



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CP13-209**

1. Agenda Item Number:

216

2. Council Meeting Date:
June 13, 2013

TO: MAYOR & COUNCIL

3. Date Prepared: May 30, 2013

THROUGH: CITY MANAGER

4. Requesting Department: Economic Development

5. **SUBJECT:** Project agreement with Dibble Engineering for the design of Airport Runway/Taxiway Erosion Control project AI1305-201 for an amount not to exceed \$104,719.28.

6. **RECOMMENDATION:** Staff recommends that Council approve a project agreement with Dibble Engineering for the design of Airport Runway/Taxiway Erosion Control project AI1305-201 for an amount not to exceed \$104,719.28.

7. **BACKGROUND/DISCUSSION:** This improvement project is necessary because the soils adjacent to the runway and taxiway pavements are prone to erosion. The Airport is obligated to adhere to Runway Safety Area (RSA) standards set forth by the Federal Aviation Administration (FAA). This project will provide stability and protection of the soils as well as improve grading and drainage in the most affected infield areas.

8. **EVALUATION:** City staff has reviewed the scope of the preapproved design fees and found it reasonable for a project of this type.

9. FINANCIAL IMPLICATIONS:

The grant for this project was previously accepted by City Council. The total project cost is estimated to be \$1,032,000, with the State's portion being 90% and the City of Chandler's share being 10%.

Fund Source:

Acct. No.:
635.4110.6910.AI264

Fund Name:
Airport Improvements #6AI-264

CIP Funded:
Yes

Amount:
\$104,719.28

10. **PROPOSED MOTION:** Move that Council approve a project agreement with Dibble Engineering for the design of Airport Runway/Taxiway Erosion Control project AI1305-201 for an amount not to exceed \$104,719.28.

ATTACHMENTS: Location Map

APPROVALS

11. Requesting Department

Lori Quan

Lori Quan, Airport

13. Department Head

Christine Mackay

Christine Mackay, Director Economic Development

12. City Engineer

Dave Nakagawara

Dave Nakagawara, Interim City Engineer

14. City Manager

Rich Dlugas

Rich Dlugas, City Manager

**PROJECT AGREEMENT
PURSUANT TO ANNUAL CONTRACT NO. EN1005-101**

PROJECT AGREEMENT NO: AI1305-201

This PROJECT AGREEMENT is made this ____ day of _____, 2013, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and Dibble Engineering, (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN1005-101.

CITY and Dibble Engineering, in consideration of the mutual covenants herein set forth, agree as follows:

ARTICLE 1 - DESCRIPTION OF WORK:

This project is Airport Runway Taxiway Erosion Control, Project Number AI1305-201. The scope of work consists of preparing studies, design plans, special provisions, specifications, quantities, cost estimating, and bid assistance services for the construction of erosion control improvements along the runways and taxiways at the Airport, all as more particularly set forth in Exhibit A attached hereto and incorporated herein by reference.

The Annual Consultant shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract amendment and signed by the Contract Administrator.

ARTICLE 2 - CONTRACT PRICE:

CITY shall pay Annual Consultant for completion of the Work in accordance with the Contract Documents a fee not to exceed One Hundred Four Thousand Seven Hundred Nineteen Dollars and Twenty Eight Cents (\$104,719.28) determined and payable as set forth in Annual Contract EN1005-101 and Exhibit B attached hereto and made a part hereof by reference.

ARTICLE 3 - CONTRACT TIME:

The contract time is One Hundred Eighty days and Annual Consultant agrees to complete all work within One Hundred Eighty (180) days of the date CITY issues a Notice to Proceed.

ARTICLE 4 - GENERAL:

This Project Agreement is entered into pursuant to Annual Contract No. EN1005-101 and the terms and conditions contained therein are incorporated herein by reference as if set forth in full.

IN WITNESS WHEREOF, the parties hereto have executed this Project Agreement on the day and year first written above.

This Project Agreement will be effective on this _____ day of _____, 2013.

CITY OF CHANDLER

FOR THE ANNUAL:

MAYOR DATE:

By: Steven E. Rex
Title: COO

ADDRESS FOR NOTICE
City of Chandler
P.O. Box 4008, Mail Stop 407
Chandler, AZ 85244-4008
480-782-3307

ADDRESS FOR NOTICE
Mr. Steve Rex
Dibble Engineering
7500 N. Dreamy Draw Dr., Ste. 200
Phoenix, AZ 85020

APPROVED AS TO FORM:

Phone: 602-957-1155
Fax: 602-957-2838

City Attorney By: [Signature]
ATTEST:

City Clerk

EXHIBIT A SCOPE OF WORK

ANNUAL CONSULTANT, in conjunction with its subconsultants, to the satisfaction of the City of Chandler and Chandler Municipal Airport, shall prepare studies, design plans, special provisions, specifications, quantities, cost estimating, and bid assistance services for the construction of erosion control improvements along the runways and taxiways at the Airport (approximately 95,500 SY). These improvements are necessary because of the poor soils conditions adjacent to the runway and taxiway pavements. A significant portion of these areas are rutted to the point of violating Runway and Taxiway Safety Area (RSA) grading and smoothness standards, or, in some cases, do not provide positive drainage away from the pavements. The stability of the soils is also compromised from the presence of prairie dogs. We also understand the foreign object debris (FOD) on the movement areas is becoming unmanageable for the airport because of the degree of instability of the soils adjacent to these pavements. The intent of this project is to provide stability and protection of the soils adjacent to the runway and taxiway pavements, and if funding allows improve grading and drainage in the northeastern-most infield areas, so that RSA standards and positive drainage away from the pavements is maintained, and that FOD is minimized.

Annual Consultant shall provide the following specific services for this project:

A. Data Collection

1. Record Information: Gather and review all available as-built drawings, utility drawings, design drawings, studies, reports and plans relevant to the project.
2. Site Visit: Perform a site visit with Lou Snow Consulting (Subconsultant) in order to identify general ground conditions and features, and areas of noticeable or significant concern that may require additional considerations.

B. Soils Investigations (Speedie & Associates)

Perform field investigations and obtain up to 20 soil samples approximately 6" to 12" deep at random locations along Runways 4L-22R and 4R-22L, Taxiway 'B', and Taxiway 'C' for analysis of gradation and plasticity index (Atterberg Limits), and to conduct unconfined compression testing for soil stabilization mix/strength designs. This information will be provided to Lou Snow Consulting (see Part C. below) in helping to determine the most suitable materials to be used for erosion control purposes.

C. Erosion Control Materials Investigation and Recommendations Report (ANNUAL CONSULTANT and Lou Snow Consulting)

Prepare a pre-design report which investigates readily-available materials made for the purposes of erosion control, compares initial construction/installation costs and anticipated maintenance cycles and costs, anticipated life cycles, and the general benefits and disadvantages of each material. The purpose of this report will be to determine and recommend the most cost-effective material(s), specifications and construction methods that will allow the City of Chandler to maximize available funding. The report will also indicate the approximate area that can be anticipated to be constructed based on available funding and the recommended construction alternative.

This report will be used as the basis of the design of the project.

D. Topographical Survey (Allowance Item)

1. Limited Topographical Survey: Conduct a ground-based topographical survey of existing surface facilities and ground conditions from the edges of runway and taxiway pavements to

approximately 25 feet from the edge of these pavements based on the anticipated/proposed areas to be completed as part of this project (see Part B. above).

2. **Base Mapping:** Utilizing topographic surveys, existing design files, photogrammetric mapping, field investigation, record drawings, and Chandler Municipal Airport's most recent Airport Layout Plan; prepare AutoCAD electronic base maps for the construction of the project.

E. Civil Design

Prepare civil construction drawings, specifications and estimates for the following:

- Project location/site plan; Contractor staging, stockpile and borrow locations; and Contractor site access;
- Construction phasing and detouring;
- Erosion Control, grading and drainage;
- Pavement markings and details; and
- Civil construction details.

F. Drainage Analysis (Allowance Item)

If funding allows, a drainage analysis will be performed to improve the grading and drainage of the four (4) northeastern-most infields bounded by Taxiways 'N', 'Q', 'B', and 'C'. There is significant erosion by way of ruts, bumps and the buildup of sediment against the airfield pavements within these infields, including within the Runway and Taxiway Safety Areas. The culverts within these infields appear to be inadequate to handle the flows, and there is significant evidence of ponding storm water. A drainage memorandum will be developed with analysis of existing and future conditions with recommendations for infrastructure improvements.

G. FAA Documentation (Nicholas J. Pela & Associates)

1. **Construction 7460's:** Prepare the FAA Form 7460 "Notice of Proposed Construction or Alteration" identifying specific locations, durations, and heights of proposed equipment necessary for construction activities, as well as the permanent construction. 7460 documentation will be provided to the Airport Administrator for submittal to the FAA, or Annual Consultant may perform this on the Airport Administrator's behalf, if desired by the Airport Administrator.
2. **Airport Layout Plan:** Update the existing AutoCAD Airport Layout Plan (ALP) to reflect new airfield conditions. The draft revised ALP will be provided to the City for review, comments will be addressed, and the final revised ALP will be provided to the FAA for review and revalidation.

It is assumed that the current ALP is in substantial conformance to FAA requirements, accurately reflects the recommendations of the most current Master Plan, and that no revisions will be necessary beyond the modifications pertaining to this project.

H. Engineer's Reports

Prepare Draft and Final Engineer's Reports documenting design calculations and confirming conformance with FAA and City of Chandler design standards, as appropriate. The Engineer's Report will include identification of standards, any modifications to standards, and Quantities and Estimates. The Engineer's Reports will include Draft and Final Soils Investigation Reports and Material Investigations and Recommendations Reports (see Part B. above) with the respective submittals. Also included will be a drainage analysis and memorandum (if the Allowance item in Part F. above is contracted).

I. Specifications

1. Technical Specifications: Prepare Technical Specifications based on FAA, ADOT and MAG (as amended by the City of Chandler) requirements for all elements of the work.
2. Special Provisions/Front End Documents: Prepare ADOT-based project Contract Documents/Special Provisions based on the City of Chandler's most current template for Airport construction projects.

J. Bid-Phase Services

Bid-Phase Services: Engineering services during the bid-phase will be provided, including assistance with advertising preparations, attending the Pre-Bid meeting, responding to contractor questions, issuing addenda to the contract documents, and assisting City and Airport staff as necessary in evaluation of bids, including preparation of a Bid Tabulation, and making a recommendation for a construction contractor, if requested.

K. Design Meetings and Coordination

1. Owner Project Meetings: Annual Consultant's key staff will be available, along with sub-consultant staff as necessary, for periodic progress meetings with City and Airport staff, estimated at once per pre-final submittal (30%, 60% and 90%). Annual Consultant will attend the 30% and 100% (if required) design/submittal meetings in Phoenix at the ADOT Multimodal Planning Division offices.
2. Project Coordination: Annual Consultant will provide management of and coordination of the design team, and will provide coordination between design team members, City of Chandler/Chandler Municipal Airport staff, and other interested stakeholders as necessary.

L. Miscellaneous

1. This proposal is based on an assumed four-month design schedule for design from May through August 2013. A mutually-agreed-upon design and submittal schedule for this project will be developed with the City. The anticipated submittal schedule will include: Draft Soils Investigation Report, Draft Erosion Control Material Investigation and Recommendations Report, 30% plans, Draft Engineer's Report, outline specifications, quantities and estimates; 60% plans, draft specifications and contract documents, quantities and estimates; 90% pre-final plans, specifications, quantities, and estimates; and 100% Final/Bid Set plans, sealed specifications and contract documents, quantities and estimates, and a Final Engineer's Report.
2. All plans are to be prepared in AutoCAD Civil 3D 2011 (or current version used by City of Chandler). All work will be prepared in conformance to MAG standards (as amended by the City of Chandler).
3. Design Quality Control/Quality Assurance: Annual Consultant will perform quality control reviews of their own work prior to each submittal utilizing standard checking processes plus separate review of project documents by the Annual Consultant's Quality Control Manager.
4. Annual Consultant will make monthly "Design and Progress Reports", including invoicing, to the City of Chandler in a format acceptable to the City.

5. It is understood that the Allowance items noted in Parts D. and F. above will only be contracted after the 30% Engineer's Opinion of Probable Construction Costs is developed and a determination is made by the City of Chandler about proceeding with these items.
6. The Final/Bid Set as well as the Record Drawing submittals for the project will include sealed mylar originals of the construction plans, electronic (CD-ROM) versions of the construction plans, PDF versions of the plans and Final Engineer's Report, and sealed hardcopies and electronic versions of the specifications.
7. No environmental or archaeological assistance is anticipated as it is assumed that a Categorical Exclusion (CatEx) has been submitted by the City of Chandler and is being or has been processed for this project.

