



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CA08-029**

1. Agenda Item Number:

28

2. Council Meeting Date:
November 8, 2007

TO: MAYOR & COUNCIL

3. Date Prepared: October 25, 2007

THROUGH: CITY MANAGER

4. Requesting Department: Public Works

5. SUBJECT: Award a contract to Roosevelt Water Conservation District (RWCD) for the relocation design of the irrigation system for the Gilbert Road (Germann Road to Queen Creek Road) Improvements, Project No. ST0625-301, in an amount not to exceed \$91,100.

6. RECOMMENDATION: Staff recommends that Council award a contract to Roosevelt Water Conservation District (RWCD) for the relocation design of the irrigation system for the Gilbert Road (Germann Road to Queen Creek Road) Improvements, Project No. ST0625-301, in an amount not to exceed \$91,100.

7. BACKGROUND/DISCUSSION: Gilbert Road between Germann Road and Queen Creek Road will be improved to six-lane arterial standards, including sidewalks, curb and gutter, turn lanes, bike lanes, median landscaping, permanent traffic signals at Gilbert/Queen Creek and Gilbert/Ryan, potable water, reclaimed water, and sewer lines. As part of this project, Queen Creek Road will also be improved from Gilbert Road to the east for a distance of approximately 1/3 mile, and from Gilbert Road to the west for a distance of approximately 2,500 feet. This limited work on Queen Creek Road will require the relocation of an existing RWCD open irrigation channel into a pipe system.

Construction is expected to begin in spring 2008 and will be completed in approximately eight months.

Roosevelt Water Conservation District will incur costs to relocate and pipe an existing irrigation canal to accommodate the improvements. Since Roosevelt Water Conservation District has prior rights, the City is required to reimburse Roosevelt Water Conservation District for all associated costs to relocate and pipe their irrigation system.

8. EVALUATION: Roosevelt Water Conservation District provides design services. Roosevelt Water Conservation District is requesting reimbursement for their estimated costs.

9. FINANCIAL IMPLICATIONS:

Cost:	\$91,100
Savings:	N/A
Long Term Costs:	N/A

Fund Source:

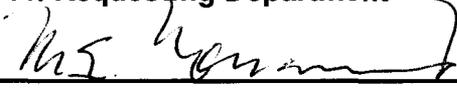
<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
415.3310.0000.6517.7ST482	Arterial St. Impact Fees	Gilbert (Germann to QC)	FY06/07	\$91,100

10. PROPOSED MOTION: Move that Council award a contract to Roosevelt Water Conservation District for the relocation design of the irrigation system for the Gilbert Road (Germann Road to Queen Creek Road) Improvements, Project No. ST0625-301, in an amount not to exceed \$91,100, and authorize the Mayor to sign the contract documents.

ATTACHMENTS: Location Map

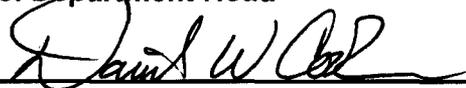
APPROVALS

11. Requesting Department



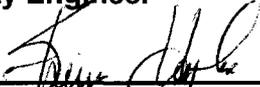
Michael Normand, Acting Assistant Public Works
Director/Transportation and Operations

13. Department Head



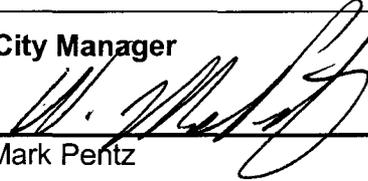
Daniel W. Cook, Acting Public Works Director

12. City Engineer

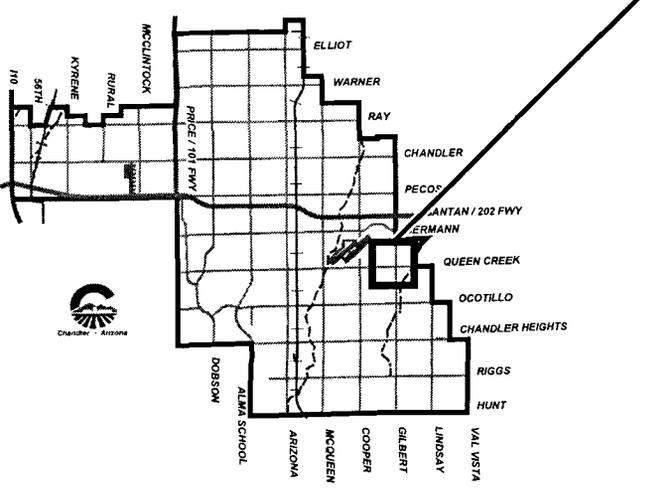


Sheina Hughes, Acting Assistant Public Works
Director/City Engineer

14. City Manager



W. Mark Pentz



**GILBERT ROAD
IMPROVEMENTS
PROJECT NO. ST0625-301
MEMO NO. CA08-029**

LEGEND
 PROJECT LIMITS



EXHIBIT "A"

SCOPE OF WORK FOR ENGINEERING SERVICES

Gilbert Rd. – Queen Creek Rd. to Germann Rd.

Project Number: 07000931

PREPARED: September, 2007

PROJECT LIMITS AND DESCRIPTION

Atwell-Hicks, LLC ("Engineer") will provide to Roosevelt Water Conservation District ("Client") the professional and technical services, as specified herein, for the RWCD Improvements described below ("Project").

The Project is located in the City of Chandler (the "Municipality") and is along RWCD lateral 15. The limits of the scope of work are more fully described below.

Location Map Exhibit



Point A is approximately 2,640 LF west of Gilbert Rd. on the north side of Queen Creek Rd. Point B is located at the intersection of Gilbert Rd. and Queen Creek Rd. Point C is approximately 1,280 LF east of Gilbert Rd. on the north side of Queen Creek Rd. The approximate distance between points A & B is 2,640 LF. The approximate distance between points B & C is 1,280 LF. The approximate distance between points A & C is 3,920 LF. The Project will be prepared in harmony with the City of Chandler Gilbert Rd., Queen Creek Rd. to Germann Rd. Improvement plans (City Project No. STO625-201).

GUIDELINES

The Project design services shall meet the following design guidelines:

- **Roosevelt Water Conservation District**
- **City of Chandler**

SCOPE OF SURVEYING SERVICES

1. Topographic Surveys

Client shall provide an electronic copy and hard copy sealed by a registered land surveyor of a current ALTA survey and topographic survey to cover the limits of the Project.

- 1.1. The final product of the topographic survey will be an electronic file of the topo in ACAD R-2000 format. The lettering height shall be 0.10' when plotted at 1"=20' scale. The graphics and information provided shall be "cleaned up" such that 1"=20' scale plots will be clear and legible, and of a neat quality. Client shall provide the required local municipal benchmark.
- 1.2. Engineer shall acquire horizontal and vertical topo information on existing RWCD facilities to supplement the topo provided by Client, such as pipe inverts, board seat elevations, grate elevations, etc., where proposed facilities connect to the existing irrigation facilities. The limits of the topographic survey that Engineer will perform are outlined on the Location Map Exhibit.
- 1.3. If the electronic files are being converted from Microstation to ACAD R-2000 format, the electronic files shall conform to Engineer's standard layer conventions as provided by Engineer. Engineer is entitled to a change order to conform the electronic files if the electronic files do not conform after converting from Microstation to ACAD R-2000 format.
- 1.4. Engineer shall acquire an as-built survey of the newly installed 3,920 LF of RWCD pipeline within the scope of work as shown on the Location Map Exhibit. This work will be on a lump sum basis.

SCOPE OF ENGINEERING SERVICES

1. Preliminary Engineering

- 1.1. Engineer will provide a preliminary alignment drawing for review by Client. This alignment shall receive approval by Client and Client shall receive approval by the developer before the final design will be completed.
- 1.2. If the alignment changes during subsequent reviews by the Municipality, the developer, or Client, Engineer shall be entitled to renegotiate the design fees.

2. Final RWCD Pipeline Design

- 2.1. Engineer will design approximately 3,920 LF of RWCD pipeline and associated private delivery connections.
- 2.2. The final product will be a stand-alone set of plans for purposes of the pipeline construction.
- 2.3. The final design will not begin until Engineer has received the following from Client:
 - 2.3.1. Electronic and hard copies of the final plat, final water, sewer, paving, grading and landscape plans.
 - 2.3.2. Notice to proceed with the final design.
- 2.4. This fee proposal does not include design of relocation of water, sewer or other underground utilities. Engineer is entitled to a change order if Engineer is required to provide utility relocation designs on the plans.

3. Plan Submittals

- 3.1. Client Plan Submittal: Engineer will submit to and obtain plan approval from Client for the Project plans.
- 3.2. Municipal Submittals: Engineer will submit the RWCD pipeline design sheets to the Municipality for review and approval.
- 3.3. Utility Conflict Reviews: Engineer will submit the RWCD pipeline design sheets to utility companies for utility conflict review only. Client shall be responsible for obtaining the necessary permits and/or approvals from any and all utility companies prior to construction.
- 3.4. Engineer shall review the improvement plans submitted by the developer in order to ensure compatibility and coordination with the Project. Compensation for this review will be on a lump sum basis.

4. Potholing to Locate Existing Utilities

- 4.1. It is required to locate existing underground utilities for design purposes during the design process rather than just prior to construction. Client shall provide existing utility locations in ACAD R-2000 format for the purposes of determining pothole locations. Engineer will identify locations where underground utilities are to be potholed and will coordinate getting the pothole information onto the plans. Client shall provide all potholing and pothole results to Engineer for inclusion on plans. Payment for coordinating potholes will be on a lump sum basis.
- 4.2. This fee proposal does not include the cost of obtaining the potholes. Engineer is entitled to a change order if Engineer is required to obtain the pothole information.

5. Project Meeting and Attendance, Coordination and Dry Utilities

- 5.1. Engineer will attend up to five (5) project meetings which include, but are not limited to, progress meetings with Client, public meetings and staff meetings at the municipality. Engineer will assist to coordinate his work with other consultants working on the project. Meeting attendance will be billed on a lump sum basis.

6. Legals and Exhibits:

- 6.1. Engineer will provide a legal description and exhibit for termination of those portions of the existing RWCD easement along the lateral 15 alignment that will be abandoned. Legal descriptions and exhibits for termination will be billed on a lump sum basis.
- 6.2. Engineer will provide a legal description and exhibit depicting the developer property that is subject to the existing RWCD irrigation easement. Engineer will prepare legal descriptions and exhibits describing and depicting (a) the existing RWCD easement, and (b) the new easement in which RWCD facilities are to be relocated. Legal descriptions and exhibits for proposed RWCD facilities will be billed on a lump sum basis.
- 6.3. This fee proposal does not include the cost of obtaining the necessary easements and/or rights-of-way for the proposed irrigation pipe. Engineer is entitled to a change order if Engineer is required to obtain the necessary rights-of-way or easements.

7. NPDES and AzPDES Compliance – To be provided by Client where needed.

8. Construction Phase Design Services

- 8.1. Construction phase design services include reviewing shop drawings, answering questions from the Client, the developer, the developer's contractor, and/or the Municipality and up to two (2) site visits. This will be billed on a lump sum basis.

INFORMATION TO BE PROVIDED BY CLIENT

Client shall provide the following information or resources for Engineer's use in performing the contract services prior to Engineer commencing final design activities. Engineer is entitled to rely on the accuracy and content of the information provided by Client without verification by Engineer. This is not to be considered a comprehensive list.

- Final Plat, ALTA Survey and topographic survey (electronic copy and hard copy sealed by a registered land surveyor)
- Benchmark location and elevation
- Electronic files of all needed horizontal control and proposed road improvements
- Potholing of existing utilities where needed (hard copy sealed by a registered engineer or land surveyor)
- Final improvement plans for water, sewer, roads, grading and landscape plans

Project Name: Gilbert Rd. - Queen Creek Rd. to Germann Rd.
 Project No.: 07000931

EXHIBIT B - SCOPE OF SERVICES MATRIX

Scope	Service	Included?
Surveying	Topographic Surveying	No
	Boundary Verification	No
	ALTA Survey	No
	Supplemental Irrigation Facility Topo	Yes
	Irrigation Facility As-Built	Yes
Preliminary Engineering	Under separate contract (T&M)	No
Grading and Drainage	Flood Zone modifications	No
	Onsite retention calculations	No
	Offsite drainage analysis	No
	Drainage Report	No
	Grading, Drainage, and Paving Plan	No
Utility Design	Irrigation Design	Yes
	Water system design	No
	Sewer System design	No
	Septic Sewer System Design	No
	Sewer Lift Station	No
	Construction Cost Estimates	No
	Coordinate pothole locations	Yes
Offsite Design	Offsite Roadway Design	No
	Offsite Utility (water and sewer) Design	No
Final Plat/Legals	Legals and Exhibits for Termination of existing Easements	Yes
	Map of Dedication	No
	Legals and Exhibits for New Easements	Yes
	Obtain rights-of-way and/or easements	No
SWPPP	NOI and SWPPP	No
MISC	404 Permitting	No
	Landscape Design	No
	Street Light or Traffic Signal Design	No
	Potholing of existing utilities	No
	Submittal of plans	No
	Geotechnical, electrical, landscaping	No
	Construction phase design services	Yes
	As-built certification	No
	Bidding Assistance	No
	Shop Drawing review	No
	Improvement Plans review	Yes
	Pavement section recommendations	No
	Retaining wall	No
	Traffic Studies	No
	Dry Utility Exhibit (drafting)	No
	Gas Design or drafting	No
Project meeting attendance	Yes	

Project Name: Gilbert Rd. - Queen Creek Rd. to Germann Rd.
 Project No.: 07000931

EXHIBIT C - SCOPE AND FEE PROPOSAL

Proj No.	Ext	SCOPE	FEE	TYPE
07000931	0.11	Supplemental Topo	\$ 16,000	LS
07000931	0.12	Legals & Exhibits (Existing)	\$ 1,800	LS
07000931	0.13	Legals & Exhibits (Proposed)	\$ 1,800	LS
07000931	0.14	RWCD Facilities As-Builts	\$ 3,500	LS
07000931	0.31	Irrigation Design	\$ 51,000	LS
07000931	0.32	Pothole Coordination	\$ 2,500	LS
07000931	0.33	Project Meeting Attendance	\$ 4,000	LS
07000931	0.34	Construction Phase Design Services	\$ 3,500	LS
07000931	0.35	Improvement Plans Review	\$ 3,500	LS
			\$ 87,600	

PLUS REIMBURSABLES

LS = Lump Sum
 TM = Time and Materials
 (with estimated budget as shown)

Submitted for Atwell-Hicks, LLC by: *Mark H. Eddings*

 **ATWELL-HICKS**
 DEVELOPMENT CONSULTANTS

9/17/07
 DATE

TEL: (480) 218-8831 FAX: (480) 830-4888

Accepted for Client by: For your information only

 DATE

CLIENT: Roosevelt Water Conservation District
 PO Box 100
 Higley, AZ 85236

TEL: 480.988.9586
 FAX: 480.988.9589

Project Name: Gilbert Rd. - Queen Creek Rd. to Germann Rd.
 Proposal No.: 07000931

EXHIBIT D - 2007 ATWELL-HICKS, LLC BILLING RATES

Principal	\$ 195.00	Engineer Technician	\$ 87.00
Senior Project Mgt.	\$ 175.00	Survey Technician	\$ 87.00
Project Management	\$ 149.00	Planning Technician	\$ 87.00
Project Manager	\$ 134.00	CAD Technician II	\$ 79.00
Project Coordinator	\$ 124.00	CAD Technician I	\$ 73.00
Senior Project Engineer	\$ 149.00	Field Technician II	\$ 89.00
Engineer/Designer IV	\$ 134.00	Field Technician I	\$ 71.00
Engineer/Designer III	\$ 112.00	Project Administrator	\$ 71.00
Engineer/Designer II	\$ 99.00	Research Specialist	\$ 71.00
Engineer/Designer I	\$ 90.00	Sr Environ Consultant	\$ 149.00
Senior Project Surveyor	\$ 149.00	Environ Consultant IV	\$ 134.00
Project Surveyor IV	\$ 134.00	Environ Consultant III	\$ 112.00
Project Surveyor III	\$ 112.00	Environ Consultant II	\$ 99.00
Project Surveyor II	\$ 99.00	Environ Consultant I	\$ 90.00
Project Surveyor I	\$ 90.00	Corporate Svcs-Mgt	\$ 149.00
Crew Chief	\$ 97.00	Corporate Svcs-Mgt	\$ 112.00
Crew Member	\$ 62.00	Corporate Svcs -Staff	\$ 60.00
Senior Crew Chief	\$ 112.00	Technical Council	\$ 60.00
Senior Project Planner	\$ 149.00	Expert Testimony	\$ 275.00
Planner/Designer IV	\$ 134.00		
Planner/Designer III	\$ 112.00		
Planner/Designer II	\$ 99.00		
Planner/Designer I	\$ 90.00		

Equipment Nuclear Density Gauge \$50.00 / day

Subconsultant charges, fees, commissions, and out of town travel expenses will be billed at cost plus 15%. All other project related reimbursable expenses, including vehicle mileage, computer time, outside data reports, postage, shipping, reproductions, survey stakes and monuments, will be billed at an amount equal to 8.75% of the labor charges for the project.

Billing will be made monthly for work accomplished during the previous month. Invoices are due and payable upon receipt. Interest will be charged at the rate of 1.0% per month (annual interest rate of 12%) commencing 30 days after date of invoice.

All fees and hourly rates quoted within this contract may increase by 6% annually after the beginning of each year.

The original Atwell-Hicks Agreement is enforceable for all subsequent work orders.

The client shall pay all fees and permit charges.