Fee of $580,644.00
Post Construction .....Cost Plus a Fixed Fee of $48,378.00
Xcel Energy Coordination Phase.....Cost Plus a Fixed Fee of $12,360.00

CONSTRUCTION ADMINISTRATION AND FIELD
ENGINEERING FIXED FEE $104,198.00

SUB-TOTAL CONSTRUCTION ADMINISTRATION & FIELD ENGINEERING.... $798,853.00

TOTAL SPECIAL SERVICES..... $1,060,298.00

TOTAL..... $1,573,008.00

Method of payment shall be as follows:

For services rendered under PART B - SPECIAL SERVICES, the Sponsor agrees to make monthly payments based upon the work performed by the Engineer, up to 90 percent of the total contract. The final ten percent of the fee shall be due and payable when the project final inspection and the construction report have been completed, and when reproducible "Record Drawings" have been submitted to the Sponsor and when the revised Airport Layout Plan has been approved by the FAA or

when the construction work has terminated. The "Record Drawings" and Construction Report shall be submitted within a period of 90 days from end of construction period. This Amendment shall be considered concurrent with completion of audit.

PART C – ASSURANCES

I. CIVIL RIGHTS ACT OF 1964, TITLE VI – CONTRACTOR CONTRACTUAL REQUIREMENTS (*Reference: 49 CFR Part 21*)

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Engineer") agrees as follows:

- **Compliance with Regulations.** The Engineer shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

- **Nondiscrimination.** The Engineer, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Engineer shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

- **Solicitations for Subcontracts, Including Procurements of Materials and Equipment.** In all solicitations either by competitive bidding or negotiation made by the Engineer for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Engineer of the Engineer's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

- **Information and Reports.** The Engineer shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of an Engineer is in the exclusive possession of another who fails or refuses to furnish this information, the Engineer shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

- **Sanctions for Noncompliance.** In the event of the Engineer's noncompliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

  a. Withholding of payments to the Engineer under the contract until the Engineer complies, and/or
  b. Cancellation, termination, or suspension of the contract, in whole or in part.

- **Incorporation of Provisions.** The Engineer shall include the provisions of paragraphs one through five (*Compliance with Regulations*, *Nondiscrimination*, *Solicitations for Subcontracts*, *Information and Reports*, and *Sanctions for Noncompliance*) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Engineer shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means

of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a Engineer becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Engineer may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the Engineer may request the United States to enter into such litigation to protect the interests of the United States.

II. AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS (*Reference: Airport and Airway Improvement Act of 1982, Section 520;Title 49 47123;AC 150/5100-15, Para. 10.c.*)

The Engineer assures that it will 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 handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of Engineers, this provision binds the Engineers from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

III. DISADVANTAGED BUSINESS ENTERPRISES (*Reference: 49 CFR Part 26*)

- **Contract Assurance (§26.13)** - The Engineer or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Engineer shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the Engineer to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

- **Prompt Payment (§26.29)** - The prime Engineer agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than ***Fifteen (15)*** days from the receipt of each payment the prime Engineer receives from Sponsor. The prime Engineer agrees further to return retainage payments to each subcontractor within Fifteen (15) days after the subcontractor'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 Board. This clause applies to both DBE and non-DBE subcontractors.

IV. LOBBYING AND INFLUENCING FEDERAL EMPLOYEES (*Reference: 49 CFR Part 20, Appendix A*)

- No Federal appropriated funds shall be paid, by or on behalf of the Engineer, 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 making of any Federal grant and the amendment or modification of any Federal grant.

- 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 any Federal grant, the Engineer shall complete and submit Standard Form-LLL, "Disclosure of Lobby Activities," in accordance with its instructions.

V. ACCESS TO RECORDS AND REPORTS (*Reference: 49 CFR Part 18.36(i); FAA Order 5100.38*)

The Engineer shall maintain an acceptable cost accounting system. The Engineer agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representative's access to any books, documents, papers, and records of the Engineer which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Engineer agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

VI. BREACH OF CONTRACT TERMS (*Reference: 49 CFR Part 18.36*)

Any violation or breach of terms of this contract on the part of the Engineer or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

VII. RIGHTS TO INVENTIONS (*Reference: 49 CFR Part 18.36(i)(8); FAA Order 5100.38*)

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

VIII. TRADE RESTRICTION CLAUSE (*Reference: 49 CFR Part 30.13; FAA Order 5100.38*)

The Engineer or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

- 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 published by the Office of the United States Trade Representative (USTR);

- 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 on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

- has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

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 Engineer or subcontractor who is unable to certify to the above. If the Engineer knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

Further, the Engineer agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The Engineer may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The Engineer shall provide immediate written notice to the sponsor if the Engineer learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the Engineer if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the Engineer or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.

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 an Engineer is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

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.

IX. TERMINATION OF CONTRACT (*Reference: 49 CFR Part 18.36(i)(2); FAA Order 5100.38*)

- The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.

- If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.

- If the termination is due to failure to fulfill the Engineer's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the Engineer shall be liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.

- If, after notice of termination for failure to fulfill contract obligations, it is determined that the Engineer had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this clause.

- The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION (*Reference: 49 CFR Part 29; FAA Order 5100.38*)

The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/Engineer or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

XI. OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (*Reference: 20 CFR part 1910*)

All contracts and subcontracts that result from this solicitation incorporate the following provisions by reference, with the same force and effect as if given in full text. The contractor has full responsibility to monitor compliance

to the referenced statute or regulation. The contractor must address any claims or disputes that pertain to a referenced requirement directly with the Federal Agency with enforcement responsibilities.

XII. CLEAN AIR AND WATER POLLUTION CONTROL ***(Reference: 49 CFR § 18.36(i)(12))***
Note, when the DOT adopts 2 CFR 200, this reference will change to 2 CFR § 200 Appendix II(G))

Contractors and subcontractors agree:

- That any facility to be used in the performance of the contract or subcontract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities;

- To comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308 of the Acts, respectively, and all other regulations and guidelines issued thereunder;

- That, as a condition for the award of this contract, the contractor or subcontractor will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be used for the performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities;

- To include or cause to be included in any construction contract or subcontract which exceeds $100,000 the aforementioned criteria and requirements.

XIII. CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS
(Reference: 2 CFR § 200 Appendix II (E))

- **Overtime Requirements.** No contractor or subcontractor contracting for any part of the contract 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.

- **Violation; Liability for Unpaid Wages; Liquidated Damages.** In the event of any violation of the clause set forth in paragraph (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 United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), 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 paragraph 1 above, in the sum of $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 paragraph 1 above.

- **Withholding for Unpaid Wages and Liquidated Damages.** The Federal Aviation Administration 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 paragraph 2 above.

- **Subcontractors.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 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 paragraphs 1 through 4 of this section.

XIV. FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE) *(Reference: 29 USC § 201, et seq.)*

All contracts and subcontracts that result from this solicitation incorporate the following provisions by reference, with the same force and effect as if given in full text. The contractor has full responsibility to monitor compliance to the referenced statute or regulation. The contractor must address any claims or disputes that pertain to a referenced requirement directly with the Federal Agency with enforcement responsibilities.

XV. TEXTING WHEN DRIVING *(References: Executive Order 13513, DOT Order 3902.10)*

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.

The Contractor must promote policies and initiatives for employees and other work personnel that decrease crashes by distracted drivers, including policies to ban text messaging while driving. The Contractor must include these policies in each third party subcontract involved on this project.

All other terms and conditions of the original contract shall remain in effect.

IN WITNESS WHEREOF, the parties hereto have affixed their signatures this _____ day of _____ 201__.

SPONSOR:
GUNNISON COUNTY AND THE
CRESTED BUTTE REGIONAL AIRPORT
GUNNISON, COLORADO

By: _____

Name: _____

Title: _____

ATTEST:

_____

ENGINEER:
Jviation, Inc.

By: _____

Name: _____

Title: _____

SCOPE OF WORK
FOR
GUNNISON-CRESTED BUTTE REGIONAL AIRPORT
Gunnison, Colorado
AIP Project No. 3-08-0030-051
Runway 6/24 Rehabilitation

This project will consist of preparing Construction Plans, Contract Documents, Technical Specifications and Engineer's Design Report, along with Bidding and Construction Administration, Construction Management Plan, Construction Safety and Phasing Plan, On-site Coordination, Post Construction Coordination and the Final Construction Report for the project described below.

DESCRIPTION:

This project will consist of designing and constructing the rehabilitation of Runway 6/24. The runway rehabilitation will include the entire 9,397 feet long and 150' wide paved area. The rehabilitation is exclusive of the runway's 20' wide paved shoulders. The taxiway connectors and Taxiway A between A1 and A2 will be included with the rehabilitation. The extended safety area of Runway 6 will be improved by grading and replacing a storm sewer system. The segmented circle and wind cone will be relocated outside of the safety areas and the areas will be graded. The schedule breakout is depicted in the attached exhibit and includes the following:

Schedule I – Runway 6/24 and Taxiway A (A1-A2) Rehabilitation

Runway 6/24 consists of numerous pavement sections and was last rehabilitated in 2004. The previous rehabilitation utilized Trinidad Lake Asphalt (TLA) which has not performed as expected. The surface course of the asphalt pavement has reached the end of its useful life and has developed significant longitudinal cracking. Previous pavement investigations on the runway have shown that asphalt striping has taken place on the underlying asphalt layers at the longitudinal joints. The stripped asphalt at the failed joints will have to be removed to a greater depth and rebuilt. The rehabilitation will be limited to the 150' mainline portion of the runway and connectors and will not include pavement or lighting systems in the paved shoulders or in the blast pads. In addition to the runway, the taxiway connectors and Taxiway A between A1 and A2 will be rehabilitated including adjustment of the flush mounted fixtures in the connectors.

As a part of the runway project the taxiway connectors and Taxiway A between A1 and A2 will be rehabilitated. Taxiway A between A1 and A2 was previously designed as a part of AIP-50, but was not constructed. The design will be evaluated along with the adjacent portions of work to determine what design adjustments may be required. During previous design efforts it was determined that Taxiway A is less than the minimum design width in areas. This project will widen this segment of Taxiway A, with a full strength pavement section, to meet current geometry standards. Several design alternatives will be reviewed to determine the appropriate method of constructing the 6" to 18" widening. Grading improvements for this schedule of work will be limited to shoulders adjacent to rehabilitated pavement surfaces.

Taxiway connectors A4, A5, A6, A7, and A8 will be rehabilitated up to five feet outside of the runway safety area. Taxiway connectors A1, A2, and A3 will be rehabilitated up to the limits of work defined in AIP-50. This will reduce the need to close the runway for future Taxiway A pavement maintenance projects. The geometry of the taxiway connectors will not be modified with this project to meet current Taxiway Design Group criteria.

Schedule II – Runway 6 Extended Safety Area Grading Improvements

Two parallel storm sewer pipes pass perpendicular through the extended safety area for Runway 6. The grades over the top of these pipes are out of safety area criteria. The intent is to replace the storm pipes to reduce the pipe height to improve safety area grading compliance. Several design alternatives will be prepared to determine the most cost effective method to correct the grades. This will include coordination with the City of Gunnison Engineering staff to understand the storm system's tie to the City's drainage basins. Any modification to the storm sewer system will be limited accommodating the historic storm sewer flows.

Schedule III – Remove and Replace Wind Cones and Segmented Circle

The supplementary wind cone, primary wind cone, and segmented circle are located within the safety and object free area for Taxiway A. The existing primary wind cone and segmented circle will be removed and replaced adjacent to Runway 6/24, outside of the object free area. Several sites will be evaluated for suitability for the segmented circle and primary wind cone. The location of the supplementary wind cone will be reviewed to determine the feasibility of moving and replacing the structure or justifying the existing location. A new electrical line and transformer are anticipated to provide power to the primary and supplementary wind cones. Grading improvements will be limited to the proposed sites for the new infrastructure. Re-grading of the existing site will be addressed in Schedule IV.

Coordination with Xcel Energy will be required to prepare a work order with Gunnison County for the determine power sources for the relocated wind cones.

Schedule IV – Taxiway Safety Area Grading Improvements

The grades in the north Taxiway A safety area in between the general aviation apron and the terminal apron are out of criteria and require correction. The primary wind cone, the segmented circle, and a high pressure gas main are in the area that requires grading. These facilities will require relocation prior to improving the site grades which will be addressed in Schedule III.

Coordination with Xcel Energy will be required to prepare a work order with Gunnison County for the determine limits lowering, cost, and schedule for the gas line relocation.

SERVICES:

The Engineering fees for the Runway 6/24 Rehabilitation project will be broken into two parts:

- **Part A-Basic Services;** 1) Preliminary Design Phase, 2) Design Phase, and 3) Bidding Phase.
- **Part B-Special Services;** 4) Construction Administration Phase, 5) Pre-Construction Phase, 6) On-site Construction Coordination Phase, or Field Engineering, 7) Post Construction Phase.

Also included in Part B are additional design services that will be completed by subconsultants to Jviation, Inc. These include the proposed geotechnical investigation (Ground Engineering Consultants, Inc.), topographical survey (North Star Survey, Inc.), Airport GIS (Woolpert, Inc.), and quality assurance testing (Ground Engineering Consultants, Inc.).

Part B also includes coordination with Xcel Energy that will be required to address the high-pressure gas main that is located within the project limits.

Parts A and B along with the seven phases and sub consultants are described in more detail below. Based on our preliminary cost estimate, the estimated construction cost is approximately **$9,460,000.**

PART A - BASIC SERVICES

Part A - Basic Services will consist of the preliminary design phase, design phase and bidding phase.

1.0 Preliminary Design Phase

1.1 Meetings with the Sponsor and FAA. Meetings with the Sponsor and the FAA will take place to determine critical dates, establish the proposed design schedule, AIP development schedule and scope meeting schedule, determine the feasibility of the proposed work and to establish the need for topographical surveying and pavement investigation/geotechnical testing. Various meetings during the design phase will also be conducted to review the progress of the design and discuss construction details, proposed time frame of the construction, and special requirements of the project. It is anticipated that there will be a minimum of 5 meetings with the Sponsor and/or the FAA throughout the course of the project.

1.2 Prepare Project Scope of Work and Contract. This task includes establishing the scope of work through meetings with the Sponsor and the FAA. This also includes drafting the contract for the work to be completed by Jviation for the Sponsor.

1.3 Coordinate Topographical Survey. This task includes preparing the requirements, limits of work, scheduling and supervising of the topographical survey. A Project Engineer will be on-site during surveying operations to coordinate with the Sponsor and the surveyor. Negotiating with the surveying firm for a cost to perform the work is also included in this item. During design, the need may arise to verify other existing survey information or to extend the limits of the existing survey.

1.4 Coordinate Geotechnical Investigation. This task includes preparing the requirements for soils testing, limits of work, and scheduling a time for testing to be completed. Negotiating with the geotechnical engineering firm for a cost to perform the work and for providing the Project Engineer on-site during the testing procedures is also included in this item. During design, the need may arise to perform additional soils testing and to extend the limits of the geotechnical investigation.

1.5 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 will include the following:

- Prepare Federal 424 form
- Prepare Project Funding Summary
- Prepare Program Narrative, discussing the Purpose and Need of the work and the Method of Accomplishment
- Project Sketch (8.5"x11")
- Prepare Preliminary Cost Estimate
- Exhibit "A" Property Map
- Prepare the Sponsors Certifications
- Attach the current Grant Assurances

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

1.6 Prepare Environmental Checklist. Jviation will complete and coordinate a documented Categorical Exclusion (CATEX) as required by the FAA in environmental orders 1050.1F, *Environmental Policies and Procedures*, and 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects*. The Office of Airports (ARP) Standard Operating Procedure (SOP) 5.00, *CATEX Determinations*, Appendix A

Documented CATEX, with an effective date, October 1, 2014, will be used. This form is required to request approval of a CATEX along with any supporting documentation.

The documentation will include the following:

- Air Quality - an emissions analysis will be completed using the FAA's Airport Construction Emissions Inventory Tool (ACEIT) (Jviation to complete)
- Cultural Resources - a Class I Records Search will be completed by Alpine Archaeological Consultants, Inc.
- Wetlands – a wetland delineation (preliminary and final) will be conducted within the project area by Iris Mitigation

The draft CATEX will be distributed to the Sponsor for review and comment prior to submittal to the FAA. Following revision, the draft final will be submitted to the FAA for preliminary review and comment. Jviation will address comments received and coordinate with the FAA for final approval. The following distributions shall be made:

- Draft CATEX: electronic copies sent to Sponsor
- Draft Final CATEX: electronic copy sent to Sponsor for signature and FAA for review, comment, and approval
- Final CATEX: electronic copy sent to FAA for approval and signature; electronic signed copies sent to Sponsor

2.0 Design Phase

2.1 Analyze Topographic Survey Data. This work includes analyzing the topographical surveying data and preparing the data for use with computer modeling. Included are the following separate tasks:

- Input raw survey data into AutoCAD Civil 3D in order to sort data into company standard layers for efficient analysis.
- Verify surveyor horizontal and vertical control
- Verify survey data from as-built conditions.
- Sort all data points by layers and descriptions for computer modeling.
- Prepare Triangulated Integrated Network (TIN - surface model) of existing ground contours, pavement edges, roadways, electrical equipment, drainage features, buildings, fences and other miscellaneous entities
- Generate three-dimensional contour model from TIN.
- Prepare and process data for spot elevations, grading and/or paving cross sections.

2.2 Analyze Geotechnical Investigation Data. This task includes analyzing the geotechnical investigation, consisting of the following:

- Review geotechnical engineer recommendations.
- Determine on-site sources and quantities of suitable material for embankment.
- Determine appropriate data for the pavement design form(s). It is anticipated that one pavement design form for this project will be required.
- Input data for computer modeling with topographical survey data.
- Prepare soil information for incorporation on the construction drawings.

2.3 Prepare Pavement Design. After receiving the geotechnical investigation data, the Engineer will analyze the data to verify the pavement strenght and to determine the appropriate mill depth. Due to asphalt stripping at the longitudinal joints a deeper reconstruction may be required. The pavement section will be analyzed with the current and anticipated traffic using current FAA design software. A PCN analysis will be performed to determine the runway PCN classification based on the geotechnical investigation, the pavement strength survey, and the expected air traffic mix.

A life cycle cost analysis will be completed to compare the proposed rehabilitation method with a concrete overlay alternative. Should the asphalt overlay be the most cost effective method of rehabilitation, it is

anticipated that two and a half inches of asphalt will be removed and replaced.

2.4 Coordinate Phases for Construction. This task involves meeting with the Sponsor to discuss the operations of the airport to help determine how the construction phasing of the project will effect operations. From these meetings, a Construction Safety and Phasing Plan (CSPP) will be compiled and depicted in the Contract Documents. This plan will thoroughly discuss the operations of the airport and safety requirements during the project. This item will also identify any nighttime work, continuous working times, or other unusual conditions that could affect the contractor's normal progress on the project. A draft version of the CSPP will be developed and submitted for review at the 30% design development phase. A revised version of the CSPP, addressing all comments from the FAA and the Sponsor, will be prepared for the 95% review submittal.

2.5 Inventory Existing Utilities. This task includes reviewing record drawings and consulting with the local utility companies to identify all utilities within the project site. Existing utilities located outside of the project limits will be excluded. This will include the coordination of possible relocations, except the high pressure gas main which will be addressed in a separate section.

2.6 Prepare Preliminary Contract Documents. This task will include preparing the preliminary Contract Documents including the invitation for bids, instruction to bidders, proposal, equal employment opportunity clauses, construction contract agreement, performance bond, payment bond, and general provisions. Preparation will include establishing the location for the bid opening, dates for advertisement, and description of the work schedule. Preliminary Contract Documents will be prepared as early as possible during the design phase and submitted for review by the Sponsor's Attorney.

2.7 Prepare Preliminary Plans. The following is a list of anticipated construction drawings for the project. Additional drawings may be added during the design phase if required:

- **Cover Sheet (1 Sheet)** – Project title, project/grant numbers, funding agencies.
- **Index of Drawings, Summary of Approximate Quantities, and General Notes (3 Sheets)** – Lists all the drawings in the plan set, approximate quantities, general notes and legends.
- **Survey Control Plan (1 Sheet) –** Depicts survey control for the project.
- **Safety Plan (1 Sheet) –** Identifies the safety procedures for the project.
- **Overall Construction Safety Drawing and Phase Schedule (1 Sheet) –** Depicts the overall airport layout and schematically identifies key project elements including project milestones, phasing schedule, contractor access, storage and staging areas.
- **Construction Phasing/Operations Plan (6 Sheets) –** Identifies to the contractor the phasing requirements and operating procedures for the project.
- **Geotechnical Investigation Plan (5 Sheets)** – Identifies geotechnical data relevant to the project.
- **Demolition Plan (11 Sheets)** – Depicts the demolition limits for the project.
- **Geometric Layout (11 Sheets)** – Depicts the geometry for the project.
- **Grading and Drainage Sheets (11 Sheets)** – Depicts site grading for the project.
- **Typical Sections (4 Sheets)** – Depicts the typical sections for the runway and taxiway.
- **Cross Sections (4 Sheets)** – Depicts specific cross sections for the project's grading.
- **Crack Repair Plan and Details (1 Sheet)** – Depicts location and repair details for pavement cracks.
- **Runway Plan and Profile Sheets (8 Sheets)** – Depicts the left, center, and right profiles of the runway along with spot elevations for area outside of the profile.
- **Taxiway Plan and Profile Sheets (6 Sheets)** – Depicts the center profile of the taxiway along with spot elevations for area outside of the profile.
- **Storm Sewer Plan and Profile Sheets (2 Sheets)** – Depicts the invert profile of the storm sewer.
- **Storm Sewer Details (3 Sheets)** – Depicts the details for any drainage elements.
- **Utility Adjustment Table (1 Sheet)** – Depicts the location and elevations for utility structures that require adjustment.
- **Pavement Marking Plan (8 Sheets)** – Depicts the proposed paint layout for the runway and taxiway.
- **Pavement Marking Details (4 Sheets)** – Depicts the details for pavement markings.
- **Runway Grooving Plan and Details (1 Sheet)** – Depicts a plan for the grooving along with details.

- **Seeding and Erosion Control Plan (8 Sheets)** – Depicts the layout of various seeding and erosion control measures.
- **Seeding and Erosion Control Details (2 Sheets)** – Depicts the details for all seeding and erosion control measures.
- **Electrical Legend and Notes (1 Sheet)** – Depicts the master legend for electrical symbols and general electrical notes.
- **Electrical Demolition and Layout Plan (5 Sheets)** – Depicts the removals for electrical system including the wind cone. Depicts the relocation and replacement of the wind cone and any other electrical adjustments.
- **Electrical Details and Adjustment Table (5 Sheets)** – Depicts the relocation and replacement of the wind cone and any other electrical adjustments.

PLAN SET TOTALING 114 SHEETS

2.8 Prepare Preliminary Technical Specifications. This task includes assembling the technical specifications necessary for the intended work. Standard FAA specifications will be utilized where possible; with the guidance from the current edition of the *FAA Advisory Circular 150/5370-10G, Standards for Specifying Construction of Airports* and any relevant Northwest Mountain Region "Notices" will be followed. 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 will include, but not be limited to, the following:

- Item P-101 Surface Preparation
- Item P-151 Clearing and Grubbing
- Item P-152 Excavation and Embankment
- Item P-153 Controlled Low-Strength Material (CLSM)
- Item P-154 Subbase Course
- Item P-156 Temporary Air and Water Pollution, Soil Erosion and Siltation Control
- Item P-209 Crushed Aggregate Base Course
- Item P-401 Plant Mix Bituminous Pavements
- Item P-603 Bituminous Tack Coat
- Item P-608 Emulsified Asphalt Seal Coat
- Item P-610 Structural Portland Cement Concrete
- Item P-620 Runway and Taxiway Painting
- Item P-621 Saw-Cut Grooves
- Item D-701 Pipe and Storm Drains and Culverts
- Item D-751 Manholes, Catch Basins, Inlets, and Inspection Holes
- Item T-901 Seeding and Erosion Control
- Item T-905 Topsoiling
- Item L-107 Airport 8-Foot and 12-Foot 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

The added specifications will include, but not be limited to, the following items:

- Item P-159 Watering
- Item P-312 Non-Woven Geotextile Fabrics
- Item P-315 Asphalt Reinforcement Grid Tack Film Mesh
- Item D-710 Rock Riprap
- Item L-125 Airport Lighting Systems
- APP P Appendix P

2.9 Prepare Preliminary Special Provisions. This task includes preparing the Special Provisions to address,

or expound on, conditions that require additional clarification. They will include, but are not be limited to, the following:

- Description of Work
- Haul Roads/Project Access
- Airport Security
- Work Schedule
- Additional Quality Control Requirements
- Pre-Construction Conference
- Sequencing of the Work
- Closure of AOA's
- Accident Prevention
- Underground Cables/Utilities
- Guarantees/Insurance/Taxes/Permits
- Contracts/Subcontracts
- Additional DBE Information
- Liquidated Damages
- Safety Standards and Impacts
- Additional Acceptance Testing Issues
- Grade Control and Surface Tolerance for Paving Work
- Special Testing Considerations
- Project Closeout Forms

2.10 Prepare Drainage Analysis and Storm Drainage Design. This task will consist of verifying the existing storm drainage and/or subsurface drainage systems. Surface drainage will be evaluated to ensure accordance with standard engineering practices, local requirements, and in accordance with the *FAA Advisory Circular 150/5320-5D, Surface Drainage Design.*

Areas that will be analyzed for drainage will include work that may disturb existing drainage paths or storm sewer. This includes the Taxiway A object free area grading and the Runway 6 extended safety area grading. There are no known issues with the runway/taxiway infields and they will not be analyzed.

Three coordination meetings with the City of Gunnison are anticipated to review the City's drainage plan in coordination with the storm sewer improvements taking place in the Runway 6 extended safety area. The improvements to the storm sewer system will be limited to accommodating the historic storm water flow.

2.11 Compile/Submit Permits. Special use permits that can be identified during the design phase of the project will also be identified in the Special Provisions of the Contract Documents for the contractor's benefit. This would include a permit to allow for an onsite asphalt batch plant. The contractor will be responsible for any special use permits including any surface discharge requirements, including the stormwater management construction plan permit (SWMP).

2.12 Compile/Submit FAA Form 7460. This task includes preparing and submitting the required FAA Form 7460 on the Sponsor's behalf. The proposed construction will require an FAA Form 7460 to be sent to the FAA a minimum of 90 days prior to the start of construction for approval.

2.13 Compile/Submit Strategic Event Notice. This task includes preparing and submitting the required FAA Form 6000-26 on the Sponsor's behalf. The proposed construction will require an FAA Airport Sponsor Strategic Event Submission Form to be sent to the FAA a minimum of 45 days prior to the start of construction for approval.

2.14 Calculate Estimated Quantities. This task includes calculating all necessary quantities for the various work items. Quantities will 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 plans and specifications, Jviation will prepare the construction cost estimate. The estimate will be based on information obtained from previous projects, contractors, material suppliers, and other databases available.

2.16 Prepare Design Engineer's Report and Modification of Standards. During the preparation of the preliminary plans and specifications, a design report will be prepared according to the current FAA Northwest Mountain Region Design Report guidelines. The report will include a detailed narrative of the design issues and decisions of the project, photographs and descriptions of existing site conditions, pavement design and 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 to the FAA standards, as necessary, for the project will be compiled and presented to the FAA and Sponsor at the 60% design submittal. The approved modifications to standards will be included in the final design report. The design report will also contain any alternative design concepts that were investigated and evaluated.

2.17 Plans Review at 30%, 60%, and 90% Complete. During various stages of completion of the design, Jviation will submit a set of Construction Drawings, Specifications and Contract Documents to the Sponsor for their review. Meetings will be scheduled for periodic reviews, including a plans-in-hand review at the airport after each submittal. The project will be reviewed with the FAA to obtain their concurrence with the design.

2.18 In-House Quality Control. Jviation 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 Drawings, Specifications and Contract Documents 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 Drawings, Specifications and Contract Documents being submitted, by a licensed Professional Engineer, other than the Engineer whom performed the design of the project, comments offered by the Engineer that performed the review and revisions to the Construction Drawings, Specifications and Contract Documents accordingly.

In addition to the 30%, 60%, and 90% reviews of all plans, specifications, and engineer's reports, the Jviation in-house quality control program also provides engineering guidance to the design team throughout the project design in attempt to steer the project in a manner that provides the best sound engineering judgment.

2.19 Prepare and Submit Final Plans and Specifications. A final set of Construction Drawings (11" x 17"), Technical Specifications, Contract Documents, Construction Safety Phasing Plan, and Engineer's Design Report will be prepared and submitted to the Sponsor, CDOT Aeronautics, and FAA. These documents shall incorporate all revisions, modifications and corrections determined during the Sponsor, CDOT Aeronautics, and FAA final review.

3.0 Bidding Phase

3.1 Advertise for Bid Proposals. Required advertisement dates and bidding dates will be established. The Engineer will submit notification, on behalf of the Sponsor, to the local and selected publications for the upcoming project. Invitations for bids will be mailed to selected firms to assure local contractors and material suppliers are aware of the pending project. Approximately 30 copies of the final plans and specifications will be printed or cut to digital format for distribution to prospective contractors, plan rooms, FAA, and the Sponsor.

3.2 Prepare/Conduct Pre-Bid Meeting. Jviation will attend and conduct the pre-bid meeting and pre-bid site visit. The meeting will take place at the airport.

3.3 Prepare Addenda. Any necessary addenda will be issued to clarify and modify the project as required, based on questions or comments that may arise from potential contractors during the bidding process. Any

necessary addenda will be reviewed with the Sponsor for issuance. The addenda will meet all design and construction standards, as required.

3.4 Consult with Prospective Bidders. During the bidding process, Jviation will be available, if needed, to clarify bidding issues with contractors and suppliers, and for consultation with the various entities associated with the project.

3.5 Attend Bid Opening. Jviation will attend and assist the bid opening for the project at the Sponsors preferred location.

3.6 Review Bid Proposals. Jviation will review all the bid proposals submitted. An analysis of the bid prices and contractor's qualification for the work will be completed and tabulated. Bid results will be communicated to the ADO immediately after the bid opening.

3.7 Prepare Recommendation of Award. Jviation will prepare a Recommendation of Award for the Sponsor to accept or reject the bids, as submitted. If rejection is recommended, Jviation will supply an explanation for their recommendation and possible alternative actions the Sponsor can pursue to complete the project. Jviation will support the Sponsor in preparing and submitting the recommendation letter to the FAA.

PART B - SPECIAL SERVICES

Part B - Special Services will consist of the construction administration phase, pre-construction coordination phase, on-site construction coordination phase, and post-construction/project close out phase. Also included are direct subcontract costs, such as topographical survey, geotechnical investigation, Airport GIS, quality assurance testing verification during construction, and coordination with Xcel Energy.

4.0 Construction Administration Phase

4.1 Prepare Construction Contract and Documents. This item accounts for the efforts during and immediately prior to project construction. In agreement with the FAA, Jviation will prepare the Notice of Award, Notice to Proceed and Contract Agreements for the Sponsor's approval and signatures. Appropriate copies will be submitted to the successful contractor(s) for their signatures. Jviation will make five copies of the plans and specifications for the contractor's use during construction.

4.2 Office Assistance. Office engineering staff, CAD personnel, and clerical staff will be required to assist the Resident Engineer(s) as necessary during construction. Specific items to be accomplished include compiling and sending additional information requested from the office to the project site, providing secondary engineering opinions on issues arising during construction, maintaining project files (field files are mirrored in the office for continuity) and various other items necessary in the day-to-day operations.

4.3 Requests for Reimbursement. This task consists of preparing FAA requests for reimbursement of funds. A request for reimbursement will be submitted to the Sponsor for review and approval prior to the Sponsor requesting reimbursement from the appropriate agency.

4.4 Weekly/Monthly Reports. The Project Manager will review progress reports weekly and monthly. The weekly reports will be submitted to the FAA on the following Monday. Monthly reports will be submitted to the FAA during the first week of the following month.

4.5 Material Submittal Review. Material submittal data will be reviewed and approved by the Resident Engineer(s) or office personnel, if the Resident Engineer(s) are unable to make final determination of compliance.

4.6 Change Orders/Supplemental Agreement. Clerical and drafting personnel will assist with change orders and supplemental agreements as necessary.

5.0 Pre-Construction Coordination Phase

5.1 Prepare Project Files. This task is to assure the construction contracts are in order, the bonds have been completed, and the contractor has been provided with adequate copies of the Construction Drawings, Specifications and Contract Documents, which will be updated to include all addenda items issued during bidding. Clerical will prepare the quantity sheet, testing sheets, construction report format, etc.

5.2 Prepare/Conduct Pre-Construction Meeting. This task is to assure the pre-construction meeting has been scheduled and all necessary parties have been informed. Jviation will conduct a pre-construction meeting to review FAA requirements prior to commencing construction. The meeting will be held at the airport and will included the Sponsor, FAA (if possible), contractor, sub-contractors, and airport tenants affected by the project.

5.3 Prepare/Submit Construction Management Plan. This task includes preparing and submitting the Construction Management Plan, which includes a brief project summary, the contractor's quality control plan, remedial actions for failing tests, material acceptance tests table (includes all acceptance testing from the project specifications), resumes of project personnel representing the stakeholders, detailed inspection procedures, list of required submittals by the Contractor, quality control testing methods, acceptance testing methods, and final test result summary forms.

5.4 Review Contractor's Safety Plan Compliance Document. This task includes the review and to comment on the contractor's Safety Plan Compliance Document (SPCD) as required per *FAA Advisory Circular (AC) 150/5370-2F, Operation Safety on Airports during Construction.* Jviation will review to ensure that all applicable construction safety items are addressed and meet the requirements of AC 150/5370-2F and the Contract's Construction Safety and Phasing Plan (CSPP). The bid documents will address the requirement for the contractor to submit a SPCD. The intent of the SPCD is to detail how the contractor will comply with the CSPP. Following award of the project to the successful contractor and prior to the issuance of the Notice to Proceed, Jviation will review the SPCD and provide comments and ultimately approval of the document. It is anticipated that the document will require at least one re-submittal by the contractor to address any missing information.

6.0 On-Site Construction Coordination Phase

This phase will consist of providing one full time Construction Manager, supported by one to two full time Field Engineers. It will be the responsibility of the Construction Manager to facilitate sufficient on-site construction coordination to ensure that the project is completed according to good construction practice and is consistent with the Project Manager's direction. The proposed construction season will span over the 2016 and 2017 construction seasons. Incidental travel costs, including vehicle usage, mileage, lodging, per diem, etc. are in addition to the engineering hours expended.

6.1 Field Inspection/Coordination. The Project Manager will make on-site visits, as required, to deal with construction issues as necessary for the duration of the project. It is estimated that the Project Manager will be required to make 12 site visits to the project.

6.2 Resident Engineering. A Construction Manager and Field Engineer positions will be provided for site inspection and project coordination. The Construction Manager and Field Engineers will be able to complete all daily project documentation in the course of their shift. Management of the field staff will be provided under 4.0 Construction Administration.

In 2016 a project development phase will occur where the Contractor will have **60 calendar days** to submit administrative documents, to mobilize equipment, to start producing aggregates, setup an asphalt plant, and to order long-lead materials. One full time Field Engineer will be provided to review submittal documents and to support on and offsite tasks. It is anticipated that this effort will require a Field Engineer 10 hours a day, 3 days per week for onsite coordination and a Construction Manager 8 hours per day, 2 day per week for office support.

There will be a project shutdown for the 2016/2017 winter season. During this period it is anticipated the Construction Manager will be available 8 hours a day, 1 day per week to coordinate project details.

In 2017 the primary construction will start. The Contractor will have **75 calendar days** for the construction of Schedules I through IV. One full time Construction Manager and one full time Field Engineer will be provided to support onsite tasks. It is anticipated that this effort will require 12 hours a day, 6 days per week. During the **30 calendar days** following the runway closure a Construction Manager will be provided to provide onsite support. It is anticipated that this effort will require 10 hours a day, 6 days per week. During the final **14 calendar days** of the project night work is anticipated to complete the runway grooving and final pavement markings. During this final phase one full time Construction Manager and one full time Field Engineer will be provided support day and night shifts. It is anticipated that this effort will require 12 hours a day, 6 days per week. During the duration of construction the Deputy Project Manager will be utilized 20 hours per week to support Resident Engineering activities and will visit the site every other week.

6.3 Review Construction Submittals. This task will consist of reviewing and approving the shop drawings and material submittal data received from the contractor. Engineering field personnel will also review copies of the contractor's survey data and other construction items for general compliance with the construction documents.

6.4 Review Contractor Payroll Forms and Perform Random Employee Interviews. Engineering field personnel will be required to conduct employee interviews and review Contractor's weekly payroll records as required by the FAA. As part of this effort, all payrolls will be reviewed and logged when received. A log identifying current status of reviews, and any action taken to correct noted discrepancies, will be provided for Sponsor review at time of RFR processing as appropriate.

6.5 Calculate Construction Quantities. Engineering field personnel will maintain record of the progress and will review the quantity records with the contractor on a periodic basis.

6.6 Periodic Cost Estimates. Engineering field personnel will prepare the periodic cost estimates and review the quantities with the contractor. The Engineer, Sponsor, and contractor will resolve discrepancies or disagreements with the contractor's records. The Engineer will then submit the period cost estimate to the Sponsor for payment.

Jviation will be required to obtain all administrative expenses, engineering fees and costs, surveying costs, testing costs, and construction costs associated with project and assemble a total project summary. The summary will be compared with available funding.

6.7 Prepare Daily Reports. Engineering field personnel will maintain daily logs of the construction activities for the duration of time on site.

6.8 Prepare/Submit Weekly Reports. Engineering field personnel will prepare a weekly status report using the FAA's standard form. The report will be submitted to the Sponsor, the FAA, and the office.

6.9 Review QC/QA Results Provided by Contractor. Engineering field personnel will review and coordinate revisions by the contractor for quality control and the acceptance testing firm submittals performed as part of the acceptance testing required by FAA Standard Specifications. This will occur on a weekly basis and at project completion prior to submittal to the FAA.

6.10 Prepare Quality Assurance Test Summary Report. Engineering field personnel will compile the quality acceptance testing into a summary report. This report will be submitted to the FAA for review and approval prior to the final inspection.

7.0 *Post Construction Coordination Phase*

This phase will consist of project close out and site cleanup.

7.1 Conduct Final Inspection. Jviation, along with the Sponsor and FAA, will conduct the final inspection. The Quality Assurance Test Summary Report must be accepted by the FAA prior to final inspection.

7.2 Coordinate Final Surveys. Jviation will coordinate with the contractor's surveyor for the final survey upon completion of construction. This survey is for material acceptance and quantity verification only.

7.3 Prepare Clean-up Item List. Jviation will assure the contractor has removed all construction equipment and construction debris from the airport, that all access points have been re-secured (fences repaired, gates closed and locked, keys returned, etc.) and the site is clean. A punch list will be developed at substantial completion for outstanding items. Jviation will coordinate the punch list with the Sponsor and the Contractor until all items are resolved.

7.4 Prepare Engineering Record Drawings. Jviation will prepare the record drawings indicating modifications made during construction. All drafting for the final record drawings will be prepared by the office drafting personnel. One set of 11"x17" drawings (hard copy and electronic) will be submitted to the Sponsor. One set of 11"x17" black-line drawings and one electronic copy (portable document format) of the documents will be provided to the FAA.

7.5 Prepare Final Construction Report. Jviation will prepare the final construction report. Clerical will complete the typing for the final construction report. Clerical will prepare the required project closeout statements. Two copies of the construction report, prepared according to the current Northwest Mountain Region's construction/final report guidance, will be submitted to the Sponsor and one copy submitted to the FAA. It is expected that the Denver ADO will request revisions to this document following initial submittal.

7.6 Update and Modify Airport Layout Plan (ALP). Jviation will review and update the ALP to reflect the work completed at the airport during this project.

7.7 Assist with Project Audit. When requested by the Sponsor or FAA, Jviation will assist with any project audit. Jviation will provide files requested that are pertinent to the project cost and completion.

Special Considerations

The following special considerations are required for this project and will be completed by sub-consultants to Jviation. The cost for this work will be included in the engineering contract agreement with the Sponsor and the costs are in addition to the engineering fees outlined above.

Topographical Survey: Survey will be required in order to complete the design of the project. Survey shall include the following:

- Schedule I – A topographical survey will be completed for the paved runway, taxiway, and shoulders. The pavement grades will be evaluated including: longitudinal, transverse, and line of sight. The method of rehabilitation is anticipated to include milling off the surface course and then placing an asphalt overlay. This includes the main runway and taxiway sections and does not include the paved runway shoulders. Safety area grading will not be analyzed with this project scope except where

required by other schedules.

- Schedule II – A topographical survey will be completed for the extended safety area to define the limits of the grade issue. The storm sewer rim and invert elevations will be collected to determine what modifications to the system may be required.
- Schedule III – A topographical survey will be completed on the south side of Runway 6/24 in the area of the proposed new wind cone. This survey will be used to determine the preferred location of the new wind cone and segmented circle.
- Schedule IV – A topographical survey will be completed around the existing segmented circle and along the AOA fence. This survey will be used to determine the limits of the grade correction. A high pressure gas main runs through this area and it is anticipated that this line will have to be relocated and lowered.
- The survey will include the pavement, lights, signs and drainage for Runway 6/24, Taxiway Connectors A1 through A8. The existing and proposed segmented circle sites along with the Runway 6 extended safety area will also be included.
- The ground survey area is approximately 70 acres.
- Verification of the existing pavement elevations and infrastructure located within the project area.
- Verification of the existing terrain to create an accurate topographical drawing.
- All existing utilities in the project limits will be surveyed from locates performed prior to surveying.
- During design, there may be the need to verify other existing survey information or extend the limits of the existing survey.

Geotechnical Investigation: Soil samples for analysis will be taken for the project site. Investigation and testing will also be performed to facilitate the design of the proposed asphalt section. The geotechnical investigation will be performed in two phases and will include the following:

- A geotechnical investigation will be completed to verify the pavement section. This data will be used to determine the mill depth and analyze pavement strength of the pavement various sections.
- Perform a geologic reconnaissance of the project site.
- Pavement cores at approximately 60 locations with 10 foot deep soil borings and laboratory testing for approximately 3 locations.
- Visual inspection and documentation of each soil boring.
- Soil Classification/Atterberg Limits, Liquid Limit (LL) , Plastic Limit (PL), Plasticity Index (PI)
- Moisture/Density Relations
- Swell/Consolidation Potential
- Standard Test Method for California Bearing Ratio (CBR) of Laboratory-Compacted Soils
- Moisture content, density of undisturbed fine-grained samples
- Project recommendations with regards to fill material, temporary and permanent cut/fill slopes, and compaction criteria for site grading fills.

Airport GIS Survey and Data Submission: Conformance with the FAA's Airport GIS (AGIS) system will be required for this project. The AGIS data will be collected, processed, and submitted in accordance with the following documents: *150/5300-16A 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 Change 1, General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards*. The column, Pavement Design, Construction, Rehabilitation or Roughness, from Table 2-1 Survey Requirements Matrix was referenced for data submittals. The actual AGIS data will be limited to the following:

This project will utilize the Survey and Quality Control Plan that was developed during the 2014 Master Plan AGIS survey (AIP-3-08-0030-48) which was completed by Woolpert. Woolpert will be contracted to complete the AGIS survey and data processing for the Runway 6/24 Rehabilitation project as follows:

- The proposed design the AGIS submittal will be limited to the Runway 6/24 profile only. The design profile for Runway 6/24 will be submitted via the AGIS portal at the 90% review submittal. Jviation

will provide the profile data for the center, left, and right alignments to Woolpert. Woolpert will process the profiles into a GIS format and submit the data through the FAA's AGIS web portal.

- The as built survey the AGIS submittal will be limited to the paved surface of Runway 6/24, Taxiway A, Connector Taxiways as well as the new locations of the wind cone and the segmented circle. This will include the field work to collect the as built condition and the processing of the data into a format that can be submitted into the AGIS system.

Acceptance Testing: Acceptance testing will be performed under the direct supervision of engineering field personnel. All acceptance test summaries must be accepted by the FAA prior to final inspection. Certified materials technicians will perform the necessary material acceptance testing for the following items, as detailed in the project specifications:

- P-152 Excavation and Embankment (Performed by Engineer's Testing Firm)
- P-153 Controlled Low-Strength Material (CLSM) (Performed by Contractor's Testing Firm)
- P-154 Subbase Course (Performed by Engineer's Testing Firm)
- P-209 Crushed Aggregate Base Course (Performed by Engineer's Testing Firm)
- P-401 Plant Mix Bituminous Pavements (Performed by Engineer's Testing Firm)
- P-610 Structural Portland Cement Concrete (Performed by Engineer's Testing Firm)

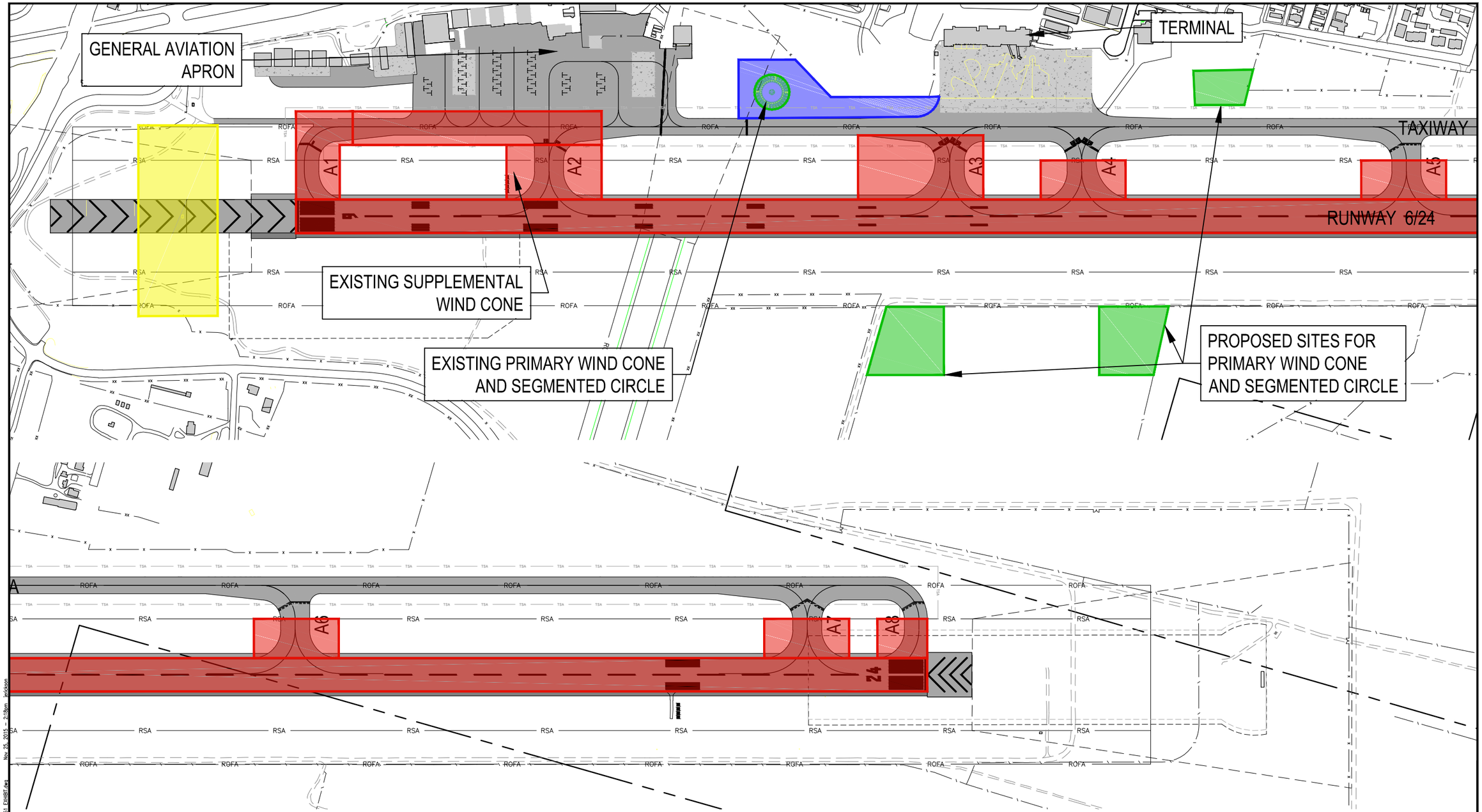
Coordinate with Xcel Energy: This task includes meeting and coordinating with Xcel Energy to provide

- A coordinated design for the relocation of the high pressure gas main.
- A coordinated design for the power source for the relocated wind cone.

Xcel Energy will not prepare a work order, which includes the design and cost estimate, until the project is close to construction. Therefore the coordination for the high pressure gas main will take place during the construction phase of the project. The line will be potholed by the Contractor in the fall of 2016. The results of the potholing will be reviewed with Xcel Energy to determine if the gas main requires lowering.

Allowances will be provided in the contract documents for the Contractor to prepare the site for Xcel Energy and restore the site after the work is completed. The lowering of the gas main will be provided by Xcel Energy.

It is estimated that this effort will include 5 meetings/phone conferences with Xcel Energy. This includes a review session after the pothole data is received.



A.I.P. - 51	
Schedule	PROJECT DESCRIPTION
I	RUNWAY 6/24 & TAXIWAY A (A1–A2) REHABILITATION
II	RUNWAY 6 EXTENDED SAFETY AREA GRADING IMPROVEMENTS
III	REMOVE & REPLACE WINDSOCK & SEGMENTED CIRCLE
IV	TAXIWAY SAFETY AREA GRADING IMPROVEMENTS

GRAPHIC SCALE
200 0 200 400
(IN FEET)

N

Gunnison Crested Butte REGIONAL AIRPORT

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GUNNISON-CRESTED BUTTE
REGIONAL AIRPORT
A.I.P. - 51
SCHEDULE I, II, III & IV

DATE: DECEMBER 2015 SHEET 1 OF 1

Nov 29, 2015 - 2:18pm jackson
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Detailed Engineering Fee Breakout

AIRPORT: Gunnison-Crested Butte Regional Airport
LOCATION: Gunnison, Colorado

AIP PROJECT NUMBER: 3-08-0030-051
Revised 6/20/2016

PROJECT DESCRIPTION:

Schedule I – Runway 6/24 and Taxiway A (A1-A2) Rehabilitation
Schedule II – Runway 6 Extended Safety Area Grading Improvements
Schedule III – Remove and Replace Windsock and Segmented Circle, Schedule IV – Taxiway Safety Area Grading Improvements

		Proposed Fee		Independent Fee Analysis		Negotiated Fee	
PART A - BASIC SERVICES							
1.0	Preliminary Design Phase	$ 63,604.00		$ 63,276.80		$ 79,292.00	
2.0	Design Phase	$ 396,468.00		$ 361,397.00		$ 401,820.00	
3.0	Bidding Phase	$ 31,598.00		$ 38,126.00		$ 31,598.00	
SUB-TOTAL PART A BASIC SERVICES		**$ 491,670.00**		**$ 462,799.80**		**$ 512,710.00**	
PART B - SPECIAL SERVICES							
4.0	Construction Administration Phase	$ 16,514.00		$ 16,067.00		$ 36,712.00	
5.0	Pre-Construction Coordination Phase	$ 7,515.00		$ 6,349.00		$ 16,561.00	
6.0	On-Site Construction Coordination Phase	$ 268,348.00		$ 200,200.00		$ 580,644.00	
7.0	Post Construction Coordination Phase	$ 21,720.00		$ 15,744.00		$ 48,378.00	
8.0	Xcel Energy Coordination Phase	$ 4,198.00		$ 6,656.00		$ 12,360.00	
	Sub-Total Part B - Labor and Expense	$ 318,295.00		$ 245,016.00		$ 694,655.00	**
	General Administration Overhead	$ 432,843.00		$ 333,695.00		**$ -**	**
	Fixed Payment (15%)	$ 151,239.00		$ 125,375.00		$ 104,198.00	
PART B - SPECIAL SERVICES - SUBCONSULTANTS							
SUB	Cultural Resources Survey	$ 1,500.00		$ 1,500.00		$ 1,500.00	
SUB	Geotechnical Investigation	$ 38,000.00		$ 38,000.00		$ 38,000.00	
SUB	Topographical Survey	$ 60,000.00		$ 60,000.00		$ 60,000.00	
SUB	Wetlands Survey, Seeding, 404 Permitting	$ 17,625.00		$ 17,625.00		$ 21,945.00	
SUB	Acceptance Testing	$ 120,000.00		$ 120,000.00		$ 120,000.00	
SUB	Airport GIS Data Submission	$ 20,000.00		$ 20,000.00		$ 20,000.00	
SUB-TOTAL PART B SPECIAL SERVICES		**$ 1,159,502.00**		**$ 961,211.00**		**$ 1,060,298.00**	
TOTAL ENGINEERING FEES		**$1,651,172.00**	**86%**	**$1,424,010.80**	**90.5%**	**$1,573,008.00**	

****** General Administration Overhead (OH) was removed as a single line item cost in the Negotiated Fee. The OH costs were distributed into the line items for Items 4.0, 5.0, 6.0, 7.0, & 8.0.

L:\GUC\GUC-51 Rnwy Rehab\Eng\C. SOW_Fees_Eng. Contract\SOW & Fees (JV and Subs)\Jviation\GUC AIP-51 Eng & CM Fee.xlsx

AIRPORT: Gunnison-Crested Butte Regional Airport
LOCATION: Gunnison, Colorado

AIP PROJECT NUMBER: 3-08-0030-051
Revised 6/20/2016

PART A - BASIC SERVICES

Item No.		Principal	Senior Consultant	Project Manager	Deputy Project Manager	Planner	Electrical Engineer	Associate Engineer	Designer	Associate Planner	CADD Tech	Administrative Support	Total Hours	Misc. Costs	Cost Summary
1.0	**Preliminary Design Phase**	$235.00	$225.00	$220.00	$150.00	$180.00	$150.00	$135.00	$150.00	$125.00	$102.00	$85.00			
1.1	Meetings with the Sponsor and FAA	8	12	32	16								68		$ 14,020.00
1.2	Prepare Project Scope of Work and Contract	4	4	16	4		8				8	8	52		$ 8,656.00
1.3	Coordinate Topographical Survey	4		24	16			40	24			8	116		$ 18,300.00
1.4	Coordinate Geotechnical Investigation	4		24	16			32	32			8	116		$ 18,420.00
1.5	Prepare Federal Grant Application			8	16								24		$ 4,160.00
1.6	Prepare Environmental Checklist		4	6	8	18				16	12	8	72		$ 10,564.00
	Estimated Total Man-hours	**20**	**20**	**110**	**76**	**18**	**8**	**72**	**56**	**16**	**20**	**32**	**448**		
	Summary Costs	**$4,700.00**	**$4,500.00**	**$24,200.00**	**$11,400.00**	**$3,240.00**	**$1,200.00**	**$9,720.00**	**$8,400.00**	**$2,000.00**	**$2,040.00**	**$2,720.00**		**$0.00**	
1.90	**Reimbursables**														
1.91	Miscellaneous													$1,000.00	$ 1,000.00
1.92	Auto Rental			2	5				5				12 Days	$70.00	$ 840.00
1.93	Mileage			800	2000				1200				4000 Mi	$0.575	$ 2,300.00
1.94	Lodging			1					5				6 Days	$108.00	$ 648.00
1.95	Per Diem			1					5				6 Days	$64.00	$ 384.00
														Total Preliminary Design Phase	$ 79,292.00

Checks

Item No.		Principal	Senior Consultant	Project Manager	Deputy Project Manager	Planner	Electrical Engineer	Associate Engineer	Designer	Associate Planner	CADD Tech	Administrative Support	Total Hours	Misc. Costs	Cost Summary
2.0	**Design Phase**	$235.00	$225.00	$220.00	$150.00	$180.00	$150.00	$135.00	$150.00	$125.00	$102.00	$85.00			
2.1	Analyze Topographic Survey Data			9	36			46	91		46		228		$ 31,932.00
2.2	Analyze Geotechnical Investigation Data	5		9	27								41		$ 7,205.00
2.3	Prepare Pavement Design	9		14	46			18			9		96		$ 15,443.00
2.4	Coordinate Phases for Construction		18	14	46				27		27		132		$ 20,834.00
2.5	Inventory Existing Utilities			5	27				46		36		114		$ 15,722.00
2.6	Prepare Preliminary Contract Documents	5		9	36		5					18	73		$ 10,835.00
2.7	Prepare Preliminary Plans	18		29	137	36	46	46	160		160		632		$ 91,070.00
2.8	Prepare Preliminary Technical Specifications	9		14	68							9	100		$ 16,160.00
2.9	Prepare Preliminary Special Provisions	5		5	18								28		$ 4,975.00
2.10	Prepare Drainage Analysis and Storm Drainage Design			2	18			36			27		83		$ 10,754.00
2.11	Compile/Submit Permits			2	18			18			9		47		$ 6,488.00
2.12	Compile/Submit FAA Form 7460			5	27	9		27			18	9	95		$ 13,016.00
2.13	Compile/Submit Strategic Event Notice			2	9	9	5					5	30		$ 4,585.00
2.14	Calculate Estimated Quantities	9		9	27			27	46		18		136		$ 20,526.00
2.15	Prepare Estimate of Probable Construction Cost	6		14	27		18						65		$ 11,240.00
2.16	Prepare Design Engineer's Report and Modification of Standards	6	5	21	46		18			18	18		132		$ 20,841.00
2.17	Plans Review at 30%, 60%, and 90% Complete			23	68				68		46		205		$ 30,152.00
2.18	In House Quality Control	18		46	46								110		$ 21,250.00
2.19	Prepare and Submit Final Plans and Specifications			23	91				91		46		251		$ 37,052.00
2.20	Coordinate AGIS Data Preparation and Submittal			4				16			16	8	44		$ 5,352.00
	Estimated Total Man-hours	**90**	**23**	**259**	**818**	**54**	**92**	**234**	**529**	**18**	**476**	**49**	**2642**		
	Summary Costs	**$21,150.00**	**$5,175.00**	**$56,980.00**	**$122,700.00**	**$9,720.00**	**$13,800.00**	**$31,590.00**	**$79,350.00**	**$2,250.00**	**$48,552.00**	**$4,165.00**		**$0.00**	
2.90	**Reimbursables**														
2.91	Miscellaneous													$3,000.00	$ 3,000.00
2.92	Auto Rental		1	4	4								9 Days	$70.00	$ 630.00
2.93	Mileage		400	1600	1600								3600 Mi	$0.58	$ 2,070.00
2.94	Lodging		1	2	1								4 Days	$108.00	$ 432.00
2.95	Per Diem		1	2	1								4 Days	$64.00	$ 256.00
														Total Design Phase	$ 401,820.00

Checks

AIRPORT: Gunnison-Crested Butte Regional Airport
LOCATION: Gunnison, Colorado

AIP PROJECT NUMBER: 3-08-0030-051
Revised 6/20/2016

PART A - BASIC SERVICES (CONT.)

Item No.		Principal	Senior Consultant	Project Manager	Deputy Project Manager	Planner	Electrical Engineer	Associate Engineer	Designer	Associate Planner	CADD Tech	Administrative Support	Total Hours	Misc. Costs	Cost Summary
3.0	**Bidding Phase**	$235.00	$225.00	$220.00	$150.00	$180.00	$150.00	$135.00	$150.00	$125.00	$102.00	$85.00			
3.1	Advertise for Bid Proposals				2							16	18		$ 1,660.00
3.2	Prepare/Conduct Pre-Bid Meeting	8		8	16								32		$ 6,040.00
3.3	Prepare Addenda			4	16		4		16		16		56		$ 7,912.00
3.4	Consult with Prospective Bidders	4		4	8		4						20		$ 3,620.00
3.5	Attend Bid Opening			8	8								16		$ 2,960.00
3.6	Review Bid Proposals	2		4	8		4		8				26		$ 4,350.00
3.7	Prepare Recommendation of Award			8	8							8	24		$ 3,640.00
	Estimated Total Man-hours	**14**	**0**	**36**	**66**	**0**	**12**	**0**	**24**	**0**	**16**	**24**	**192**		
	Summary Costs	**$3,290.00**	**$0.00**	**$7,920.00**	**$9,900.00**	**$0.00**	**$1,800.00**	**$0.00**	**$3,600.00**	**$0.00**	**$1,632.00**	**$2,040.00**		**$0.00**	
3.90	**Reimbursables**														
3.91	Miscellaneous													$0.00	$ -
3.92	Auto Rental	1		1	1								3 Days	$70.00	$ 210.00
3.93	Mileage	400		400	400								1200 Mi	$0.58	$ 690.00
3.94	Lodging	1		1	1								3 Days	$108.00	$ 324.00
3.95	Per Diem	1		1	1								3 Days	$64.00	$ 192.00
														Total Bidding Phase	$ 31,598.00

Checks

TOTAL PART A - BASIC SERVICES $ 512,710.00

AIRPORT: Gunnison-Crested Butte Regional Airport
LOCATION: Gunnison, Colorado

AIP PROJECT NUMBER: 3-08-0030-051
Revised 6/20/2016

PART B - SPECIAL SERVICES

Item No.		Principal	Senior Consultant	Project Manager	Deputy Project Manager	Planner	Electrical Engineer	Field Engineer	Construction Manager	Associate Planner	CADD Tech	Administrative Support	Total Hours	Misc. Costs	Cost Summary
4.0	**Construction Administration Phase**	$77.00	$74.00	$58.00	$49.00	$59.00	$49.00	$44.00	$49.00	$41.00	$34.00	$28.00			
4.1	Prepare Construction Contract and Documents			24			8					8	40		$ 2,008.00
4.2	Office Assistance	4		24			8		16		16		68		$ 3,420.00
4.3	Requests for Reimbursement			8									8		$ 464.00
4.4	Weekly/Monthly Reports	4		15									19		$ 1,178.00
4.5	Material Submittal Review			16			8	40					64		$ 3,080.00
4.6	Change Orders/Supplemental Agreements	4		16							24		44		$ 2,052.00
	Estimated Total Man-hours	**12**	**0**	**103**	**0**	**0**	**24**	**40**	**16**	**0**	**40**	**8**	**243**		
	Summary Costs	**$924.00**	**$0.00**	**$5,974.00**	**$0.00**	**$0.00**	**$1,176.00**	**$1,760.00**	**$784.00**	**$0.00**	**$1,360.00**	**$224.00**		**$0.00**	
													Gerneral Administrative Overhead (184.94% of Direct Salary Costs)		$ 22,566.00
4.90	**Reimbursables**														
4.91	Miscellaneous													$1,000.00	$ 1,000.00
4.92	Auto Rental			1	1								2 Days	$70.00	$ 140.00
4.93	Mileage			400	400								800 Mi	$0.58	$ 460.00
4.94	Lodging			1	1								2 Days	$108.00	$ 216.00
4.95	Per Diem			1	1								2 Days	$64.00	$ 128.00
														Total Construction Administration Phase	$ 36,712.00

Checks

Item No.		Principal	Senior Consultant	Project Manager	Deputy Project Manager	Planner	Electrical Engineer	Field Engineer	Construction Manager	Associate Planner	CADD Tech	Administrative Support	Total Hours	Misc. Costs	Cost Summary
5.0	**Pre-Construction Coordination Phase**	$77.00	$74.00	$58.00	$49.00	$59.00	$49.00	$44.00	$49.00	$41.00	$34.00	$28.00			
5.1	Prepare Project Files			4				11	11				26		$ 1,255.00
5.2	Prepare/Conduct Pre-Construction Meeting	8		12				8	8		4		40		$ 2,192.00
5.3	Prepare/Submit Construction Management Plan			8				24					32		$ 1,520.00
5.4	Review Contractor's Safety Plan Compliance Document			6									6		$ 348.00
	Estimated Total Man-hours	**8**	**0**	**30**	**0**	**0**	**0**	**43**	**19**	**0**	**4**	**0**	**104**		
	Summary Costs	**$616.00**	**$0.00**	**$1,740.00**	**$0.00**	**$0.00**	**$0.00**	**$1,892.00**	**$931.00**	**$0.00**	**$136.00**	**$0.00**		**$0.00**	
													Gerneral Administrative Overhead (184.94% of Direct Salary Costs)		$ 9,830.00
5.90	**Reimbursables**														
5.91	Miscellaneous													$0.00	$ -
5.92	Auto Rental	1		1	1								3 Days	$70.00	$ 210.00
5.93	Mileage	400		400	400								1200 Mi	$0.58	$ 690.00
5.94	Lodging	1		1	1								3 Days	$108.00	$ 324.00
5.95	Per Diem	1		1	1								3 Days	$64.00	$ 192.00
														Total Pre-Construction Coordination Phase	$ 16,561.00

Checks

AIRPORT: Gunnison-Crested Butte Regional Airport
LOCATION: Gunnison, Colorado

AIP PROJECT NUMBER: 3-08-0030-051
Revised 6/20/2016

PART B - SPECIAL SERVICES (CONT'D)

Item No.		Principal	Senior Consultant	Project Manager	Deputy Project Manager	Planner	Electrical Engineer	Field Engineer	Construction Manager	Associate Planner	CADD Tech	Administrative Support	Total Hours	Misc. Costs	Cost Summary
6.0	**On-Site Construction Coordination Phase**	$77.00	$74.00	$58.00	$49.00	$59.00	$49.00	$44.00	$49.00	$41.00	$34.00	$28.00		$0.00	
6.1	Field Inspection/Coordination	8		200									208		$ 12,216.00
6.2	Resident Engineering						20	1513	1710				3243		$ 151,342.00
6.3	Review Construction Submittals			40			6						46		$ 2,614.00
6.4	Review Contractor Payroll Forms and Perform Random Employee Interviews											2	2		$ 56.00
6.5	Calculate Construction Quantities										16		16		$ 544.00
6.6	Periodic Cost Estimates			25								16	41		$ 1,898.00
6.7	Prepare Daily Reports											6	6		$ 168.00
6.8	Prepare/Submit Weekly Reports			60									60		$ 3,480.00
6.9	Review QC/QA Results provided by Contractor/Engineer	12		50				24	12			32	130		$ 6,364.00
6.10	Prepare Quality Assurance Test Summary Report			25								4	29		$ 1,562.00
	Estimated Total Man-hours	**20**	**0**	**400**	**0**	**0**	**26**	**1537**	**1722**	**0**	**16**	**60**	**3781**		
	Summary Costs	**$1,540.00**	**$0.00**	**$23,200.00**	**$0.00**	**$0.00**	**$1,274.00**	**$67,628.00**	**$84,378.00**	**$0.00**	**$544.00**	**$1,680.00**		**$0.00**	
													Gerneral Administrative Overhead (184.94% of Direct Salary Costs)		$ 333,343.00
6.90	**Reimbursables**														
6.91	Miscellaneous													$0.00	$ -
6.92	Auto Rental	1		25			1	96	108				231 Days	$70.00	$ 16,170.00
6.93	Mileage	400		2900			400	7400	8300				19400 Mi	$0.58	$ 11,155.00
6.94	Lodging	1		25			1	96	108				231 Days	$108.00	$ 24,948.00
6.95	Per Diem	1		25			1	96	108				231 Days	$64.00	$ 14,784.00
														Total Construction Coordination Phase	$ 580,644.00

Checks

Item No.		Principal	Senior Consultant	Project Manager	Deputy Project Manager	Planner	Electrical Engineer	Field Engineer	Construction Manager	Associate Planner	CADD Tech	Administrative Support	Total Hours	Misc. Costs	Cost Summary
7.0	**Post Construction Coordination Phase**	$77.00	$74.00	$58.00	$49.00	$59.00	$49.00	$44.00	$49.00	$41.00	$34.00	$28.00			
7.1	Conduct Final Inspection	8		16					8				32		$ 1,936.00
7.2	Coordinate Final Surveys			6									6		$ 348.00
7.3	Prepare Clean-up Item List			16				16	16				48		$ 2,416.00
7.4	Prepare Engineering Record Drawings			60				30			60		150		$ 6,840.00
7.5	Prepare Final Construction Report			48				40					88		$ 4,544.00
7.6	Update and Modify Airport Layout Plan (ALP)							4			8		12		$ 448.00
7.7	Assist with Project Audit												0		$ -
	Estimated Total Man-hours	**8**	**0**	**146**	**0**	**0**	**0**	**90**	**24**	**0**	**68**	**0**	**336**		
	Summary Costs	**$616.00**	**$0.00**	**$8,468.00**	**$0.00**	**$0.00**	**$0.00**	**$3,960.00**	**$1,176.00**	**$0.00**	**$2,312.00**	**$0.00**		**$0.00**	
													Gerneral Administrative Overhead (184.94% of Direct Salary Costs)		$ 30,574.00
7.90	**Reimbursables**														
7.91	Miscellaneous													$500.00	$ 500.00
7.92	Auto Rental			1	1								2 Days	$70.00	$ 140.00
7.93	Mileage			400	400								800 Mi	$0.58	$ 460.00
7.94	Lodging			1									1 Days	$108.00	$ 108.00
7.95	Per Diem			1									1 Days	$64.00	$ 64.00
														Total Post Construction Coordination Phase	$ 48,378.00

Checks

AIRPORT: Gunnison-Crested Butte Regional Airport
LOCATION: Gunnison, Colorado

AIP PROJECT NUMBER: 3-08-0030-051
Revised 6/20/2016

PART B - SPECIAL SERVICES (CONT'D)

Item No.		Principal	Senior Consultant	Project Manager	Deputy Project Manager	Planner	Electrical Engineer	Field Engineer	Construction Manager	Associate Planner	CADD Tech	Administrative Support	Total Hours	Misc. Costs	Cost Summary
8.0	**Xcel Energy Coordination Phase**	$77.00	$74.00	$58.00	$49.00	$59.00	$49.00	$44.00	$49.00	$41.00	$34.00	$28.00			
8.1	Meetings with Xcel Energy			10									10		$ 580.00
8.2	Coordinate Pothole Data with Xcel Energy			16				8					24		$ 1,280.00
8.3	Update Construction Plans for High Pressure Gas Main			8				16			12		36		$ 1,576.00
8.4	Prepare Change Order to Incorperate Coordinated Design			8				8					16		$ 816.00
	Estimated Total Man-hours	**0**	**0**	**42**	**0**	**0**	**0**	**32**	**0**	**0**	**12**	**0**	**86**		
	Summary Costs	**$0.00**	**$0.00**	**$2,436.00**	**$0.00**	**$0.00**	**$0.00**	**$1,408.00**	**$0.00**	**$0.00**	**$408.00**	**$0.00**		**$0.00**	
													Gerneral Administrative Overhead (184.94% of Direct Salary Costs)		$ 7,864.00
8.90	**Reimbursables**														
8.91	Miscellaneous													$0.50	$ 0.50
8.92	Auto Rental				2								2 Days	$70.00	$ 140.00
8.93	Mileage				180								180 Mi	$0.58	$ 103.50
8.94	Lodging												0 Days	$108.00	$ -
8.95	Per Diem												0 Days	$64.00	$ -
														Total Post Construction Coordination Phase	$ 12,360.00

Checks

PART B - SPECIAL SERVICES - SUBCONSULTANTS

SUB	Topographical Survey	$ 60,000.00
SUB	Geotechnical Investigation	$ 38,000.00
SUB	Wetlands Survey, Seeding, 404 Permitting	$ 21,945.00
SUB	Cultural Resources Survey	$ 1,500.00
SUB	Airport GIS Data Submission	$ 20,000.00
SUB	Acceptance Testing	$ 120,000.00
	Total Subconsultants	$ 261,445.00

Sub-Total Part B - Special Services	$ 956,100.00
Fixed Payment (15%)	$ 104,198.00
TOTAL PART B - SPECIAL SERVICES	**$ 1,060,298.00**

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