

Introduced by _____ Council Bill No. R 265-13

A RESOLUTION

authorizing an agreement for professional engineering services with Burns & McDonnell Engineering Company, Inc. for design of the reconstruction of Runway 13-31 and Taxiway B at its intersection with Runway 20 at the Columbia Regional Airport.

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF COLUMBIA, MISSOURI, AS FOLLOWS:

SECTION 1. The City Manager is hereby authorized to execute an agreement for professional engineering services with Burns & McDonnell Engineering Company, Inc. for design of the reconstruction of Runway 13-31 and Taxiway B at its intersection with Runway 20 at the Columbia Regional Airport. The form and content of the agreement shall be substantially as set forth in "Exhibit A" attached hereto and made a part hereof.

ADOPTED this _____ day of _____, 2013.

ATTEST:

City Clerk

Mayor and Presiding Officer

APPROVED AS TO FORM:

City Counselor



AGREEMENT
For
PROFESSIONAL ENGINEERING SERVICES
Between
THE CITY OF COLUMBIA, MISSOURI
And
BURNS & McDONNELL ENGINEERING COMPANY, Inc.

THIS AGREEMENT made as of ____ day of _____, 20__, by and between the City of Columbia, Missouri, hereinafter called the CITY, and Burns & McDonnell Engineering Company, Inc. of Kansas City, Missouri, hereinafter called the ENGINEER.

WITNESSETH, that whereas the CITY intends to make improvements as described below, hereinafter called the PROJECT, consisting of the following:

Reconstruct Runway 13-31 and Taxiway B at the Intersection with Runway 20, Install Edge Lighting and Guidance Signs at Columbia Regional Airport (COU).

NOW, THEREFORE, in consideration of the mutual covenants set out herein the parties agree as follows:

ENGINEER shall serve as CITY's professional engineering contractor in those assignments to which this Agreement applies, and shall give consultation and advice to CITY during the performance of the services. All services shall be performed under the direction of a professional engineer registered in the State of Missouri and qualified in the particular field.

SECTION 1 - AUTHORIZATION OF SERVICES

1.1 ENGINEER shall not undertake to begin any of the services contemplated by this agreement until directed in writing to do so by CITY. CITY may elect to authorize the PROJECT as a whole or in parts.

1.2 Authorized work may include services described hereafter as Basic Services or as Additional Services of ENGINEER.

SECTION 2 - BASIC SERVICES OF ENGINEER

2.1 General

2.1.1 Perform professional engineering services as set forth in Attachment A - "Scope of Basic Services," dated October 25, 2013.

2.1.2 The ENGINEER will designate the following listed individuals as its project team with responsibilities as assigned. The ENGINEER shall dedicate whatever additional resources are necessary to accomplish the PROJECT within the specified time frame but will not remove these individuals from the assigned tasks for any reason within the control of the ENGINEER without the written approval of the CITY.

<u>Name and Title</u>	<u>Assignment</u>
David Hadel, Director of Aviation Services	Program Manager
Joe Moses, Associate Civil Engineer	Production Manager
Ryan Manning, Senior Civil Engineer	Lead Civil Engineer
Andrew Loftus, Staff Civil Engineer	Civil Engineer
Jason Fuehne, Senior Civil Engineer	Pavement Engineer
Steve Stratton, Associate Electrical Engineer	Lead Electrical Engineer

All of the services required hereunder will be performed by the ENGINEER or under its supervision and all personnel engaged in the work shall be fully qualified and authorized or permitted under state and local law to perform such services.

None of the work or services covered by this Agreement shall be subcontracted without the prior written approval of the CITY and any work or services so subcontracted shall be subject to the provisions of this Agreement.

2.2 The ENGINEER shall furnish such periodic reports as the CITY may request pertaining to the work or services undertaken pursuant to this Agreement, the costs and obligations incurred or to be incurred, and any other matters covered by this Agreement.

2.3 The ENGINEER shall maintain accounts and records, including personnel, property and financial records, adequate to identify and account for all costs pertaining to the Agreement and any other records as deemed necessary by the CITY to assure proper accounting for all project funds. These records must be available to the CITY or its authorized representatives, for audit purposes, and must be retained for three (3) years after expiration or completion of this Agreement.

SECTION 3 - ADDITIONAL SERVICES OF ENGINEER

3.1 General

If authorized in writing by CITY, and agreed to in writing by ENGINEER, ENGINEER shall furnish or obtain from others Additional Services of the following types which are not considered normal or customary Basic Services. The scope of Additional Services may include:

- 3.1.1 Financial Consultation
Consult with CITY's fiscal agents and bond attorneys and provide such engineering data as required for any bond prospectus or other financing requirements
- 3.1.2 Property Procurement Assistance
Provide consultation and assistance on property procurement as related to professional engineering services being performed.
- 3.1.3 Obtaining Services of Others
Provide through subcontract the services or data set forth in Attachment A.
- 3.1.4 Preliminary or final engineering design of capital facilities except as specifically identified herein.
- 3.1.5 Preparation of reports, data, application, etc., in connection with modifications to FEMA floodplain definition and/or mapping.
- 3.1.6 Extra Services
Services not specifically defined heretofore that may be authorized in writing by CITY.

SECTION 4 - RESPONSIBILITIES OF CITY

- 4.1 Provide full information as to CITY's requirements for the PROJECT.
- 4.2 Assist ENGINEER by placing at ENGINEER's disposal available information pertinent to the assignment including previous reports and other data relative thereto, including the items outlined in Attachment A - "Scope of Basic Services," dated October 25, 2013.
- 4.3 Guarantee access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform his services under this Agreement.
- 4.4 Examine all studies, reports, sketches, estimates, Bid Documents, Drawings, proposals and other documents presented by ENGINEER and render in writing decisions pertaining thereto.
- 4.5 Provide such professional legal, accounting, financial and insurance counseling services as may be required for the PROJECT.
- 4.6 Designate John D. Glascock, P.E., Director of Public Works, as CITY's

representative with respect to the services to be performed under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define CITY's policies and decisions with respect to materials, equipment, elements and systems to be used in the PROJECT, and other matters pertinent to the services covered by this Agreement.

4.7 Give prompt written notice to ENGINEER whenever CITY observes or otherwise becomes aware of any defect in the PROJECT.

4.8 Furnish approvals and permits from all governmental authorities having jurisdiction over the PROJECT and such approvals and consents from others as may be necessary for completion of the PROJECT.

4.9 Furnish ENGINEER data such as probings and subsurface explorations, with appropriate professional interpretations; property, boundary, easement, right-of-way, topographic and utility surveys; zoning and deed restriction; and other special data or consultations, all of which ENGINEER may rely upon in performing his services under this Agreement.

SECTION 5 - PERIOD OF SERVICE

5.1 This Agreement will become effective upon the first written notice by CITY authorizing services hereunder.

5.2 This Agreement shall be applicable to all work assignments authorized by CITY subsequent to the date of its execution and shall be effective as to all assignments authorized.

5.3 Services shall be started within 10 calendar days of Notice to Proceed and completed within (for Items B.1 and B.2 in Attachment "A") 120 calendar days from the issuance of the Notice to Proceed. CITY shall have the right to establish performance times for individual phases or elements of the PROJECT by delivering a written schedule setting out the performance times to the ENGINEER.

SECTION 6 - PAYMENTS TO ENGINEER

6.1 Amount of Payment

6.1.1 For services performed, CITY shall pay ENGINEER the sum of amounts determined as follows:

6.1.1.1 "Schedule of Hourly Labor Billing Rates" is not included as the contract is a lump sum payment, not per hour.

6.1.1.2 For outside expenses incurred by ENGINEER, such as authorized travel and subsistence, commercial services, and incidental expenses, the cost to ENGINEER.

6.1.1.3 For reproduction, printing, long-distance telephone calls, company vehicle usage, testing apparatus, computer services and computer-assisted drafting (CAD), amounts will be charged according to the ENGINEER's standard rates in effect at the time service is provided.

6.1.1.4 For professional services rendered by others as subcontractor(s) to ENGINEER such as surveying, real property descriptions, soil borings, subsurface investigations, laboratory testing, field quality control tests, progress photos, or other activities required or requested by CITY, will be billed at the cost to ENGINEER.

6.1.1.5 For time spent by outside individual professional consultants employed by ENGINEER in providing services to CITY, the cost to ENGINEER. Expenses incurred by such outside consultants in service to CITY shall be reimbursable in accordance with 6.1.1.2 above.

6.1.2 Total payment for Scope of Services and all other expenses and costs to the City under this agreement and described herein **shall not exceed \$388,725.**

6.2 Payments

6.2.1 The ENGINEER shall submit an invoice for services rendered to the CITY not more than once every month. Upon receipt of the invoice and progress report, the CITY will, as soon as practical, pay the ENGINEER for the services rendered, provided the CITY does not contest the invoice, to the extent of ninety-five percent (95%) of the uncontested amount earned. Upon completion and acceptance of the final plans by the CITY, the five percent (5%) of these services retained by the CITY will be paid to the ENGINEER.

SECTION 7 - GENERAL CONSIDERATIONS

7.1 Insurance

7.1.1 ENGINEER'S INSURANCE: ENGINEER agrees to maintain, on a primary basis and at its sole expense, at all times during the life of this contract the following insurance coverages, limits, including endorsements described herein. The requirements contained herein, as well as CITY's review or acceptance of insurance maintained by ENGINEER is not intended to and shall not in any manner limit or qualify the liabilities or obligations assumed by ENGINEER under this contract

Commercial General Liability ENGINEER agrees to maintain Commercial General

Liability at a limit of liability not less than **\$2,000,000** combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death. Coverage shall not contain any endorsement(s) excluding nor limiting Contractual Liability or Cross Liability. If the contract involves any underground/digging operations, the general liability certificate shall include X, C and U (Explosion, Collapse and Underground) coverage.

Professional Liability ENGINEER agrees to maintain Professional (Errors & Omissions) Liability at a limit of liability not less than **\$2,000,000** per claim and **\$2,000,000** aggregate. For policies written on a "Claims-Made" basis, ENGINEER agrees to maintain a Retroactive Date prior to or equal to the effective date of this contract. In the event the policy is canceled, non-renewed, switched to an Occurrence Form, retroactive date advanced; or any other event triggering the right to purchase a Supplemental Extended Reporting Period (SERP) during the life of this contract, ENGINEER agrees to purchase a SERP with a minimum reporting period not less than two (2) years. The requirement to purchase a SERP shall not relieve ENGINEER of the obligation to provide replacement coverage.

Business Automobile Liability ENGINEER agrees to maintain Business Automobile Liability at a limit of liability not less than **\$2,000,000** combined single limit for any one occurrence and not less than \$150,000 per individual, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the ENGINEER's own automobiles, and trucks; hired automobiles, and trucks; and automobiles both on and off the site of work. Coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event ENGINEER does not own automobiles, ENGINEER agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Workers' Compensation Insurance & Employers' Liability ENGINEER agrees to take out and maintain during the life of this contract, Employers' Liability and Workers' Compensation Insurance for all of their employees employed at the site of the work, and in case any work is sublet, the ENGINEER shall require the subcontractor similarly to provide Workers' Compensation Insurance for all the latter's employees unless such employees are covered by the protection afforded by the ENGINEER. Workers' Compensation coverages shall meet Missouri statutory limits. Employers' Liability minimum limits shall be \$500,000 each employee, \$500,000 each accident and \$500,000 policy limit. In case any class of employees engaged in hazardous work under this contract is not protected under the Workers' Compensation Statute, the ENGINEER shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.

Excess/Umbrella Liability The above liability limits may be satisfied by any combination of primary and excess/umbrella liability policies.

Additional Insured ENGINEER agrees to endorse CITY as an Additional Insured with

a CG 2026 Additional Insured – Designated Person or Organization endorsement, or similar endorsement, to the Commercial General Liability. The Additional Insured shall read “City of Columbia.”

Waiver of Subrogation ENGINEER agrees by entering into this contract to a Waiver of Subrogation for each required policy herein except professional liability. When required by the insurer, or should a policy condition not permit ENGINEER to enter into an pre-loss agreement to waive subrogation without an endorsement, then ENGINEER agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition specifically prohibiting such an endorsement, or voids coverage should ENGINEER enter into such an agreement on a pre-loss basis.

Certificate(s) of Insurance ENGINEER agrees to provide CITY with Certificate(s) of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect. Said Certificate(s) of Insurance shall include a minimum thirty (30) day endeavor to notify due to cancellation or non-renewal of coverage. The Certificate(s) of Insurance shall name the City as additional insured in an amount as required in this contract and contain a description of the project or work to be performed.

Right to Revise or Reject CITY reserves the right, but not the obligation, to review and revise any insurance requirement, not limited to limits, coverages and endorsements based on insurance market conditions affecting the availability or affordability of coverage; or changes in the scope of work / specifications affecting the applicability of coverage. Additionally, the CITY reserves the right, but not the obligation, to review and reject any insurance policies failing to meet the criteria stated herein or any insurer providing coverage due of its poor financial condition or failure to operating legally.

7.1.2 **HOLD HARMLESS AGREEMENT:** To the fullest extent not prohibited by law, ENGINEER shall indemnify and hold harmless the City of Columbia, its directors, officers, agents and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any negligent act or failure to act, or willful misconduct, of ENGINEER, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with ENGINEER or a subcontractor for part of the services), of anyone directly or indirectly employed by ENGINEER or by any subcontractor, or of anyone for whose acts the ENGINEER or its subcontractor may be liable, in connection with providing these services except as provided in this Agreement. This provision does not, however, require ENGINEER to indemnify, hold harmless or defend the City of Columbia from its own negligence, except as set out herein.

7.1.3 **Professional Oversight Indemnification**

The ENGINEER understands and agrees that CITY has contracted with ENGINEER based upon ENGINEER's representations that ENGINEER is a skilled professional and fully able to provide the services set out in this Agreement. In addition to any other indemnification set out in this Agreement, ENGINEER agrees to defend, indemnify and hold and save harmless the CITY from any and all claims, settlements and judgments whatsoever arising out of the CITY's alleged negligence in hiring or failing to properly supervise the ENGINEER.

The insurance required by this Agreement shall include coverage which shall meet ENGINEER's obligations to indemnify the CITY as set out above and the CITY shall be named as co-insured for such insurance.

7.2 Professional Responsibility

7.2.1 ENGINEER will exercise reasonable skill, care, and diligence in the performance of its services and will carry out its responsibilities in accordance with customarily accepted good professional engineering practices. If the ENGINEER fails to meet the foregoing standard, ENGINEER will perform at its own cost, and without reimbursement from CITY, the professional engineering services necessary to correct errors and omissions which are caused by ENGINEER's failure to comply with above standard, and which are reported to ENGINEER within one year from the completion of ENGINEER's services for the PROJECT.

7.2.2 In addition, ENGINEER will be responsible to CITY for damages caused by its negligent conduct during its activities at the PROJECT site or in the field.

7.3 Estimates and Projections

Estimates and projections prepared by ENGINEER relating to construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, and operating results are based on ENGINEER's experience, qualifications and judgment as a design professional. Since ENGINEER has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction contractor's procedures and methods, unavoidable delays, construction contractor's methods of determining prices, economic conditions, competitive bidding or market conditions and other factors affecting such estimates or projections, ENGINEER does not guarantee that actual rates, costs, performance, schedules, etc., will not vary from estimates and projections prepared by ENGINEER.

7.4 On-Site Services

PROJECT site visits by ENGINEER during construction shall not make ENGINEER responsible for construction means, methods, techniques, sequences or procedures; for construction safety precautions or programs; or for any construction contractor(s') failure to perform its work in accordance with the plans and specifications.

7.5 Changes

CITY shall have the right to make changes within the general scope of ENGINEER's services, with an appropriate change in compensation, upon execution of a mutually acceptable amendment or change order signed by an authorized representative of the CITY and the President or any Vice President of the ENGINEER.

7.6 Suspension of Services

Should CITY fail to fulfill its responsibilities as provided under Section 4 to the extent that ENGINEER is unduly hindered in his services or if CITY fails to make any payment to ENGINEER on account of its services and expenses within ninety (90) days after receipt of ENGINEER's bill therefor, ENGINEER may, after giving seven (7) days' written notice to CITY, suspend services under this Agreement until CITY has satisfied his obligations under this Agreement.

7.7 Termination

Services may be terminated by the CITY at any time and for any reason, and by the ENGINEER in the event of substantial failure to perform in accordance with the terms hereof by the CITY through no fault of the ENGINEER, by ten (10) days' notice. If so terminated, CITY shall pay ENGINEER all uncontested amounts due ENGINEER for all services properly rendered and expenses incurred to the date of receipt of notice of termination.

7.7.1 In the event of CITY's termination of the Agreement pursuant to the above section, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared under this Agreement, shall at the option of the CITY become its property.

Further, the ENGINEER shall not be relieved of any liability to the CITY for any damages sustained by the CITY by virtue of any breach of this Agreement by ENGINEER and the CITY may withhold any payments due the ENGINEER for the purpose of set-off until such time as the exact amount of damages to the CITY, if any, is determined.

7.8 Publications

Recognizing the importance of professional development on the part of ENGINEER's employees and the importance of ENGINEER's public relations, ENGINEER may prepare publications, such as technical papers, articles for periodicals, and press releases, pertaining to ENGINEER's services for the PROJECT. Such publications will be provided to CITY in draft form for CITY's advance review. CITY will review such drafts promptly and will provide comments to ENGINEER. CITY may require deletion of proprietary data or confidential information from such publications but otherwise will not unreasonably withhold its approval. The cost of ENGINEER's activities pertaining to any such publication shall be paid entirely by ENGINEER.

7.9 Nondiscrimination

During the performance of this Agreement, ENGINEER agrees to the following:

7.9.1. ENGINEER shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, handicap, or national origin. ENGINEER shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, age, handicap, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. ENGINEER agrees to post notices in conspicuous places, available to employees and applicants for employment.

7.9.2 ENGINEER shall, in all solicitation or advertisements for employees placed by or on behalf of ENGINEER, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, handicap, or national origin.

7.9.3 ENGINEER shall comply with all provisions of State and Federal Laws governing the regulation of Equal Employment Opportunity including Title VI of the Civil Rights Act of 1964.

7.10 Successor and Assigns

CITY and ENGINEER each binds himself and his successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither CITY nor ENGINEER shall assign, sublet or transfer his interest in the Agreement without the written consent of the other.

7.11 Rights and Benefits

ENGINEER's services will be performed solely for the benefit of the CITY and not for the benefit of any other persons or entities.

7.12 Compliance with Local Laws

ENGINEER shall comply with all applicable laws, ordinances and codes of the state and city.

7.13 Law; Submission to Jurisdiction Governing.

This Contract shall be governed by, interpreted and enforced in accordance with the laws of the State of Missouri and/or the laws of the United States, as applicable. The venue for all litigation arising out of, or relating to this Contract

Document, shall be Boone County, Missouri or the United States Western District of Missouri. The parties hereto irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of Missouri and waive any defense of forum non conveniens

7.14 Employment of Unauthorized Aliens Prohibited

7.14.1 ENGINEER agrees to comply with Missouri State Statute section 285.530 in that they shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

7.14.2 As a condition for the award of this contract ENGINEER shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. ENGINEER shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.

7.14.3 ENGINEER shall require each subcontractor to affirmatively state in its contract with ENGINEER that the subcontractor shall not knowingly employ, hire for employment or continue to employ an unauthorized alien to perform work within the state of Missouri. ENGINEER shall also require each subcontractor to provide ENGINEER with a sworn affidavit under the penalty of perjury attesting to the fact that the subcontractor's employees are lawfully present in the United States.

7.15 No Waiver of Immunities

In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either party's rights or defenses with regard to each party's applicable sovereign, governmental, or official immunities and protections as provided by federal and state constitutions or laws.

7.16 Entire Agreement

This Agreement represents the entire and integrated Agreement between ENGINEER and CITY relative to the Scope of Services herein. All previous or contemporaneous agreements, representations, promises and conditions relating to ENGINEER's services described herein are superseded.

[SIGNATURES ON FOLLOWING PAGE]

CITY OF COLUMBIA, MISSOURI

By: _____
Mike Matthes, City Manager

ATTESTED BY:

Sheela Amin, City Clerk

APPROVED AS TO FORM:

Nancy Thompson, City Counselor

CERTIFICATION: I hereby certify that the above expenditure is within the purpose of the appropriation to which it is charged, Account No. 554-6288-881.40-23, C44092, and that there is an unencumbered balance to the credit of such appropriation sufficient to pay therefor.

Director of Finance

ENGINEER

By: _____
David G. Hadel, P.E. (Name/Title)
Director of Aviation Services

By: _____
Brett A. Pilney, P.E. (Name/Title)
Vice President

ATTACHMENT "A"
OCTOBER, 2013
SCOPE OF BASIC SERVICES
FOR PROFESSIONAL ENGINEERING SERVICES
FOR
THE DESIGN FOR THE RECONSTRUCTION OF RUNWAY 13-31 AND
TAXIWAY B AT THE INTERSECTION WITH RUNWAY 20 (PHASE I)
AT COLUMBIA REGIONAL AIRPORT

A. PROJECT NAME AND DESCRIPTION OF IMPROVEMENTS:

1. **Project Name:** Reconstruct Runway 13-31 and Taxiway B at the Intersection with Runway 20, Install Edge Lighting and Guidance Signs at Columbia Regional Airport (COU).

2. **Description of Improvements:** The location of improvements are shown on EXHIBIT No. 1 and are described herein as follows:
 - Runway 13-31: Reconstruct from approximately 520 feet west of runway intersection with Runway 2-20 to 560 feet East of runway intersection with Runway 2-20 and not including Runway 2-20.
 - Taxiway B: Demolish Taxiway B between the east edge of Taxiway A to the south edge of Runway 13.
 - Taxiway B (New): Reconstruct new Taxiway B between the east edge of Taxiway A, abutting and perpendicular to Runway 2-20 on the west and east side and continuing northeast to the edge of Runway 13.
 - Connecting Taxiway B will be reconfigured at 50' wide for short term use until the existing Runway 31 end is relocated to its easterly and ultimate location.
 - Runway 20 pavement is not included in the reconstruction area.
 - Runway 13-31 will have a 100' wide pavement footprint, however marking and lighting will coincide with the existing 75' wide pavement until Runway 13-31 is constructed at its ultimate length and width.
 - Runway 13-31 and Parallel Taxiway B will be designed to establish a 355' centerline to centerline separation except that portion that is constructed at a 90 degrees to Runway 2-20.
 - New edge lighting and guidance signs will be installed in the reconstructed area.
 - Elevated Runway Guard Lights (ERGLs) will be installed in three locations as noted as "Hot Spots" and as defined in the FAA's Airport/Facility Directory (AFD).
 - Underdrains will be considered if determined practical.
 - Surface drainage will be positive away from pavement surfaces.

B. DESCRIPTION OF SERVICES TO BE PERFORMED:

CONSULTANT has developed the following Scope of Services to perform engineering services for the aforementioned project. The Scope of Services is defined as follows:

1. Preliminary Design Phase: This phase includes activities for defining the scope of the aforementioned project and establishing preliminary requirements. The elements of work for this task include:
 - a. Perform onsite visual observations to determine the extent of the improvements to Runway 13-31 and Taxiway B. Attendees for the CONSULTANT include Project Manager, Project Civil Engineer and Project Electrical Engineer
 - b. Review existing data and prepare update for project Airport Capital Improvement Plan (ACIP).
 - c. Prepare Scope of Work for Geotechnical Services.

In general the work will include:

 - 1) Perform geotechnical exploratory investigation including pavement coring/boring in thirteen (13) locations.
 - 2) Perform laboratory tests on soil samples obtained from the work area. Tests to include the following:
 - i. Moisture Content
 - ii. Dry Unit Weight
 - iii. Sieve Analyses
 - iv. Atterberg Limits
 - v. Unconfined Compression
 - vi. Swell Pressure
 - vii. Consolidation
 - viii. Compaction Characteristics
 - ix. Chemical Analyses for pH, Sulfates, & Sulfides.
 - 3) Prepare a Report containing a description of the drilling and sampling program, a description of the geology and subsurface conditions encountered, groundwater conditions, typed boring logs with a boring location plan, and results of the laboratory testing program. The Report shall contain geotechnical recommendations for the design and construction of pavement and earthwork for the proposed project.
 - d. Prepare Scope of Work for Topographical Surveying Services.

In general the work will include:

 - 1) Establish Runway 13-31 and 2-20 baselines and set control points.
 - 2) Establish horizontal control in NAD 83 coordinates.
 - 3) Establish vertical control at the airport based on USGS datum.
 - 4) Establish benchmarks for construction.
 - 5) Obtain topography and above ground features in the proposed work areas of approximately 92 acres.

- 6) Collect exploratory investigation data of utilities in the work area as obtained from the Missouri One Call System, airport personnel, FAA personnel, record drawings, and utility company personnel.
- 7) Verifying existing utility, location, and depth at eleven (11) locations as specified by the CONSULTANT and as excavated by licensed contractor selected by and under contract by SURVEYOR.
- e. Prepare Engineering Scope of Services and Fee Estimate.
- f. Develop a preliminary cost estimate and submit to the SPONSOR for budgeting purposes. Monitor and report changes in the project budget throughout the project.
- g. Develop a preliminary schedule for construction and submit to the SPONSOR for review. Monitor and report changes to the schedule throughout the project.
- h. Prepare preliminary site plans for development of construction phasing and coordination with FAA Technical Operations Group, ATC, Airline(s), and FBOs.
- i. Prepare a preliminary design report per FAA AIP Guide 920. Design report will include considerations for incremental phasing of the runway and taxiway intersection work and Runway 13-31 profile construction within the limits of work area. The design report will consider the ultimate Runway 13-31 profile.
- j. Prepare FAA Pavement Design Form 5100-100. The CONSULTANT anticipates incorporation of three (3) separate pavement design sections due to intersection and phasing requirements as based on preliminary discussions with FAA prior to development of this SOW. Each section will include a life cycle cost evaluation for final pavement section(s).
- k. Prepare and submit FAA Forms 7460-1. Anticipate submittals for geometric improvements, electrical NavAids, construction work areas, staging areas, haul routes, and construction phasing scenarios.
- l. Prepare Construction Safety and Phasing Plan (CSPP) per AC 150/5370-F. Anticipate a base bid for construction and maximum of two (2) bid alternates. Submittals to be provided at the preliminary 35 to 50 percent of plans and specification phase.
- m. Perform an internal Quality Review by independent senior level staff.
- n. Submit for Review, the preliminary engineering report and geotechnical investigation to the SPONSOR and FAA.
- o. Attend and conduct a preliminary design meeting with the SPONSOR and FAA at the SPONSOR'S office. Attendees for the CONSULTANT will include the Project Manager, Project Civil Engineer, and Project Electrical Engineer.

- 2. Design Phase: This phase will include the activities required to develop the project design documents showing the character and scope of work to be performed by contractors on the project. The design of this project is based on the FAA Standards contained on the list found at

http://www.faa.gov/airports/aip/media/aip_pfc_checklist_apr2013.pdf. The specific tasks that will be performed in this phase include:

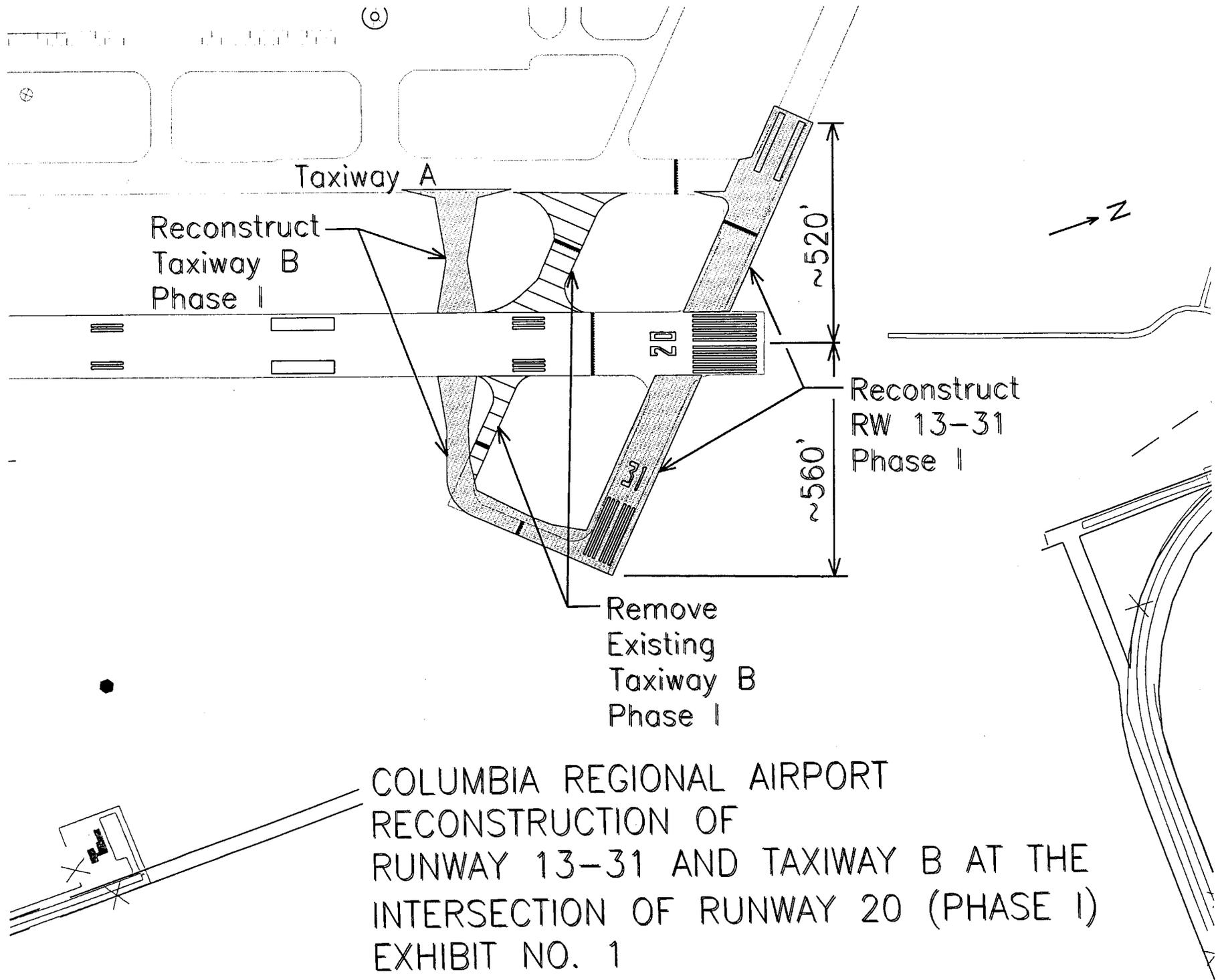
- a. Prepare construction Bid Documents. The anticipated drawing list includes the following:
 - i. Cover Sheet
 - ii. Index, Legend, Abbreviations, & Summary of Quantities
 - iii. Access & Site Plans
 - iv. Existing Conditions, Borings, and Exploratory Locations Plans
 - v. Construction Safety and Phasing Plans
 - vi. Maintenance Of Traffic Plans
 - vii. Typical Sections
 - viii. Demolition Plans
 - ix. Plan & Profiles
 - x. Underdrain Plan, Profile, & Details
 - xi. Storm Drainage Plans & Details
 - xii. Grading and Erosion Control Plans
 - xiii. Electrical: Legend, Abbreviations, & Notes
 - xiv. Electrical: Site Plans
 - xv. Electrical: Demolition Plans
 - xvi. Electrical: Lighting Plans
 - xvii. Electrical: Guidance Sign Plans
 - xviii. Electrical: Details
 - xix. Pavement Marking Plans
 - xx. Miscellaneous Details
 - xxi. Cross Sections
- b. Prepare Missouri Department of Natural Resources Erosion Control Permits & Construction Storm Water Pollution Prevention Plan.
- c. Prepare project technical specifications.
- d. Prepare Standard FAA and SPONSOR front-end documents outlining bid procedures and process.
- e. Revise the preliminary cost estimate for the final engineer's estimate of probable cost.
- f. Revise the preliminary construction schedule.
- g. Prepare the final design report following FAA AIP Guide 920.
- h. Prepare the final Construction Safety and Phasing Plan (CSPP).
- i. Perform an internal Quality Review by the designer of the project.
- j. Perform an internal Quality Review by independent senior level review team.
- k. Revise drawings and specifications per internal Quality Review comments.
- l. Submit 2 copies of drawings and specifications to the SPONSOR and FAA for 90% review.
- m. Meet with SPONSOR at the Columbia Regional Airport with three representatives of the CONSULTANT'S team during plan production as an interim review of the project status.

- n. Revise 90% contract documents per SPONSOR and FAA review comments and resubmit to SPONSOR and FAA for bidding.
 - o. Provide an electronic copy of project manual and construction drawings to SPONSOR for the purpose of filing and use for distribution to contractors.
 - p. Participate in a FAA Safety Management System (SMS) panel at the Columbia Regional Airport. Attendees for the CONSULTANT include Project Manager, Project Civil Engineer, and Project Electrical Engineer.
3. Bidding & Construction Award Phase: This phase will include basic services to assist the SPONSOR with bidding of the contract documents and reviewing and award of the bid, including the following activities:
- a. Assist SPONSOR with advertising of the project.
 - b. Attend and conduct a prebid meeting with the SPONSOR. Attendees for the CONSULTANT will include the Project Manager, Project Civil Engineer and Project Electrical Engineer.
 - c. Prepare any addenda for the project.
 - d. Respond to questions during the bidding phase.
 - e. Attend the bid opening and tabulate bids, analyze and provide recommendations to the SPONSOR.
 - f. Assist SPONSOR with preparing contract documents.
 - g. Assist SPONSOR with preparing grant application documents.
4. Construction Phase Services: This work will be determined upon completion of the project design. Construction Phase Services are not provided in this Scope of Work.

C. ESTIMATED TIME OF COMPLETION:

- 1. The time to complete the Scope of Services for items identified in B.1 – B.2 of this Scope of Work is estimated at One Hundred and Twenty (120) calendar days from the Notice To Proceed.

END OF SOW



COLUMBIA REGIONAL AIRPORT
 RECONSTRUCTION OF
 RUNWAY 13-31 AND TAXIWAY B AT THE
 INTERSECTION OF RUNWAY 20 (PHASE I)
 EXHIBIT NO. 1

**DERIVATION OF CONSULTANT PROJECT COSTS
SUMMARY OF COSTS
RECONSTRUCTION OF RW 13-31 & TW B AT INTERSECTION OF RW 2-20
COLUMBIA REGIONAL AIRPORT
DESIGN SERVICES
BASIC AND SPECIAL SERVICES
October 22, 2013**

1 DIRECT SALARY COSTS:

TITLE	HOURS	RATE/HOUR	COST (\$)		
			Office	Field	Contract
Principal	48.00	\$52.25	\$2,508.00	\$0.00	\$0.00
Project Manager	276.00	\$46.00	\$12,696.00	\$0.00	\$0.00
Sr. Civil Eng.	294.50	\$37.00	\$10,896.50	\$0.00	\$0.00
Staff Civil Eng.	202.50	\$32.50	\$6,581.25	\$0.00	\$0.00
Assist. Civil Eng.	530.00	\$29.00	\$15,370.00	\$0.00	\$0.00
Assoc. Electrical Eng.	112.00	\$48.00	\$5,376.00	\$0.00	\$0.00
Sr. Electrical Eng.	205.00	\$44.00	\$9,020.00	\$0.00	\$0.00
Staff Electrical Eng.	16.00	\$34.00	\$544.00	\$0.00	\$0.00
Sr. Tech.	203.00	\$24.00	\$4,872.00	\$0.00	\$0.00
Staff CADD Tech.	743.00	\$22.50	\$16,717.50	\$0.00	\$0.00
Geotechnical Eng.	28.00	\$45.00	\$1,260.00	\$0.00	\$0.00
Clerical	49.00	\$18.50	\$906.50	\$0.00	\$0.00
	2,707.00				
Total Direct Salary Costs			\$86,747.75	\$0.00	\$0.00

2 LABOR AND GENERAL ADMINISTRATIVE OVERHEAD:

Percentage of Direct Salary Costs @	230.06%	Office	\$199,571.87		
Percentage of Direct Salary Costs @	163.93%	Field		\$0.00	
Percentage of Direct Salary Costs @	62.69%	Contract			\$0.00

3 SUBTOTAL:

Items 1 and 2			\$286,319.62	\$0.00	\$0.00
---------------	--	--	--------------	--------	--------

4 PROFIT:

10.00%	% of Item 3 Subtotal		\$28,631.96	\$0.00	\$0.00
		Subtotal	\$314,951.59	\$0.00	\$0.00

5 OUT-OF-POCKET EXPENSES:

a. Transportation (Office Staff)	2,400.00 miles @	\$0.565 / Mile =	\$1,356.00		
b. Transportation (Field Staff)	0.00 Miles @	\$0.565 / Mile =		\$0.00	
c. Per Diem (meals) office (per day)	13.00 days @	\$10.00 / day =	\$130.00		
d. Per Diem (lodging) office (per day)	0.00 days @	\$77.00 / day =	\$0.00		
e. Per Diem field (meal & Lodging) : per day	0.00 days @	\$123.00 / day =		\$0.00	
f. Comp. hrs: (N/A)	219.00 Hours @	\$0.00 / Hour =	\$0.00		
g. Comp. hrs: (N/A)	2,488.00 Hours @	\$0.00 / Hour =	\$0.00		
h. Copies, Printing, & Shipping		=	\$1,287.42	\$0.00	\$0.00
Total Out-of-Pocket Expenses			\$2,773.42	\$0.00	\$0.00

6 SUBCONTRACT COSTS:

a. SURVEYING:	=	\$0.00	\$0.00	\$46,000.00
b. GEOTECHNICAL:	=	\$0.00	\$0.00	\$25,000.00
	Subtotal	\$0.00	\$0.00	\$71,000.00

7 MAXIMUM TOTAL FEE:

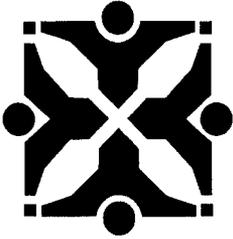
Items 1, 2, 3, 4, 5 and 6			\$317,725.00	\$0.00	\$71,000.00
---------------------------	--	--	--------------	--------	-------------

TOTAL:	SUMMARY		\$388,725.00		
---------------	----------------	--	---------------------	--	--

SUMMARY

Exhibit V
ENGINEERING BASICE AND SPECIAL SERVICES-COST BREAKDOWN
SUMMARY OF COSTS
RECONSTRUCTION OF RW 13-31 & TW B AT INTERSECTION OF RW 2-20
COLUMBIA REGIONAL AIRPORT
DESIGN SERVICES
BASIC AND SPECIAL SERVICES
October 22, 2013

Classification:	Principal	Project Manager	Sr. Civil Eng.	Staff Civil Eng.	Assist. Civil Eng.	Assoc. Electrical Eng.	Sr. Electrical Eng.	Staff Electrical Eng.	Sr. Tech.	Staff CADD Tech.	Geotechnical Eng.	Clerical	Other Costs	
Gross Hourly Rate:	\$189.70	\$167.01	\$134.33	\$118.00	\$105.29	\$174.27	\$159.75	\$123.44	\$87.14	\$81.69	\$163.38	\$67.17		
A. BASIC SERVICES														
1 PRELIMINARY DESIGN PHASE	14.00	69.00	94.00	80.00	94.00		65.00		8.00	23.00	24.00	10.00	(1, 2, 3, 4, 5)	
Total =	\$64,650.00	\$2,655.83	\$11,523.71	\$12,627.44	\$9,439.72	\$9,897.18	\$10,383.69		\$697.09	\$1,878.87	\$3,921.11	\$671.67	\$953.70	
2 DESIGN PHASE	34.00	167.00	200.50	122.50	402.00	100.00	140.00	16.00	187.00	712.00	4.00	24.00	(1, 2, 3, 4, 5)	
Total =	\$237,465.00	\$6,449.87	\$27,890.73	\$26,934.05	\$14,454.57	\$42,326.23	\$17,427.17	\$22,364.87	\$1,975.08	\$16,294.40	\$58,163.17	\$653.52	\$1,612.01	\$919.34
3 BIDDING PHASE		40.00			34.00	12.00			8.00	8.00		15.00	(1, 2, 3, 4, 5)	
Total =	\$15,610.00	\$6,680.41			\$3,579.83	\$2,091.26			\$697.09	\$653.52		\$1,007.51	\$900.38	
4 N/A													(1, 2, 3, 4, 5)	
Total =														
5 N/A													(1, 2, 3, 4, 5)	
Total =														
PART A SUBTOTAL =	\$317,725.00													
B.														
1 SURVEYING													(1, 2, 3, 4, 5)	
Total =	\$46,000.00												\$46,000.00	
2 GEOTECHNICAL													(1, 2, 3, 4, 5)	
Total =	\$25,000.00												\$25,000.00	
3 N/A													(1, 2, 3, 4, 5)	
Total =														
4 N/A													(1, 2, 3, 4, 5)	
Total =														
5 N/A													(1, 2, 3, 4, 5)	
Total =														
PART B SUBTOTAL =	\$71,000.00													
GRAND TOTAL =	\$388,725.00													
(1) Mileage, Motel and Meals (3) Computer Services (5) Other (identify) (2) Equipment, Materials and Supplies (4) Vendor Services														



Source: Public Works *Joh*

Agenda Item No:

To: City Council
From: City Manager and Staff *mh*

Council Meeting Date: Dec 16, 2013

Re: Reconstruction of Runway 13-31 and Taxiway B at the Intersection with Runway 20 at the Columbia Regional Airport

EXECUTIVE SUMMARY:

Staff has prepared for Council consideration legislation authorizing the City Manager to execute an agreement with Burns & McDonnell Engineering Company, Inc, for professional engineering services related to the reconstruction of Runway 13-31 and Taxiway B at the the Intersection with Runway 20 at the Columbia Regional Airport.

DISCUSSION:

Per Resolution 47-11, an agreement with Burns & McDonnell Engineering Company, Inc was approved by Council on April 4, 2011, to provide professional engineering services for the construction, design, operation and maintenance of airport improvement projects over a five year period. One of the projects identified in the agreement was for the rehabilitation and extensions to Runway 13-31 and parallel taxiway pavements.

The scope of services for the reconstruction of Runway 13-31 and Taxiway B, as well as the installation of edge lighting and guidance signs at Columbia Regional Airport, include the preliminary design phase, design phase, and bidding and construction award phase, for a not to exceed cost of \$388,725. Burns & McDonnell's scope of services for this project was consistent with an independent cost review completed by J-U-B Engineers, located in Spokane, WA.

FISCAL IMPACT:

This agreement is for a not to exceed amount of \$388,725. Although this cost will be eligible for 90% reimbursement from FAA, funds are being transferred from the Airport Terminal project to cover this cost until the grant offer is received from FAA. The City will have a local match of 10%, or \$38,872.50.

VISION IMPACT:

<http://www.gocolumbiamo.com/Council/Meetings/visionimpact.php>

This action will help to provide adequate air transportation facilities for Columbia and all of mid-Missouri.

SUGGESTED COUNCIL ACTIONS:

Approve the legislation authorizing the City Manager to execute an agreement with Burns & McDonnell Engineering Company, Inc, for professional engineering services related to the reconstruction of Runway 13-31 and Taxiway B at the the Intersection with Runway 20 at the Columbia Regional Airport.

FISCAL and VISION NOTES:					
City Fiscal Impact Enter all that apply		Program Impact		Mandates	
City's current net FY cost	\$0.00	New Program/ Agency?	No	Federal or State mandated?	Yes
Amount of funds already appropriated	\$100,747.00	Duplicates/Expands an existing program?	No	Vision Implementation impact	
Amount of budget amendment needed	\$288,000.00	Fiscal Impact on any local political subdivision?	No	Enter all that apply: Refer to Web site	
Estimated 2 year net costs:		Resources Required		Vision Impact?	Yes
One Time	\$0.00	Requires add'l FTE Personnel?	No	Primary Vision, Strategy and/or Goal Item #	13
Operating/ Ongoing	\$0.00	Requires add'l facilities?	No	Secondary Vision, Strategy and/or Goal Item #	
		Requires add'l capital equipment?	No	Fiscal year implementation Task #	

