



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CP15-171**

1. Agenda Item Number:

20

2. Council Meeting Date:
February 12, 2015

TO: MAYOR & COUNCIL

3. Date Prepared: January 27, 2015

THROUGH: CITY MANAGER

4. Requesting Department: City Manager

5. SUBJECT: Project Agreement with Dibble Engineering for the design of Airport Drainage Improvements.

6. RECOMMENDATION: Staff recommends that City Council approve a project agreement with Dibble Engineering for the design of Airport Drainage Improvements Project AI1401-201, pursuant to Annual Engineering Services Contract No. EN1005-101, in an amount not to exceed \$249,511.

7. BACKGROUND/DISCUSSION: Following significant precipitation events, standing water persists beyond 36 hours at Chandler Municipal Airport's west retention basin. The standing water attracts wildlife (i.e., birds), which present hazards to flight operations at CHD. The Airport intends to install infrastructure across Queen Creek Road to drain storm water to the regional retention basin and permanently mitigate the wildlife attractant caused by poor drainage. As part of the 2005 Airport Drainage Master Plan and the recently completed 2013 Drainage Study, several options were explored to drain the standing water in the Airport's west retention basin. Alternatives included adding numerous dry wells, changing the drainage pattern by pumping water to the north basin and adding dry wells, or by pumping the water to the north basin and adding dry wells. These alternatives were significantly higher in capital cost and would require ongoing maintenance. The preferred alternative of the 2005 Airport Storm Drain Master Plan was to grade the west basin to a culvert that is to be constructed under Queen Creek Road and gravity flow the water to a City-owned basin that currently exists on the south side of the road. This alternative was validated in the 2013 Drainage Study.

In preparation for this project, Dibble Engineering and SWCA Environmental Consultants were contracted through the City to develop an airport-wide Storm Water Pollution Prevention Plan (SWPPP) and assist the City in securing a Multi-Sector General Permit (MSGP) to allow for drainage discharge to off-site facilities. That process is currently nearing completion.

In order to make the improvements recommended in the Airport Drainage Master Plan and the Drainage Study, there are two key areas that this project will address:

1. Verify existing conditions and improve the Extended Runway Safety Area (ERSA) of Runways 4L and 4R to meet Federal Aviation Administration (FAA) grading and drainage criteria for Runway Safety Areas;
2. Mitigate the storm water runoff such that no ponding water remains in the subject areas after 36 hours of a 100-year, 2-hour storm.

Under this Project Agreement Dibble Engineering, in conjunction with its sub-consultants, shall prepare studies, design plans, special provisions, specifications, quantities, cost estimating, and bid assistance services for the construction of drainage improvements for "Storm Water Management Area 3" at Chandler Municipal Airport as identified in the Airport Drainage Master Plan and the Airport's Capital Improvement Program. Area 3 is the area designated for improvements in the southwestern portion of the Airport, generally off the end of Runway 4L and extending south to the Airport property line. Dibble Engineering will also complete a comprehensive Airport Layout Plan (ALP) update to bring it up to current FAA requirements and standards.

8. EVALUATION: City Staff reviewed the scope of work, billing rate and total fee for the project and determined them to be reasonable. This project is within the parameters of the annual contract for civil design services with this firm. Contractor agrees to complete this work within 180 calendar days of the date the City issues the Notice to Proceed.

9. FINANCIAL IMPLICATIONS:

Fund Source:

<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
417.4110.5219.6AI712	Airport Grant Capital		\$238,357.86
635.4110.5219.6AI712	Airport Operating	yes	\$11,153.14

10. PROPOSED MOTION: Move that City Council approve a project agreement with Dibble Engineering for the design of Airport Drainage Improvements Project AI1401-201, pursuant to Annual Engineering Services Contract No. EN1005-101, in an amount not to exceed \$249,511.

ATTACHMENTS: Project Agreement and Location Map

APPROVALS

11. Requesting Department

Lori Quan

Lori Quan, Airport

13. Department Head

Marsha Reed

Marsha Reed, Assistant City Manager

12. Transportation & Development

Bob Fortier

Bob Fortier, Capitol Projects Manager

14. City Manager

Rich Dlugas

Rich Dlugas, City Manager

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

PROJECT AGREEMENT NO: AI1401.201

This PROJECT AGREEMENT is made this ____ day of _____, 2015, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and Dibble & Associates Consulting Engineers, Inc. an Arizona corporation doing business as Dibble Engineering, Inc., (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 Safety Area Drainage, Project Number AI1401.201. The scope of work consists of prepare studies, design plans, special provisions, specifications, quantities, cost estimating, and bid assistance services for the construction of drainage improvements for "Storm Water Management Area 3" at Chandler Municipal 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 Two Hundred Forty Nine Thousand Five Hundred Eleven Dollars (\$249,511) 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 calendar days and Annual Consultant agrees to complete all work within One Hundred Eighty (180) calendar 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 _____, 2015.

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

City Attorney By: [Signature]

ATTEST:

City Clerk

EXHIBIT A SCOPE OF WORK

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 Airport staff in order to verify existing conditions and features, key constraints, and areas of noticeable or significant concern that may require additional considerations.

B. Topographical Survey & Utility Mapping

1. Topographical Survey: The survey will be a topographic survey only, based on existing City of Chandler Vertical Datum (NAVD 88) based on Chandler Benchmarks #40A, 41A, 42 and existing Airport control. For horizontal control, Dibble will use the Arizona State Plane Coordinate System, Central Zone, US Survey feet with a Combined Scale Factor of 0.9998468 to facilitate the topographic survey effort. Global Positioning Systems (GPS), conventional and differential leveling will all be utilized to establish any required temporary control. Mapping shall be published at ground values.

All topographic features will be located with an accuracy of 0.05' (\pm), with a confidence rating of 95%.

No new permanent control will be established with this project. The survey will include horizontal and vertical locations of existing pavements, facilities, utilities and manhole invert elevations impacted by this project. A 50-foot grid will be utilized for interior shots to assist with grade control during design. All existing storm drain manholes and inlets will be opened, pipe sizes confirmed and invert flow lines measured, compared and confirmed from record drawings.

2. Aerial Mapping: Aerial photogrammetry will be provided by Kenney Aerial Mapping, Inc. for the entire airport (inside the airport property/fence line), The aerial photogrammetry will also be used to establish the project limits for grading and earthwork design purposes. ANNUAL CONSULTANT will set aerial targets to facilitate the aerial mapping.

Refer to the attached Scope of Work from Kenney Aerial Mapping, Inc. for more detailed scope information.

3. Base Mapping: ANNUAL CONSULTANT will gather and review all available as-built drawings, utility drawings, design drawings, studies, reports and past projects relevant to the project. All utility information useful on this project will be evaluated and included as needed.

A base map shall be drawn in AutoCad Civil 3D 2013 showing all visible existing features and utilities based on field observations and available record data.

C. Supplemental Topographical Survey (Allowance)

Perform limited topographical survey of the limits of the regional basin south of Queen Creek Road for as-built confirmation of storage capacity. Topographical survey shall be in accordance with the procedures and processes described in Section B. above, but shall be

limited to corners of the basin as well as significant ground culture, and survey shots shall be taken at the tops and bottoms of the basin in these locations.

D. 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;
- Grading and drainage plans;
- Culvert plans and profiles;
- Civil construction details.

E. Hydrology and Hydraulics

1. Hydrology: Utilizing the 2005 Airport Master Drainage Plan (MDP) existing conditions 100-year, 2-hour HEC-1 model as the basis for design, the model will be updated to include Stage-Storage-Discharge records which are necessary to design an appropriate (West) detention basin restricted outlet to discharge the 100-year, 2-hour stored volume within the City required drain time of 36-hours. This scope assumes that the Southern Regional Retention Basin has the adequate storage capacity and drain rates to accommodate the additional airport runoff volumes.

Additionally, HEC-1 models for the 100-year, 6-hour and 100-year, 24-hour events will be created for use during the FCDMC and FEMA permitting process, discussed in Section J. of this document.

An initial review of the original design assumptions and limitations for the Southern Regional Basin will be performed in order to verify the feasibility of accepting runoff from airport property. If the initial review of the capability of the Southern Regional Basin to accept additional runoff volume is inconclusive, a more detailed evaluation of that basin may be needed. For instance, if the available information does not state that the Southern Regional Basin was constructed with adequate storage capacity to receive the additional runoff volume from the airport property (West Basin), a more detailed analysis of the stage-discharge relationship in the Southern Regional Basin may be necessary. This may include tasks such as measuring the in-situ infiltration/percolation characteristics of the Southern Regional Basin. Therefore, an allowance is included herein for investigative items (see Section F. below).

2. West Basin Outlet Culvert: The stage-discharge rating curve for the West Basin outlet culvert under Queen Creek Road will be evaluated using the FHWA culvert analysis program, HY-8. No other storm drains or hydraulic modeling is anticipated for this scope of work.

It is anticipated that coordination of the design of this new basin outlet will be required with the design of the forthcoming Queen Creek Road Improvements (S. McQueen Rd. to S. Gilbert Rd.).

The design of this outlet from the West Basin will include a method(s) for providing pre-treatment, and isolation if required, of stormwater prior to discharging into the Southern Regional Basin. The exact method will be evaluated as part of the 30% design submittal for review and concurrence by the City of Chandler.

3. Re-Grading of the West Basin: The basin will be re-graded to match the recommendations presented for the West Basin in the MDP. The new West Basin design will include

recommended longitudinal and cross slopes to achieve the desired flow pattern and maintain adequate storage capacity to avoid flooding outside of the basin limits.

The method for conveying flow from the current West Basin area to the new culvert beneath Queen Creek Road (i.e. channels or enclosed storm drains) will be evaluated during the 30% design phase for City of Chandler review and concurrence. Pipe/culvert material recommendations will also be evaluated during that phase.

F. Geotechnical Investigations (Allowance – Speedie & Associates)

1. Geotechnical Investigations & Earthwork Recommendations: Depending on the location and extents of the designed basin at the southwest end of the Airport, perform geotechnical borings in the proposed excavation and embankment areas to confirm existing soils conditions and provide recommendations for earthwork specifications/requirements.
2. Infiltration/Percolation Testing: If verification of the Southern Regional Basin is inconclusive for the acceptance of additional runoff volume, perform in-situ infiltration/percolation testing in the Southern Regional Basin to gain more definitive performance results.

G. FAA Documentation

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.

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 Hydrology and Hydraulics reports/memorandums as well.

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 FAA-based project Contract Documents/Special Provisions based on the City of Chandler's most current template for Airport construction projects.

J. FCDMC and FEMA Floodplain Permitting

1. Flood Control District of Maricopa County (FCDMC) Floodplain Use Permit: As the Floodplain Administrator for the City of Chandler, the FCDMC acts as the reviewing authority for all Special Flood Hazard Areas (SFHA's) within the City, commonly known as the 100-year floodplain. Therefore, Dibble will complete a Floodplain Use Permit application for the City's signature.

2. FEMA Conditional Letter of Map Revision (CLOMR): Because the West Basin and the Southern Regional Basin are located in a SFHA, a permit is required from the Federal Emergency Management Agency (FEMA) for any activity which changes the characteristics of the land within the SFHA and thereby alters the applicable Flood Insurance Rate Maps (FIRM's). In order to mitigate risk and obtain preliminary approval of the project prior to construction, Dibble will complete the MT-2 CLOMR application and associated documentation necessary for FEMA, through the FCDMC, to conditionally approve the revisions to the effective FIRM's resulting from the construction of this project.

Although the current effective FIRMs are dated Oct. 16, 2013, the FCDMC has conducted a Floodplain Delineation Study in the project area and has indicated that the preliminary mapping from this study will become effective in 2015. Therefore, the FCDMC has advised Dibble to use the study's preliminary mapping as the base condition for this project.

Because the FIRM zones indicated for the West Basin-Southern Regional Basin system are designated "AH" (shallow flooding base floodplain, no floodway), no hydraulic modeling (e.g. HEC-RAS) of the floodplain is needed. Approval from the FCDMC and FEMA is based on the requirement for demonstrating that the proposed improvements will have "no adverse impact" to adjacent land owners.

K. Utility Coordination

Verify comprehensive utility base maps from the information gathered during the Data Collection task, and perform up to one (1) field/site walk if required for confirmation. Utilities will be shown based on surveyed surface features and mapping information provided by each utility. Base mapping will be created in AutoDesk Civil 3D (AutoCAD) 2013 format.

Following the 30% and 95% (sealed) progress submittals, submit one set of plans to each of the eight (8) anticipated utility companies along with a no conflict (clearance) letter utilizing the City's standard format. Upon request, ANNUAL CONSULTANT will provide the City's Project Manager with a receipt indicating the utilities that were sent submittal sets of plans. If requested by the City's utility coordination liaison, ANNUAL CONSULTANT will participate in one (1) utility coordination meeting with affected utility companies. The City shall be responsible for organizing the utility coordination meeting and inviting utility companies, as necessary. Upon receipt of all 95% (sealed) no conflict (clearance) letters the ANNUAL CONSULTANT shall prepare the Utility Clearance Summary and submit it to the City's Project Manager and utility coordination liaison.

L. Airport Layout Plan Update (Nicholas J. Pela & Associates)

Provide a comprehensive Airport Layout Plan (ALP) set update (originally developed by Wilbur-Smith Associates, 2010), as requested by the FAA Phoenix ADO, that complies with FAA requirements including those found in AC 150/5300-13A Airport Design and the latest FAA ALP Checklist dated October 1, 2013.

Refer to the attached Scope of Work provided by Nicholas J. Pela & Associates for the full scope of services related to this task.

M. 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.

N. 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% and 95%). ANNUAL CONSULTANT will attend the 30% and 100% (if required) design/submittal meetings in Phoenix at either the FAA Phoenix ADO or 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.

O. Potholing/Utility Locating (Allowance – RT Underground)

ANNUAL CONSULTANT shall secure the services of a licensed utility locator on an as-needed basis to confirm the locations and depths of known utilities if such information has not been provided on as-built or record drawings. Location information shall be provided to the ANNUAL CONSULTANT in AutoCAD 2013 format.

P. Miscellaneous

1. This proposal is based on five-month design schedule for design from February through June 2015. A proposed preliminary design and bidding submittal schedule for this project is attached with this Scope of Work. The anticipated submittal schedule includes: 30% plans, Draft Engineer's Report, outline specifications, quantities and Engineer's Opinion of Probable Construction Cost (EOPCC); 95% pre-final sealed plans, specifications, quantities, and EOPCC; and 100% Final/Bid Set plans, sealed specifications and contract documents, quantities and EOPCC, and Final Engineer's Report.

The following are the anticipated hard copies for each submittal level:

30% Submittal

- One (1) full-size (24"x36") set of plans;
- Six (6) half-size (11"x17") sets of plans;
- Two (2) Draft Engineer's Reports with outline specifications, quantities and EOPCC;
- One (1) CD of PDF's of each of these submittal items.

95% Pre-Final Submittal

- Six (6) full-size sets of sealed plans;
- Six (6) half-size sets of sealed plans;
- Six (6) sets of sealed specifications;
- One (1) CD of PDF's of each of these submittal items.

100% Bid-Set Submittal

- Three (3) full-size sets of sealed plans with one (1) mylar cover sheet;
- Six (6) half-size sets of sealed plans;
- Two (2) sets of sealed specifications;
- Two (2) Final Engineer's Reports with quantities and EOPCC;
- One (1) CD of PDF's of each of these submittal items.

2. All plans are to be prepared in AutoCAD Civil 3D 2013 (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. FEMA Letter of Map Revision (LOMR) (EXCLUDED from this Scope of Work): It is anticipated that a Letter of Map Revision (LOMR) will be required after construction is completed, and this task will be completed under a separate construction phase services contract. The LOMR will be submitted to FEMA, through the FCDMC, which identifies any changes to the project made during construction, and certify to FEMA that the West Basin-Southern Regional Basin system functions as intended in the CLOMR. It is anticipated that the contractor of record for the construction of this project will provide as-built plans which verify that the locations, elevations and materials used in the work are within the allowable tolerances indicated on the plans and used in the development of the CLOMR documents. In the event that the project is not constructed within tolerances, additional engineering calculations may be needed to assess the impact on the function of the basin systems. Once the magnitude of the changes is known, ANNUAL CONSULTANT will provide the City with a separate scope of work for the effort if required.

EXHIBIT B FEE SCHEDULE

		SR. PROJECT MANAGER	PROJECT MANAGER	SENIOR ENGINEER	ENGINEER (P.E.)	ASSISTANT ENG. (E.I.T.)	TECHNICIAN	ADMIN. ASSISTANT	TOTAL HOURS
DESIGN PHASE SERVICES									
Airport									
1	Project Management and Admin	4	8	32				8	52
2	Topographic Survey Coordination				8		4		12
3	30% General Plan Sheets		2	4	4	4	8		22
4	30% Construction Phasing Plans		2	4	8	8			22
5	Draft Engineer's Report			4	4	12		4	24
6	30% Quantities/EOPCC Coordination			2	2	8			12
7	30% QA/QC		4		16				20
8	30% FAA/ADOT/City Coord./Review Mtgs.			8		8			16
9	Post-30% Plan-in-Hand Review				8	8			16
10	95% General Plan Sheets		2	8	8	8	12		38
11	95% Construction Phasing Plans		2	4		8	12		26
12	Final Engineer's Report			4	4	8		4	20
13	95% Quantities/EOPCC Coordination			2	2	8			12
14	95% Specifications & Special Provisions		2	4	8	16	4		34
15	95% QA/QC		4		16				20
16	95% FAA/ADOT/City Coord./Review Mtgs.			8		8			16
17	Post-95% Plan-in-Hand Review				8	8			16
18	Construction Safety & Phasing Plan			4	2	12		4	22
19	Comment Resolution Coordination		2	8	4				14
20	100% Bid-Set General Plan Sheets		2	4		4		8	18
21	100% Bid-Set Construction Phasing Plans		2	4		4	4		14
22	100% Bid-Set Quantities/EOPCC Coord.			2	2	8			12
23	100% Specifications & Special Provisions		2	4	4	8			18
24	100% QA/QC		4		12				16
25	Airport Layout Plan Update Coordination		2	8		8	8		26
26	Bid Phase Services			8	8	16		4	36
Drainage									
27	Data Collection/Initial Design Feasibility		2		8	16			26
28	Site Visit		2		4				6
29	30% Grading & Drainage Plan Sheets		2		24		12		38
30	30% Culvert Plan/Profile Sheets		1		16		12		29
31	30% Construction Details		1		8		8		17
32	30% Cost Estimate		2		12				14
33	30% List of Special Provisions		1		4				5
34	Preliminary Drainage Report		2		24			8	34
35	30% Drainage QA/QC & Revisions		8		8			6	24
36	Present 30% documents to COC		2				2		4
37	95% Grading & Drainage Plan Sheets		3		48		24		75
38	95% Culvert Plan/Profile Sheets		2		32		24		58
39	95% Construction Details		2		16		16		34
40	95% Cost Estimate		4		24				28
41	95% Special Provisions		2		24				26
42	95% Drainage QA/QC & Revisions		8		16		16		40
43	Present 95% documents to COC		2				2		4
44	100% Grading & Drainage Plan Sheets		3		36		24		63
45	100% Culvert Plan/Profile Sheets		1		24		16		41
46	100% Construction Details		2		8		12		22

**EXHIBIT B (cont.)
FEE SCHEDULE**

47	100% Cost Estimate		2		8			4		14
48	100% Special Provisions		2		16					18
49	Final Drainage Report		2		12			4		18
50	100% Drainage QA/QC & Revisions		8		16			16		40
51	Present 100% documents to COC		2					2		4
52	FCDMC Floodplain Use Permit		2		24					26
53	FEMA CLOMR		4		45			15		64
54	Bid Phase Design/Technical Support		4		16			4		24
Utilities										
55	Utility Coordination				32					32
56	Utility Clearance Letters/Responses (8)					16	16			32
TOTAL DIRECT LABOR HOURS		4	118	126	617	212	52	277	8	1414

LABOR FEE BY TASK		\$154.00	\$146.00	\$137.00	\$126.00	\$121.00	\$95.00	\$92.00	\$49.00	
		PRINCIPAL	SR. PROJECT MANAGER	PROJECT MANAGER	SENIOR ENGINEER	ENGINEER (P.E.)	ASSISTANT ENG. (E.I.T.)	TECHNICIAN	ADMIN. ASSISTANT	TOTAL TASK FEE
DESIGN PHASE SERVICES										
Airport										
1	Project Management and Admin.	\$616	\$1,168	\$4,384					\$392	\$6,560
2	Topographic Survey Coordination					\$968		\$328		\$1,296
3	30% General Plan Sheets		\$292	\$548	\$504	\$484		\$656		\$2,484
4	30% Construction Phasing Plans		\$292	\$548		\$968	\$760			\$2,568
5	Draft Engineer's Report			\$548	\$504	\$1,452		\$328		\$2,832
6	30% Quantities/EOPCC Coordination			\$274	\$252	\$968				\$1,494
7	30% QA/QC		\$584		\$2,016					\$2,600
8	30% FAA/ADOT/City Coord./Review Mtgs.			\$1,096		\$968				\$2,064
9	Post-30% Plan-in-Hand Review				\$1,008	\$968				\$1,976
10	95% General Plan Sheets		\$292	\$1,096	\$1,008	\$968		\$984		\$4,348
11	95% Construction Phasing Plans		\$292	\$548		\$968	\$1,140			\$2,948
12	Final Engineer's Report			\$548	\$504	\$968		\$328		\$2,348
13	95% Quantities/EOPCC Coordination			\$274	\$252	\$968				\$1,494
14	95% Specifications & Special Provisions		\$292	\$548	\$1,008	\$1,936	\$380			\$4,164
15	95% QA/QC		\$584		\$2,016					\$2,600
16	95% FAA/ADOT/City Coord./Review Mtgs.			\$1,096		\$968				\$2,064
17	Post-95% Plan-in-Hand Review				\$1,008	\$968				\$1,976
18	Construction Safety & Phasing Plan			\$548	\$252	\$1,452		\$328		\$2,580
19	Comment Resolution Coordination		\$292	\$1,096	\$504					\$1,892
20	100% Bid-Set General Plan Sheets		\$292	\$548		\$484		\$656		\$1,980
21	100% Bid-Set Construction Phasing Plans		\$292	\$548		\$484	\$380			\$1,704
22	100% Bid-Set Quantities/EOPCC Coord.			\$274	\$252	\$968				\$1,494
23	100% Specifications & Special Provisions		\$292	\$548	\$504	\$968				\$2,312
24	100% QA/QC		\$584		\$1,512					\$2,096
25	Airport Layout Plan Update Coordination		\$292	\$1,096		\$968	\$760			\$3,116
26	Bid Phase Services			\$1,096	\$1,008	\$1,936		\$328		\$4,368
Drainage										
27	Data Collection/Initial Design Feasibility		\$292		\$1,008	\$1,936				\$3,236
28	Site Visit		\$292		\$504					\$796
29	30% Grading & Drainage Plan Sheets		\$292		\$3,024			\$984		\$4,300
30	30% Culvert Plan/Profile Sheets		\$146		\$2,016			\$984		\$3,146
31	30% Construction Details		\$146		\$1,008			\$656		\$1,810

**EXHIBIT B (cont.)
FEE SCHEDULE**

32	30% Cost Estimate		\$292	\$1,512					\$1,804	
33	30% List of Special Provisions		\$146	\$504					\$650	
34	Preliminary Drainage Report		\$292	\$3,024		\$656			\$3,972	
35	30% Drainage QA/QC & Revisions		\$1,168	\$1,008		\$656			\$2,832	
36	Present 30% documents to COC		\$292			\$164			\$456	
37	95% Grading & Drainage Plan Sheets		\$438	\$6,048		\$1,968			\$8,454	
38	95% Culvert Plan/Profile Sheets		\$292	\$4,032		\$1,968			\$6,292	
39	95% Construction Details		\$292	\$2,016		\$1,312			\$3,620	
40	95% Cost Estimate		\$584	\$3,024					\$3,608	
41	95% Special Provisions		\$292	\$3,024					\$3,316	
42	95% Drainage QA/QC & Revisions		\$1,168	\$2,016		\$1,312			\$4,496	
43	Present 95% documents to COC		\$292			\$164			\$456	
44	100% Grading & Drainage Plan Sheets		\$438	\$4,536		\$1,968			\$6,942	
45	100% Culvert Plan/Profile Sheets		\$146	\$3,024		\$1,312			\$4,482	
46	100% Construction Details		\$292	\$1,008		\$984			\$2,284	
47	100% Cost Estimate		\$292	\$1,008		\$328			\$1,628	
48	100% Special Provisions		\$292	\$2,016					\$2,308	
49	Final Drainage Report		\$292	\$1,512		\$328			\$2,132	
50	100% Drainage QA/QC & Revisions		\$1,168	\$2,016		\$1,312			\$4,496	
51	Present 100% documents to COC		\$292			\$164			\$456	
52	FCDMC Floodplain Use Permit		\$292	\$3,024					\$3,316	
53	FEMA CLOMR		\$584	\$5,570		\$1,230			\$7,484	
54	Bid Phase Design/Technical Support		\$584	\$2,016		\$328			\$2,928	
Utilities										
55	Utility Coordination			\$4,032					\$4,032	
56	Utility Clearance Letters/Responses (8)				\$1,936	\$1,520			\$3,456	
TOTAL LABOR FEE		\$616.00	\$17,228.00	\$17,262.00	\$77,742.00	\$25,852.00	\$4,940.00	\$22,714.00	\$392.00	\$166,546.00

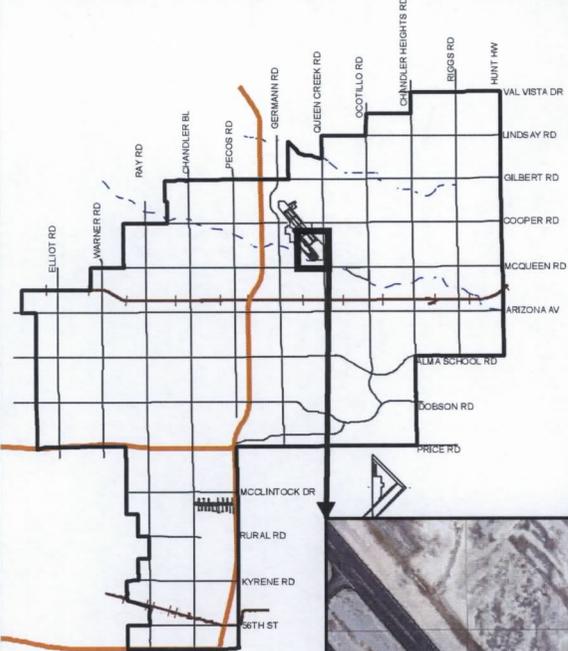
DIRECT COSTS		
DESIGN PHASE SERVICES		
1.	Submittal Printing	\$3,500.00
2.	Mileage	\$150.00
Total - Design Phase Services		\$3,650.00

ALLOWANCE & SUB-CONSULTANT COSTS		
DESIGN PHASE SERVICES		
1.	Design Topographical Survey & Utility Mapping (Dibble)	\$19,550.00
2.	Aerial Mapping (Kenney Aerial)	\$21,745.00
3.	Supplemental Topographical Survey (Dibble - Allowance)	\$2,000.00
4.	Airport Layout Plan Update (Pela)	\$29,520.00
5.	Soils Investigations (Specdie and Associates - Allowance)	\$4,000.00
6.	Potholing/Utility Locating (RT Underground - Allowance)	\$2,500.00
Total - Design Phase Services		\$79,315.00

FEE SUMMARY	
Design Services Labor Fee	\$166,546.00
Direct Costs	\$3,650.00
Allowance (Sub-Consultant) Costs	\$79,315.00
TOTAL CONTRACT AMOUNT	\$249,511.00



AIRPORT DRAINAGE IMPROVEMENTS PROJECT NO. A11401.201



MEMO NO. CP15-171

